

# Crystals for Electronic Applications

## PDF Express Report



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## Crystals for Electronic Applications

Crystals for Electronic Applications

PureData *Express*

The **PDF Express** report is an extract of the main database and provides a number of limited datasets for each of the countries covered. For users needing more information, detailed data on Crystals for Electronic Applications is available in several Editions and Database versions. Users can order (at a discount) any other Editions, or the full Database version, as required from the After-Sales Service or from any Dealer.

This research provides Market data for **Crystals for Electronic Applications**.

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# Market Consumption

## Crystals for Electronic Applications

Reference: M04669\_L

This **PDF Express** report has 411 pages. Updated monthly.

Years covered: Historic data for the past 7 years, and Forecast data for the next 7 years.

**Cost:** \$950

**Delivery:** 24 hours as a downloaded PDF file, or shipped as a DVD-ROM.

### Market Data in US\$

This report covers the following Markets:-

Market data is given in US\$ for each Country, by each Product listed below, by each Year: Historic data for the past 7 years, and Forecast data for the next 7 years.

#### CRYSTALS FOR ELECTRONIC APPLICATIONS

1. Crystals for Electronic Applications
2. Crystals: Mounted Quartz: Miscellaneous Applications
3. Crystals: Mounted ADP / Salt / Ruby / Garnet: Miscellaneous Applications
4. Filters: Quartz and other piezoelectric
5. Frequency Control Crystals: Quartz
6. Frequency Control Crystals: ADP / Salt / Ruby / Garnet
7. Oscillators: Crystal

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#### NAICS / SIC coded reports and databases

This is a Market database which is designed to be compatible with U.S. government databases.

For NAICS / SIC coded reports and databases, the report structures are an analogue of U.S. Department of Commerce / U.S. Census databases, but in a worldwide context.

For a full explanation of the NAICS coding system see: <http://www.census.gov/eos/www/naics/>

These Products, Services & Revenue Lines codes and definitions are determined by the U.S. Government agencies.

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## PDF Express Description

### Crystals for Electronic Applications Report

The Crystals for Electronic Applications PDF Express Report gives data on each of the Products & Markets listed by 2 Time series: 7 years Historic data and 7 years Forecast data.

Each of the 8 Products & Markets are quantified in US\$, by each year (7 historic & 7 forecast years).

Financial data is provided for Crystals for Electronic Applications, by each year (7 historic & 7 forecast years), including complete aggregated Financials, Balance Sheets and Financial Margins and Ratios, by country.

A range of Industry Data is provided for Crystals for Electronic Applications, by country, by year. The Industry Data is based on 5,025 Companies and Entities which Supply or Distribute Crystals for Electronic Applications.

This Crystals for Electronic Applications Report is a PDF Express Edition. 411 pages. Updated monthly.

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Argentina	Guyana	Philippines
Australia	Honduras	Poland
Austria	Hong Kong	Portugal
Azerbaijan	Hungary	Romania
Bahrain	Iceland	Russia
Bangladesh	India	Saudi Arabia
Belarus	Indonesia	Serbia & Montenegro
Belgium	Iran	Singapore
Bolivia	Ireland	Slovakia
Bosnia & Herzegovina	Israel	Slovenia
Botswana	Italy	South Africa
Brazil	Jamaica	South Korea
Bulgaria	Japan	Spain
Cambodia	Kazakhstan	Sri Lanka
Canada	Kenya	Suriname
Chile	Kuwait	Sweden
Colombia	Kyrgyzstan	Switzerland
Costa Rica	Laos	Taiwan
Croatia	Latvia	Tanzania
Cuba	Lebanon	Thailand
Cyprus	Lithuania	The Netherlands
Czech Republic	Luxembourg	Tunisia
Denmark	Malawi	Turkey
Ecuador	Malaysia	Uganda
Egypt	Mexico	Ukraine
El Salvador	Morocco	United Arab Emirates
Estonia	New Zealand	United Kingdom
Finland	Nicaragua	United States
France	Nigeria	Uruguay
French Guiana	Norway	Uzbekistan
Georgia	Pakistan	Venezuela
Germany	Panama	Vietnam
Ghana	Paraguay	Zambia

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### Data Caveat

The report databases are designed to give a common definition, unit of measure and quantification of markets in over 200 countries. The reports rely on data collection at various levels of the product flow; this effectively means, the producer, the distribution channels and the end user or consumers. This data is then correlated with any national and international statistical data produced by official agencies. Unfortunately, product flow data gathering in some countries is difficult, and furthermore the official statistical data is both inaccurate and sparse. In such circumstances, in some countries, we have to flag a Data Caveat as a warning. What this means is that in some countries the data is not sufficiently verifiable for statistical purposes and in those cases the data may not be presented.

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## Market Notes & Definitions

ALL BUYING/PURCHASING DATA FIGURES ARE IN REAL TERMS : US\$

REAL TERMS are figures excluding the effects of inflation, thus the Forecasts and figures given can be readily converted into units or volume. This is done by applying the average prices for the base year and dividing the figures by this price for all years. Thus it is possible to easily ascertain both historic and forecasted product volume.

A "most recent published accounts" base is used because most company accounts are historic and thus clients will be able to compare the figures given in this report with their own company figures without the need for conversion or the need for inflators or multiplying factors.

AVERAGE SALES PRICES ARE NOT APPROPRIATE OR APPLICABLE TO THIS DATABASE

The effect of using Real Terms figures is that the forecasted figures will be depressed, as they do not include inflation, and figures from former years (i.e. before the Base Year) will be increased.

The Current or Base Year is at the convergent point as is the Current cost. This Current Cost usually increases because of the effects of inflation. The Real Terms figures do not include the effects of inflation and thus only increases or decreases if the actual product volume or units increase or decrease. In this way it is possible to evaluate the market and other figures more realistically.

The figures and the Trend figures represent an overall median probability trend line that is plotted to give the most probable course amongst the annual forecast scatter. Thus, the figures do not reflect year-on-year depressions and peaks in absolute terms, but instead represents a year-on-year modified trend line. The various SCENARIOS provided in the database reflect the differential forecasts specific to the factors being forecast.

The U.S. government uses the term Constant dollars (or "real" dollars) and this is defined thus: Output values converted to a base price level, calculated by dividing current (or actual) dollars by a deflator. Use of constant dollars eliminates the effects of price changes between the year of measurement and the base year and allows calculation of real changes in output.

## HISTORIC & FORECAST DATA TRANSITION PERIODS

The HISTORIC DATA covers the last 7 years to the current year, and the MEDIAN FORECAST DATA series covers the next 7 years. There is always a transition period; which is in fact during the last two quarters, i.e. whilst the historic data is being collated. In addition the data given for the next two quarters is considered an estimate rather than a forecast. Thus the 12 month period around the database output date is an estimate.

### THE MARKET ENVIRONMENT

There are four basic issues to investigate when considering the market environment:

- 1. Market Growth
- 2. Market Structure
- 3. Market/s Serviced
- 4. Customer & End User Factors

1. MARKET GROWTH (both short-term and medium term) is fully analysed in these sections.

2. THE MARKET STRUCTURE is critical for profitability.

3. MARKET SERVICED denotes the function between the products & services offered by companies and the particular market sector the marketing effort reaches. In addition, there is the MARKET AVAILABILITY which represents the 'real market' available to any particular company or supplier.

### TOTAL AVAILABLE MARKET



Thus the Market Area Serviced is the sector of the market for which companies are offering a suitable product or service and Available Markets the sector of the market reached by a company's marketing effort. The areas marked as the overlap in the Market Area Serviced, i.e. the market sector for which companies are offering suitable product/s or services and which may theoretically be reached by a company's marketing activities, but of which part is controlled by either other Purchasers or Suppliers. The Market Availability is the total market perceived by the total Purchaser universe; however the Available Markets the market which is actually available to individual Suppliers.

The Market Area Serviced is the true market in terms of product/s and services, however parts of this market may be difficult or impossible to attain due to the control exerted by either the controlling Purchasers or Suppliers.

## **HISTORIC DATA & TIME SERIES**

### **Last 7 Years to Current Year**

This standard HISTORIC format is the most popular time series demanded by readers. Many readers feel that it is more important to know what is likely to happen in the recent past rather than what has transpired in the long-term past. The HISTORIC DATA in the database covers the years from 1997 to the Current Year.

## **FORECAST DATA & TIME SERIES : MEDIAN MARKET FORECAST**

### **From the Current Year to the next 7 Years**

The MEDIAN FORECAST DATA covers the next 7 years. This standard FORECAST format is the most popular format demanded by readers.

We can of course provide readers with other data on long-range forecast data and this is done as part of the After-Sales Service.

#### **1. ALL FIGURES IN THIS SECTION ARE IN REAL TERMS: Current Year BASE**

REAL TERMS are prices excluding the effects of inflation, thus the Market figure given can be readily converted into units or volume. This is done by applying the average sales prices for the Current Year and dividing the Market figures by this price for all years. Thus it is possible to easily ascertain previous and forecasted product volume.

A base year is used because company accounts are historic and thus readers will be able to compare the figures given in this volume with their own figures without the need for conversion or the need for inflators or multiplying factors.

The effect of using Real Terms figures is that the forecasted figures will be depressed, as they do not include inflation, and figures from former years will be increased.

2. The Market figures and the Trend figures represent an overall median probability trend line which is plotted to give the most probable course amongst the annual market forecast scatter. Thus the figures do not reflect year-on-year depressions and peaks in absolute terms, but instead represents a year-on-year modified trend line.

3. All analyses are based on correlations of the results of the Surveys of Suppliers, Distribution and Customers. Thus, for example, an analysis of Market Sectors will gain data firstly from the End User Surveys and secondly confirmations and correlations will be gained from the Surveys of Suppliers / Distributors. This in the opinion of the publishers is a very accurate method and is far superior than, for example, that which is used in the compilation of the majority of published governmental statistics.

4. All figures given in this volume refer only to the product/s covered and not to any other product or systems which may be connected or associated with the products covered.

5. The TREND figures given in the Industry section of this volume refers to the average year-on-year change in the period specified.

6. The YEAR-ON-YEAR TREND figures given in this volume refer to the average year-on-year change in the period specified

The AVERAGE GROWTH TRENDS figures refer to the long term trends over the period.

Thus the actual Trend is given by a year-on-year figure and the long-term Trends are given as a Real Terms Forecast.

## **DATABASE LONG-RANGE DATA & TIME SERIES**

### **From 1972 until the Next 28 Years**

The database contains a LONG-RANGE HISTORIC time series which covers the years from 1972. This is the standard long range HISTORIC format. We provide readers with this time series (on request) to enable long range regressional analysis for forecasting models which require an extended time period analysis.

The database contains a LONG-RANGE FORECAST time series which covers a period for the next 28 years. This is the standard long range forecast format and is usually used for planning production plant / capital projects, macro-economic trends and demographics data.

We can of course provide readers with other data on long-range historic and forecast data and this is done as part of the After-Sales Service.

## **EXCHANGE RATES + PURCHASING POWER PARITY**

The report database and forecasting models do not use current market or bank exchange rates as these can be deceptive. The rates used are those of the base year in addition to a number of real value factors which reflect the actual or forecasted value of the product in each of the national markets over the period 1974 to 2028. A simple conversion of local currency into U.S. Dollars or any other national currency cannot be used to adequately represent products or services.

The report database and forecasting models are attempting to show the relative values of products or markets free from any extraneous effects of currency movements or government fiscal policy which arbitrarily alter currency exchange rates. Thus the currency calculations and data in the database are indicating relative unit values or the relative cost of the product or service in the national market.

We do not indicate the Currency Conversion Rate that you can use with any calculations and readers will have to apply their own discretion in this respect. Beware however, such calculations involving currency conversions can be artificial and do not reflect real values of either products or markets.

The diagram shows the problem of relating Product or Market Values or Costs in Real Terms (+), the National Currency Value in Real Terms (i.e. excluding the effects of Inflation) and the Value of another currency (the Converted Currency, given as \$) in relation to the National Currency.

## **PRODUCT PARITY**

The basis of the data provided is to allow users to produce business plans and forecasting models across national and statistically diverse boundaries. Thus it is necessary to adopt a standard product definition which can be then applied across national borders. The product definition chosen is the U.S. government's NAICS product codes (and the previous SIC product codes where relevant). The problem is to apply these product definitions across the national boundaries. The U.S. government stubbornly clings to the imperial system of measurement and this further complicates the matter.

The use of PRODUCT PARITY is intended to allow trans-national business planning and forecasting (however readers can request data based on national product definitions), and in general terms Product Parity means that equivalent products are compared even where the exact technical specification, or quantification, of the product is not the same. Thus a 12oz liquid container as defined in the (Imperial measuring system) NAICS product codes is quantitatively equivalent to 35.5ml, however for the purposes of Product Parity it will be the equivalent of a 33ml liquid container in countries with a Metric measuring system. Similarly in non-Metric markets a 16oz or 1lb Imperial measure, whilst actually equivalent to 454g, will equate to a 450g product in Metric measure markets.

For many products this 'Product Parity' will be based on the 'Purchasing Parity unit costs' -v- 'product performance', rather than 'unit cost' -v- 'technical specifications'. This is because national markets impose different technical specifications on products which essentially fulfil the same customer requirement, and thus these products have a Product Parity which can be used for uniform, cross border, business planning and forecasting.

## Financial Notes & Definitions

### HISTORIC & FORECAST FINANCIAL DATA TRANSITION PERIODS

The HISTORIC DATA covers the last 7 years, and the FORECAST DATA series covers the next 7 years. There is always a transition period; which is in fact during the last two quarters, i.e. whilst the historic data is being collated. In addition the data given for the next two quarters is considered an estimate rather than a forecast. Thus the 12 month period around the output date is an estimate.

For the various Financial Scenarios it must be assumed that the Scenario factor or strategy being considered will not exert an impact on the forecast immediately and will not become evident for some time after its inception. Whilst the forecasting models used operates on a monthly time scale and does also take account of other temporal factors (for example seasonality of demand, industry accounting periods, stock taking scheduling, et al) it would be too pedantic to express the transition year in greater detail. Therefore in the forecast data a straight line plot is produced between the BASE year, through the transition period to the first full forecast year.

The data in this section derives data from 5,025 worldwide companies and organisations (Suppliers and Distribution Channel members).

ALL FINANCIAL DATA FIGURES ARE IN REAL TERMS

### FINANCIAL BALANCE SHEETS

Row	TITLE	LEGEND
	TOTAL SALES	
1	The TOTAL SALES figures given are synchronized with the Median Market Forecast and not to the individual Market Scenario Forecasts. This ensures that one can use a standardized market measure to compare the Financial data and not have the additional complication of interpreting the financial data in relation to the market scenarios.	
2	DOMESTIC SALES	% Sales
3	EXPORTS	% Sales
4	PRE-TAX PROFIT	% Sales
5	INTEREST PAID	% Sales
6	NON-TRADING INCOME	% Sales
7	OPERATING PROFIT	% Sales
8	DEPRECIATION: STRUCTURES	% Sales
9	DEPRECIATION: PLANT AND EQUIPMENT	% Sales
10	DEPRECIATION: MISCELLANEOUS ITEMS	% Sales
11	TOTAL DEPRECIATION	% Sales
12	TRADING PROFIT	% Sales
13	INTANGIBLE ASSETS	% Sales
14	INTERMEDIATE ASSETS	% Sales
15	FIXED ASSETS: STRUCTURES	% Sales
16	FIXED ASSETS: PLANT AND EQUIPMENT	% Sales
17	FIXED ASSETS: MISCELLANEOUS ITEMS	% Sales
18	FIXED ASSETS	% Sales
19	CAPITAL EXPENDITURE ON STRUCTURES	% Sales
20	CAPITAL EXPENDITURE ON PLANT AND EQUIPMENT	% Sales
21	CAPITAL EXPENDITURE ON VEHICLES	% Sales
22	CAPITAL EXPENDITURE ON DATA PROCESSING EQUIPMENT	% Sales
23	CAPITAL EXPENDITURE ON MISCELLANEOUS ITEMS	% Sales
24	TOTAL CAPITAL EXPENDITURE	% Sales
25	RETIREMENTS: STRUCTURES	% Sales
26	RETIREMENTS: PLANT AND EQUIPMENT	% Sales
27	RETIREMENTS: MISCELLANEOUS ITEMS	% Sales
28	TOTAL RETIREMENTS	% Sales
29	TOTAL FIXED ASSETS	% Sales

## Crystals for Electronic Applications

Row	TITLE	LEGEND
30	FINISHED PRODUCT STOCKS	% Sales
31	WORK IN PROGRESS AS STOCKS	% Sales
32	MATERIALS AS STOCKS	% Sales
33	TOTAL STOCKS & INVENTORY	% Sales
34	DEBTORS	% Sales
35	MISCELLANEOUS CURRENT ASSETS	% Sales
36	TOTAL CURRENT ASSETS	% Sales
37	TOTAL ASSETS	% Sales
38	CREDITORS	% Sales
39	SHORT TERM LOANS	% Sales
40	MISCELLANEOUS CURRENT LIABILITIES	% Sales
41	TOTAL CURRENT LIABILITIES	% Sales
42	NET ASSETS / CAPITAL EMPLOYED	% Sales
43	SHAREHOLDERS FUNDS	% Sales
44	LONG TERM LOANS	% Sales
45	MISCELLANEOUS LONG TERM LIABILITIES	% Sales
46	WORKERS	persons
47	HOURS WORKED	Hours
48	WORK IN 1ST QUARTER	% of Annual
49	WORK IN 2ND QUARTER	% of Annual
50	WORK IN 3RD QUARTER	% of Annual
51	WORK IN 4TH QUARTER	% of Annual
52	TOTAL EMPLOYEES	persons
53	RAW MATERIALS COST	% Sales
54	FINISHED MATERIALS COST	% Sales
55	FUEL COST	% Sales
56	ELECTRICITY COST	% Sales
57	TOTAL INPUT SUPPLIES / MATERIALS AND ENERGY COSTS	% Sales
58	PAYROLL COSTS	% Sales
59	WAGES	% Sales
60	DIRECTORS' REMUNERATIONS	% Sales
61	EMPLOYEE BENEFITS	% Sales
62	COMMISSIONS & INCENTIVES PAID	% Sales
63	TOTAL REMUNERATIONS	% Sales
64	SUB CONTRACTORS	% Sales
65	RENTAL & LEASING: STRUCTURES	% Sales
66	RENTAL & LEASING: PLANT AND EQUIPMENT	% Sales
67	TOTAL RENTAL & LEASING COSTS	% Sales
68	MAINTENANCE: STRUCTURES	% Sales
69	MAINTENANCE: PLANT AND EQUIPMENT	% Sales
70	TOTAL MAINTENANCE COSTS	% Sales
71	SERVICES PURCHASED	% Sales
72	COMMUNICATIONS COSTS	% Sales
73	MISCELLANEOUS EXPENSES	% Sales
74	SALES PERSONNEL VARIABLE & COMMISSION COSTS	% Sales
75	SALES EXPENSES AND COSTS	% Sales
76	SALES MATERIALS COSTS	% Sales
77	TOTAL SALES COSTS	% Sales
78	DISTRIBUTION FIXED COSTS	% Sales
79	DISTRIBUTION VARIABLE COSTS	% Sales
80	WAREHOUSING FIXED COSTS	% Sales
81	WAREHOUSING VARIABLE COSTS	% Sales



## Crystals for Electronic Applications

Row	TITLE	LEGEND
82	PHYSICAL HANDLING FIXED COSTS	% Sales
83	PHYSICAL HANDLING VARIABLE COSTS	% Sales
84	PHYSICAL PROCESS FIXED COSTS	% Sales
85	PHYSICAL PROCESS VARIABLE COSTS	% Sales
86	TOTAL DISTRIBUTION AND HANDLING COSTS	% Sales
87	MAILING & CORRESPONDENCE COSTS	% Sales
88	MEDIA ADVERTISING COSTS	% Sales
89	ADVERTISING MATERIALS & PRINT COSTS	% Sales
90	POS & DISPLAY COSTS	% Sales
91	EXHIBITION & EVENTS COSTS	% Sales
92	TOTAL ADVERTISING COSTS	% Sales
93	PRODUCT RETURNS & REJECTION COSTS	% Sales
94	PRODUCT INSTALLATION & RE-INSTALLATION COSTS	% Sales
95	PRODUCT BREAKDOWN & POST INSTALLATION COSTS	% Sales
96	PRODUCT SYSTEMS & CONFIGURATION COSTS	% Sales
97	PRODUCT SERVICE & MAINTENANCE COSTS	% Sales
98	CUSTOMER PROBLEMS & CUSTOMER COMPLAINT COSTS	% Sales
99	TOTAL AFTER-SALES COSTS	% Sales
100	TOTAL MARKETING COSTS	% Sales
101	NEW TECHNOLOGY EXPENDITURE	% Sales
102	NEW PRODUCTION TECHNOLOGY EXPENDITURE	% Sales
103	TOTAL RESEARCH AND DEVELOPMENT EXPENDITURE	% Sales
104	TOTAL OPERATIONAL & PROCESS COSTS	% Sales
105	DEBTORS WITHIN AGREED TERMS	% Sales
106	DEBTORS OUTSIDE AGREED TERMS	% Sales
107	UN-RECOVERABLE DEBTS	% Sales

**COMPANY FINANCIAL DATA DEFINITIONS**

<b>Data given on:</b>	<b>Definition:</b>
% OF CUSTOMERS = 50% Revenue	The best estimate of the percentage of immediate customers accounting for 50% of the sales of the business.
% SHARE OF 4 LARGEST FIRMS	The combined market shares of the four leading firms in the industry, expressed as a percentage.
ACTUAL RETURN ON INVESTMENT	The actual, pre-tax net income expressed as a percentage of investment for the business, used to adjust the future estimates of ROI.
ASSET UTILIZATION	Sales as a ratio of total sales.
AVERAGE REMUNERATION	Total employee remuneration divided by the number of employees.
BORROWING RATIO	Total debt as a ratio of net worth.
CAPACITY UTILIZATION	The average % percentage of standard capacity utilized during the year. Standard capacity is the sales value of the maximum output the business can sustain with:  a) facilities normally in operation and b) current constraints (e.g. technology, work rules, labour practices, etc.)
CAPITAL EMPLOYED	The sum of long term liabilities. It represents the counterpart of the net assets employed by the firm.
CREDIT PERIOD	Debtors over sales times 365 days.
CREDITORS RATIO	Creditors over sales times 365 days.
CREDITORS	Trade creditors and bills payable within one year.
CURRENT RATIO	Current assets as a ratio of current liabilities.
DEBT GEARING RATIO	Long term loans as a ratio of net worth.
DEBTORS	Trade debtors and trade bills receivable due within one year.
DEPRECIATION	Includes amounts written off tangible fixed assets, including leased assets.
DIRECTORS REMUNERATION	Includes all payments made to directors including pension fund contributions, ex-gratia payments and payments to directors' family.
DISCOUNT CASH FLOW YIELD RATE	The internal rate of return after tax earned in this business when this strategy is executed. It is the time discount rate at which discounted cash flow plus residual is equal to initial investment.
DISCOUNTED CASH FLOW	The cash generated over ten years from net income, less the cash absorbed by increases in the net investment in the business. The annual cash flows are discounted to a present value, using the time discount rate.
DISCOUNTED NET INCOME (10 YEARS)	From pre-tax net income in each year is deducted a capital charge on the increase in investment since the base period to reflect the cost of these funds. The time discount rate is then applied to obtain the present value of the income stream for the 10 year period.
DOMESTIC REVENUES	Wherever applicable, domestic Revenues represent the proportion of total turnover generated locally less exports produced by the same companies.
EMPLOYEES UNIONIZED	The percentage of total employees of the business who are unionized.
EQUITY GEARING	Shareholders' funds as a ratio of total liabilities.
EXPORTS / REVENUES	Exports divided by Revenues.
EXPORTS	This figure will be shown where it has been disclosed.
FIFO VALUATION	The accounting method used for inventory valuation FIFO, or other method (e.g. LIFO).
FIXED ASSETS / EMPLOYEES	Fixed assets divided by the number of employees.
FIXED ASSETS	Property, plant, fixtures and fittings, office equipment and motor vehicles wholly owned and shown at their written down book value.
FIXED CAPITAL INTENSITY	Gross book value of plant & equipment expressed as a percentage of Revenues. Gross book value includes original value of buildings, real estate manufacturing & transportation equipment.
FIXED CAPITAL INTENSITY	The gross book value of plant and equipment, expressed as a percentage of Revenues.
FORECAST REAL MARKET GROWTH RATE (% / YEAR)	An estimate of the future annual real growth rate of the served market.
FORECAST SELLING GROWTH RATE % p.a.	A forecast of the annual growth rate of the selling prices.
IMMEDIATE CUSTOMER	The proportion of the total number of immediate customers accounting for 50% of total Revenues,

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FRAGMENTATION	expressed as a percentage. For example, if 5 of a business's 100 immediate customers represent 50% Revenue, immediate customer fragmentation is 5%.
INCOME GEARING	Interest paid as a percentage of profit before tax and before interest paid.
INDUSTRY (SIC/NAICS) GROWTH, LONG RUN	The annual long term (10 year) growth rate of the SIC/NAICS industry in which the business is located, expressed as a percentage.
INDUSTRY CONCENTRATION RATIO	The amount of industry shipments accounted for by the four largest firms in the industry expressed as a percentage.
INTANGIBLE ASSETS	Non-tangible assets such as good will, trademarks, patents and copyrights owned.
INTEREST PAID	Gross interest paid. It should be noted that many private companies either do not disclose this figure in full or aggregate short-term, long-term and hire purchase interest together.
INTERMEDIATE ASSETS	Includes investments in subsidiary and associated companies, trade investments and other unquoted investments, insurance premiums on life policies, and Advanced Corporation Tax recoverable. In addition, amounts due from other Group companies (as necessary), associated and affiliated companies, receivable after one year and with no stated fixed repayment terms will be included. Long term portions of trade and sundry debtors will also be included, wherever they are disclosed separately in the accounts.
INVENTORY / REVENUES	The sum of raw materials, work-in-process inventory and finished goods inventory (each net of reserve for losses) as a percentage of Revenues.
INVESTMENT / REVENUES	Investment as a percentage of Revenues. Investment can be measured in any of the following ways: a) net book value of plant and equipment plus working capital b) equity plus long-term debt c) total assets employed minus current liabilities attributable to the business.
INVESTMENT / VALUE ADDED	Investment expressed as a percentage of value added. Value added is adjusted for profits to minimize that portion of the relationship with ROI which is caused by under or overstated earnings.
INVESTMENT PER EMPLOYEE	Average investment, expressed in monetary units per employee.
LONG TERM LOANS	Includes long term portions of bank & other institutional loans, mortgages, hire purchase repayments and leasing obligations, all of which are due after one year. Also, amounts due to group, associated & affiliated companies payable after one year are included.
MARKET POSITION	A factor combining:  a) MARKET SHARE: the share of the served market for the business, expressed as a percentage. b) RELATIVE MARKET SHARE: the market share of the business relative to the combined market share of the three leading competitors, expressed as a percentage. For example if ones business has 30% of the market and the three largest competitors have 20%, 10% and 10%: 30 divided by (20+10+10) = 75%.
MARKET SHARE GROWTH RATE	The annual growth rate of market share expressed as a percentage.
MARKET SHARE INSTABILITY	The instability of the market share of the business, measured as the sum of the absolute values of the business's annual market share changes.
MARKET SHARE	The share of the served market expressed as a percentage.
MARKETING EXPENSES / REVENUES	The sum of salesforce, advertising, promotion and other marketing expenses expressed as a percentage of Revenues. Does not include costs of physical distribution.
MISCELLANEOUS CURRENT ASSETS	Cash and near cash items such as quoted investments and tax reserve certificates. Also sundry debtors, prepayments & accrued income due within one year, plus amounts due from group companies, associated & affiliated companies receivable within one year.
MISCELLANEOUS CURRENT LIABILITIES	Sundry creditors, accrued expenses and prepaid income including dividends, corporation tax, social security and other sundry amounts payable within one year.
MISCELLANEOUS LONG TERM LIABILITIES	Deferred and future taxation, minority interests, pension funds and similar liabilities, provisions for liabilities and charges due.
NET ASSETS	The net assets employed are obtained by subtracting total current liabilities from the total assets.
NET WORTH	Equals shareholders' funds less the intangible assets.
NEW PRODUCT SALES / REVENUES	Percentage of sales accounted for by new products. New products are those products introduced during the three preceding years.
NEWNESS OF PLANT & EQUIPMENT (NBV / GBV)	Newness of plant and equipment, measured as the ratio of Net Book Value to Gross Book Value.
NON-TRADING INCOME	Comprises Investment income received, such as income from quoted & unquoted investments, rents received, share of profit from associated companies; as well as Reserves adjustments, such as transfers from capital grant reserve, interest relief grants.
NUMBER OF EMPLOYEES + THEIR	The average number of employees together with their aggregate wages and salaries.

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<b>REMUNERATION</b>	
<b>OPERATING PROFIT MARGIN</b>	Operating profit as a percentage of sales.
<b>OPERATING PROFIT</b>	Pre-tax profit plus interest, less non-trading income.
<b>PRE-TAX PROFIT MARGIN</b>	Pre-tax profits as a percentage of sales.
<b>PRE-TAX PROFIT</b>	The net trading profit figure declared after deducting all operating expenses including depreciation & finance charges but before deduction of tax, dividends, subventions or group relief and other appropriations. Consolidated data is included where applicable in respect of the share of profits & losses of associated companies. Items described as exceptional are included. Those described as extraordinary items are excluded.
<b>PROFIT / EMPLOYEES</b>	Profit before tax divided by the number of employees.
<b>PURCHASE AMOUNT IMMEDIATE CUSTOMERS</b>	The typical amount of products or services bought by an immediate customer in a single transaction.
<b>QUICK RATIO</b>	Current assets less stocks as a ratio of current liabilities.
<b>RESEARCH &amp; DEVELOPMENT EXPENSES / REVENUES</b>	Product or Service R & D expenses plus Process R & D expenses expressed as a % Revenue. Product or Service R&D expenses include all expenses for innovation & advances in the products or services; including improvements in packaging, product design, features and functions. Process R & D expenses include all expenses for process improvements to reduce the cost of producing, processing and handling of goods. Sales are the net Revenues billed including lease revenues.
<b>REAL MARKET GROWTH, SHORT-RUN</b>	The annual growth rate of the size of served market, deflated by the selling price index, expressed as a percentage.
<b>REAL MARKET GROWTH RATE</b>	The historical annual real (unit) growth rate of the market which the business serves, expressed as a percentage.
<b>RELATIVE COMPENSATION</b>	The average of hourly wage rates relative to leading competitors and salary levels relative to competitors. Competitors' wage rates and salary levels are 100%; if ones wage rates and salary levels are 5% higher, ones relative hourly wage rates are 105%, relative salaries are 105%, and ones average relative compensation is 105%.
<b>RELATIVE INTEGRATION BACKWARD</b>	The degree of backward vertical integration (i.e. toward suppliers) of the business relative to its leading competitors.
<b>RELATIVE INTEGRATION FORWARD</b>	The degree of forward vertical integration (i.e. toward customers) of the business relative to its leading competitors (less than, the same as, more than).
<b>RELATIVE MARKET SHARE</b>	The market share of the business, relative to the combined market shares of the three leading competitors, expressed as a percentage.
<b>RELATIVE PRICE</b>	The average level of selling prices of the products & services relative to the average level of the leading competitors. The average price of the competitors is 100%; if the average prices of the business are 5% higher when its price relative to competition is 105%.
<b>RELATIVE PRODUCT QUALITY</b>	The percentage of sales volume from products and service that, from the perspective of the consumer, are judged as superior to those available from leading competitors minus the percentage judged as inferior.
<b>RETURN ON ASSETS</b>	Pre-tax profits as a percentage of total assets.
<b>RETURN ON CAPITAL</b>	Pre-tax profits as a percentage of capital employed.
<b>RETURN ON SHAREHOLDERS FUNDS</b>	Pre-tax profits as a percentage of shareholders' funds.
<b>ROI = NET INCOME / INVESTMENT</b>	Pre-tax net income, including special non-recurring costs, minus corporate overhead costs, as a percentage of average investment including fixed and working capital at book value, but excluding corporate investment not particular to the business.
<b>SALES / EMPLOYEES</b>	Sales divided by the number of employees.
<b>SALES / FIXED ASSETS</b>	Sales as a ratio of fixed assets.
<b>SALES</b>	Gross turnover recorded, including overseas sales, inter-group sales and exports, but excluding Value Added Tax or Sales Tax.
<b>SALES</b>	The net sales billed, including lease revenues.
<b>SELLING PRICE GROWTH RATE</b>	The annual growth rate of selling prices charged, expressed as a percentage.
<b>SHAREHOLDERS FUNDS</b>	The sum of issued, ordinary, and preference share capital, all reserves, the profit and loss balance (retained profits) and government grants.
<b>SHORT TERM LOANS</b>	Includes short term portions of loans, bank overdrafts, hire purchase repayments & leasing obligations, due within one year. Plus amounts due to affiliated entities within one year.
<b>STANDARD PRODUCTS / SERVICES</b>	The products or services of the business more or less standardized for all customers, or are they designed or produced to order for individual customers.
<b>STOCK TURNOVER</b>	Sales as a ratio of stocks.

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STOCKS	Stocks and work in progress (net of progress repayments) held.
TOTAL CURRENT ASSETS	The sum of stocks, debtors and other current assets, representing the portion assets which is realizable within a year.
TOTAL CURRENT LIABILITIES	The sum of trade creditors, short term debt and other current liabilities.
TOTAL DEBT / WORKING CAPITAL	Total debt as a ratio of working capital.
TOTAL DEBT	This amount is obtained by adding short term loans to the long term loans.
TOTAL LIABILITIES	The sum of capital employed and total current liabilities.
TRADING PROFIT MARGIN	Trading profit as a percentage of sales.
TRADING PROFIT	Operating profit plus depreciation.
VALUE ADDED / EMPLOYEES	Value added (adjusted for profits) expressed in monetary terms per employee.
VERTICAL INTEGRATION	Value added as a percentage of sales. Both value added & sales are adjusted for profits to minimize that portion of the relationship with ROI affected by under or overstated earnings.
WAGES / REVENUES	Employee remuneration divided by Revenues.
WORKING CAPITAL / REVENUES	Working capital over Revenues.
WORKING CAPITAL	The short-term funding to carry out day to day trading activities, it is obtained by subtracting total current liabilities from the current assets.

## Industry Norms Definitions

The data in this section derives data from 5,025 worldwide companies and organisations (Suppliers and Distribution Channel members).

Norms for the Product industry are shown in this section. This represents the major industry sector data for the industry in each country and as such forms the basis of international comparison.

Only the most critical factors should be compared with the various scenarios given above as industry averages can at best represent an indication and not a specific point of measure.

Reliance on Industry Norms is often used by analysts in order to support theories and suppositions and these are in turn used for investment scenarios. In fact Industry Norms or Averages are not tangible as they combine and manipulate data from companies in wide ranging activities.

Much of the benefit in the analysis of Industry Norms is to use the data to provide guide-lines or parameters which can be seen to define and identify issues for the target industry sector.

Since these Industry Norms should be representative of the entire industry it is wise to provide an average which encompasses all the major countries in the trade cell.

## INDUSTRY NOTES + DEFINITIONS

01. OEM & Manufacturers Market Level
02. Wholesale & Distributor Market Level
03. Retailer & Added Value Retailer Market Level
04. End User & Consumer Market Level
05. Discounted & Promotional Market Level
06. Plant & Equipment Average Annual Investment
07. Product Prices / Market Average Index
08. New Products Introduction Index
09. Relative output of Products of a Superior Quality Index
10. Index of Comparative Salesforce and Selling Expenditure
11. Index of Comparative Advertising Expenditure
12. Index of Comparative General Promotional Expenditure
13. Product Adoption Rates
14. Product Sales Conversion Rates
15. Average Annual Sales Growth Rate
16. Capacity Utilization as a measure of Standard Capacity
17. Standardized Products & Services Index
18. Relative Employee Compensation Index
19. Instable Market Share as an Index of Total Market Share
20. Relative Forward Integration Index
21. Plant and Equipment Investment greater than Depreciation  
Plant and Equipment Investment Equal to Depreciation  
Plant and Equipment Investment Less than Depreciation  
Plant and Equipment Investment - Unallocated

## Crystals for Electronic Applications

22. Plant and Equipment in Use within the range 0-3 years  
Plant and Equipment in Use within the range 3-6 years  
Plant and Equipment in Use within the range 6-9 years  
Plant and Equipment in Use over years 9 old / Unallocated
23. Supplier Concentration = 8 Largest  
Supplier Concentration = 20 Largest  
Supplier Concentration = 50 Largest  
Supplier Concentration = Unspecified / Unallocated
24. Immediate Wholesale & Retail Customers  
Immediate OEM and Manufacturing Customers  
Immediate Consumer and End User Customers  
Immediate Non-Specific Customers / Unallocated
25. Enterprises within the Range 1-19 Employees  
Enterprises within the Range 20-99 Employees  
Enterprises within the Range 100+ Employees  
Enterprises within Unspecified / Unallocated Employee Ranges
26. Buyer Age Profile in the range 0-19 Years  
Buyer Age Profile in the range 20-24 Years  
Buyer Age Profile in the range 25-34 Years  
Buyer Age Profile in the range 35-44 Years  
Buyer Age Profile in the range 45-54 Years  
Buyer Age Profile in the range 55-64 Years  
Buyer Age Profile in the range 65+ / Unallocated Years
27. Buyer Profile in the AB Social Group  
Buyer Profile in the C1 Social Group  
Buyer Profile in the C2 Social Group  
Buyer Profile in the DE / Unallocated Social Group
28. End User Age Profile in the range 0-19 Years  
End User Age Profile in the range 20-24 Years  
End User Age Profile in the range 25-34 Years  
End User Age Profile in the range 35-44 Years  
End User Age Profile in the range 45-54 Years  
End User Age Profile in the range 55-64 Years  
End User Age Profile in the range 65+ / Unallocated Years
29. End User Profile in the AB Social Group  
End User Profile in the C1 Social Group  
End User Profile in the C2 Social Group
01. End User Profile in the DE / Unallocated Social Group

# Corporate Data

## Crystals for Electronic Applications

**This database contains data on 5,025 significant worldwide Companies (Suppliers and Distribution Channel members).**

Once users have identified from the *PDF Express* document the Products or Services of interest, together with the Countries of interest (based on the Markets, Profitability, Industry data, and other criteria) a next step is to access data on the Company Targets, i.e. the individual Companies, Organisations and other Entities.

**Users can get the data in several sections.**

The **Procurement Data** provides information on the \$ Values and/or Quantities/Volumes of Materials, Products and Services purchased by individual Companies and Organisations. In addition to the Materials, Products & Services listed above, additional breakdowns and more detailed product and service data is available from the raw surveys.

The **Sales Data** provides information on the \$ Values and/or Quantities/Volumes of Products and Services sold by individual Companies and Organisations. In addition to the Products & Services listed above, additional breakdowns and more detailed product and service data is available from the raw surveys.

The **Trade Buyer & End User Data** provides information on the Trade Buyers and End Users of individual Companies and Organisations.

The **Survey Data** provides information on the Surveys of Products & Services, Operations, Buyer & Decision Maker Profiles, Trading Area, and Competitors.

The **Corporate Data** provides information on target companies or organisations and this will give readers a detailed understanding of the target.

### **Cost + Delivery**

Costs depend on the data required. A quotation of cost and delivery will be provided on request from the After-Sales Service (see below).



## Procurement & Input Data

### Demand for Input Materials, Products & Services

The Procurement Data provides information on the \$ Values and/or Quantities/Volumes of Materials, Products and Services purchased by individual Companies and Organisations.

In addition to the Materials, Products & Services listed, additional breakdowns and more detailed product and service data is available from the raw surveys.

This will always include data, by year Historic: from 1997, and a Forecast by year to 2040. Data can be provided for up to 200 countries.

The client can specify Input Materials / Product / Services breakdowns as needed.

## Sales Data

### Sales of Products & Services

The Sales Data provides information on the \$ Values and/or Quantities/Volumes of Products and Services sold by individual Companies and Organisations.

In addition to the Products & Services listed above, additional breakdowns and more detailed product and service data is available from the raw surveys.

This will always include data, by year Historic: from 1997, and a Forecast by year to 2040. Data can be provided for up to 200 countries.

The client can specify Product / Services Market breakdowns as needed.

## Trade Buyers & End User Data

### Trade Buyers

This data can investigate the Trade Buyers in the selected industries. The data is based on a series of existing Databases and raw survey data. The client can specify information as needed.

### End Users

This data can investigate the End Users in the selected industries. The data is based on a series of existing Databases and raw survey data. The client can specify information as needed.

## Survey Data

### Survey Data for the Products & Industries

Each survey (Suppliers, Distribution Channels, Decision Makers, Trade Buyers and End Users) contains 5 sub-sets for Products, Physical Operations, Buyer & End Users, Trading Area, & Competitors in the selected Industries.

<b>Products</b>	The client can specify information as needed.
<b>Physical Operations</b>	The client can specify information as needed.
<b>Buyer &amp; Decision Maker Profiles</b>	The client can specify information as needed.
<b>Trading Area</b>	The client can specify information as needed.
<b>Competitors</b>	The client can specify information as needed.

These surveys cover the Industries, Products, Competitors, Operations and Product Flows in terms of the Suppliers, Distributors, Decision Makers, and End Users.

### Industry & Supplier Performance

One can investigate the product Industry in the selected Industries. Industry Performance Survey results. **The client can specify information as needed.**

### Distribution Channels

One can investigate the product Distribution Channels in the selected Industries. Distribution Survey results. **The client can specify information as needed.**

### Decision Makers

One can investigate the product Buyers and Purchasing Decision Makers in the selected Industries. Purchasing Decision Makers Survey results. **The client can specify information as needed.**

### Trade Buyers & End Users

One can investigate the End Users in the selected Industries. Trade Buyer & End User Survey results. **The client can specify information as needed.**

## Corporate Data

This database contains data on 5,025 significant Companies (Suppliers and Distribution Channel members) worldwide.

The **Corporate Data** provides information on target companies or organisations and this will give readers a detailed understanding of the target company.

This part is provided as a  PDF file or a  Word file, as specified by the client.

## Sample Data Objectives for each Target Company

The data objectives have to be set by the client and were possible these will be achieved by the research. For example:-

1. Financials: historical sales, forecasted sales, gross profit margin.
  - a. By industry sector and application sector as defined by the client.

For example, for the sales made by a Target Company those products sold to specific categories of customers, how much of their revenue is generated from providing various products, or application to specific categories of customers, et cetera.
2. A list of products produced by the Target Company or sourced from other suppliers.
3. Type of distribution channel, e.g. direct sales to End Users, OEM sales, via specifiers, via importers or distributor, partnering with third party providers, et cetera.
4. Partners by type (e.g. specifiers, product distributor, customer service partner) per country
5. Pricing by product sector defined by the client.
6. Discount structures
7. Capacity by product/market defined
8. Availability of products (% of product in stock versus product to be ordered)
9. Sales by the type of Support for all categories specified by the client.
10. The average Modernization and Upgrades period by Product Sector defined by the client.
11. Customer Perceptions
12. The size (in terms of number) of management team per country, number of field sales persons per country, number of customer service staff per country.
13. Countries covered by the competitors, production sites (city), customer service sites (city), headcount, documentation.
14. Technology and innovation: innovative technology or application developments.
15. Et cetera... **The client can specify any particular data which needs to be covered.**

## List of Target Companies

The Client may either select the target themselves, or can specify the Top 10 or Top 15 in the World / Europe / individual Country / et cetera. **The client can specify here which Target Companies are to be covered.**

## Base data objectives for the Target Company

### Key Personnel:

1. Chairman
2. Chief Executive
3. Directors:
4. Executives:

### Corporate Summary:

5. Company Description
6. Company History
7. Legal Entity & Ownership
8. Company Facilities
9. Company Key Assets
10. Mainline product / service
11. Product / services provided
12. Parent Company
13. Bankers
14. Year established
15. Current employees
16. Issued capital
17. Shareholders
18. Last published turnover
19. Subsidiaries
20. Associated companies
21. Companies represented
22. Agencies
23. Physical processing locations
24. Capital investment
25. Advertising expenditure
26. Advertising media
27. Advertising posture
28. Sales promotion activity
29. Method of selling
30. Distribution
31. Distribution network
32. Use of distribution channels

### Future Strategy Planning & Implementation:

57. Philosophy
58. Product Development
59. Internet Strategy
60. Marketing Strategy
61. Sales Strategy
62. Strategic Alliances
63. Operations

### Exit Strategies:

#### Management:

72. Organisational Structure
73. Leadership
74. Staff Members

### Corporate Observations:

33. Premises
34. Product Brands
35. Product Sales Channels
36. Products Carried & Services Offered
37. Consumer Features & Benefits
38. Current Industry Analysis
39. Competition
40. Competitive Advantage
41. Target Industries
42. Target Customers
43. Current Strategy & Implementation
44. Current Management
45. Current Financial Plan
46. Investment Fund Sources & Use of Funds
47. Future Target Customers
48. Future Process Trends
49. Future Industry Analysis
50. Projected Industry Size
51. Planned Products & Services
52. Development Plans

### SWOT Analysis:

53. Strengths
54. Weaknesses
55. Opportunities
56. Threats

### Goals:

64. Renovations, stocking, staff & marketing.
65. Industry Penetration
66. Penetrate & raise awareness in markets.
67. Achieving a higher profit margin.
68. Building the customer base.
69. Generate repeat and referral sales.
70. Expansion potential.
71. Reputation as a quality Supplier.

### Financial Plans:

75. Finance Requirements
76. Use of Funds
77. Cash Flow
78. Balance Sheet Topics
79. Financial Assumptions

### Specific Additional corporate data required on Target Companies

The client can specify any particular corporate data which is needed:

- 80. -
  - 81. -
  - 82. - .../
- 

These above items are a qualitative analysis of the Target Company. This data is derived from the Surveys of Industry sources, Distribution Channels and Buyers of the products supplied by the target company. This data is not quantified, but is presented as the qualified and subjective opinions of those responding to the surveys.

### Financial Data for the Target Company

The financial data is provided in sections:-

- 1. the most salient Management figures and margins, and
- 2. a full Balance Sheet and Management Accounts simulation.

### Management Accounts

Management figures for the Target Company:  as an Excel file:

- |   |   |
|---|---|
| 1. Product Revenue                      | 21. Total Fixed Assets                  |
| 2. Product Profitability as a % Revenue | 22. Finished Product Stocks             |
| 3. Total Process Space                  | 23. Work in Progress as Stocks          |
| 4. Average Site Process Space           | 24. Materials as Stocks                 |
| 5. Average Site Revenues                | 25. Total Stocks / Inventory            |
| 6. Average Site Establishment Cost      | 26. Debtors                             |
| 7. Fixed Assets: Premises               | 27. Miscellaneous Current Assets        |
| 8. Fixed Assets: Equipment              | 28. Total Current Assets                |
| 9. Fixed Assets: Miscellaneous Items    | 29. Total Assets                        |
| 10. Fixed Assets                        | 30. Creditors                           |
| 11. Capital Expenditure on Premises     | 31. Short Term Loans                    |
| 12. Capital Expenditure on Plant        | 32. Miscellaneous Current Liabilities   |
| 13. Capital Expenditure on Equipment    | 33. Total Current Liabilities           |
| 14. Cap. Expend. on Data Processing     | 34. Net Assets / Capital Employed       |
| 15. Capital Expenditure on Misc. Items  | 35. Long Term Loans                     |
| 16. Total Capital Expenditure           | 36. Miscellaneous Long Term Liabilities |
| 17. Retirements: Premises               | 37. Shareholders' Funds                 |
| 18. Retirements: Plant & Equipment      | 38. Process Workers                     |
| 19. Retirements: Miscellaneous Items    | 39. Total Employees                     |
| 20. Total Retirements                   |   |

### Specific Additional Financial data required on Target Companies

The client can specify any particular Financial data which is needed.

---

**Balance Sheet and Management Ratios**

Balance Sheet and Management Accounts for the Target Company:  as an Excel file:

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Return on Capital</li> <li>2. Return on Assets</li> <li>3. Return on Shareholders' Funds</li> <li>4. Pre-tax Profit Margins</li> <li>5. Operating Profit Margin</li> <li>6. Trading Profit Margin</li> <li>7. Return on Investment</li> <li>8. Assets Utilisation (Sales to Total Assets)</li> <li>9. Sales as a ratio of Fixed Assets</li> <li>10. Stock Turnover (Sales as a ratio of Stocks)</li> <li>11. Credit Period</li> <li>12. Creditors' Ratio</li> <li>13. Default Debtors / Ratio of Total Debtors</li> <li>14. Un-Recoverable Debts Ratio of Total Debts</li> <li>15. Working Capital / Sales</li> <li>16. Materials &amp; Energy Costs as a % Revenue</li> <li>17. Added Value</li> <li>18. Investment as a Ratio of Added Value</li> <li>19. Value of Plant &amp; Equipment % Revenue</li> <li>20. Vertical Integration (Value Added % Revenue)</li> <li>21. Research &amp; Development Investment</li> <li>22. Capital Expenditure Investment % Revenue</li> <li>23. Marketing Costs as a % Revenue</li> <li>24. Current Ratio (Current Assets/Liabilities)</li> <li>25. Quick Ratio</li> <li>26. Borrowing Ratio Total Debt ratio of Net Worth)</li> <li>27. Equity Ratio (Shareholders Funds : Liabilities)</li> <li>28. Income Gearing</li> <li>29. Total Debt as a ratio of Working Capital</li> <li>30. Debt Gearing Ratio</li> <li>31. Average Remuneration (all employees)</li> <li>32. Profit per Employee</li> <li>33. Sales per Employee</li> <li>34. Remunerations / Sales</li> <li>35. Fixed Assets per Employee</li> <li>36. Capital Employed per Employee</li> <li>37. Total Assets per Employee</li> <li>38. Value of Average Investment per Employee</li> <li>39. Value Added per Employee</li> <li>40. Materials Costs as a % Revenue</li> <li>41. Wage Costs as a % Revenue</li> <li>42. Payroll and Wages as a Ratio to Materials</li> <li>43. Variable Costs as a % Revenue</li> <li>44. Fixed Costs as a % Revenue</li> <li>45. Fixed Costs as a Ratio of Variable Costs</li> <li>46. Distribution Costs as a % Revenue</li> <li>47. Warehousing Costs as a % Revenue</li> <li>48. Physical Costs as a % Revenue</li> <li>49. Fixed as a Ratio of Variable Distribution Costs</li> <li>50. Fixed Ratio of Variable Warehousing Costs</li> <li>51. Fixed as a Ratio of Variable Physical Costs</li> <li>52. Fixed Ratio of Variable Total Distribution Costs</li> <li>53. Product Returns Costs % Revenue</li> <li>54. Product Installation Costs as a % Revenue</li> <li>55. Product Breakdown Costs as a % Revenue</li> <li>56. Product Systems Costs as a % Revenue</li> <li>57. Product Service &amp; Associated Costs</li> <li>58. Customer &amp; Associated Costs % Revenue</li> <li>59. Work in Progress: Finished Products</li> <li>60. Stock</li> </ol> | <ol style="list-style-type: none"> <li>61. Un-recoverable Debts Ratio of Total Debt</li> <li>62. Un-recoverable Debts Ratio Within Terms</li> <li>63. Total Sales Costs as a % Revenue</li> <li>64. Total Distribution Costs as a % Revenue</li> <li>65. Total Advertising Costs as a % Revenue</li> <li>66. Total After-Sales Costs as a % Revenue</li> <li>67. Total Customer Compensation Costs</li> <li>68. Total Variable Marketing Costs % Revenue</li> <li>69. Total Fixed Marketing Costs % Revenue</li> <li>70. Total Fixed Marketing Costs : Variable Costs</li> <li>71. Variable Sales Personnel Costs: Marketing</li> <li>72. Variable Distribution Ratio Marketing Costs</li> <li>73. Variable Advertising Costs : Marketing</li> <li>74. Variable After-Sales Costs : Marketing Costs</li> <li>75. Sales Personnel Variable Costs : Sales</li> <li>76. Sales Personnel Variable Costs : Debtors</li> <li>77. Sales Personnel Variable Costs</li> <li>78. Exports as a % Revenue</li> <li>79. \$ Hourly Pay Rate</li> <li>80. \$ Hourly Wage Rate</li> <li>81. Capital Employed</li> <li>82. Return on Capital</li> <li>83. Return on Assets</li> <li>84. Return on Shareholders' Funds</li> <li>85. Pre-tax Profit Margins</li> <li>86. Operating Profit Margin</li> <li>87. Trading Profit Margin</li> <li>88. Return on Investment</li> <li>89. Assets Utilisation (Sales : Total Assets)</li> <li>90. Sales / Fixed Assets Ratio Work in Progress</li> <li>91. Stock Turnover (Sales as a ratio of Stocks)</li> <li>92. Credit Period</li> <li>93. Creditors' Ratio</li> <li>94. Default Debtors Ratio of Total Debtors</li> <li>95. Un-Recoverable Debts Ratio of Total Debts</li> <li>96. Working Capital / Sales</li> <li>97. Materials &amp; Energy Costs as a % Revenue</li> <li>98. Added Value</li> <li>99. Investment as a Ratio of Added Value</li> <li>100. Value of Plant &amp; Equipment as a % Revenue</li> <li>101. Vertical Integration Ratio</li> <li>102. Research &amp; Development Investment</li> <li>103. Capital Expenditure Investment % Revenue</li> <li>104. Marketing Costs as a % Revenue</li> <li>105. Current Ratio</li> <li>106. Quick Ratio</li> <li>107. Borrowing Ratio</li> <li>108. Equity Ratio</li> <li>109. Income Gearing</li> <li>110. Total Debt as a ratio of Working Capital</li> <li>111. Debt Gearing Ratio</li> <li>112. Average Remuneration (all employees)</li> <li>113. Profit per Employee</li> <li>114. Sales per Employee</li> <li>115. Remunerations / Sales</li> <li>116. Fixed Assets per Employee</li> <li>117. Capital Employed per Employee</li> <li>118. Total Assets per Employee</li> <li>119. Value of Average Investment / Employee</li> <li>120. Value Added per Employee</li> </ol> |
|--|--|

## Supplementary Data

The client can specify information as needed.

This section can be used to specify non-Industry or non-Corporate data and research, for example:-

- Product Data
- Distribution Data
- Processes
- Technologies
- Macro-Economic Issues
- Political Issues
- National Legislation and Regulations
- Product Certification and Conformity Issues
- Demographic Data
- Physical & Geographical data (for example, Highways, Elevations, et al)
- Business Resources
- Et cetera...

# PureData Database



## Crystals for Electronic Applications

### *Database* Editions

#### Upgrade to the full *Database* Edition at a reduced cost

To upgrade to the full Database Edition you can use the coupon in the *PDF Express* Edition to order the upgrade database edition you need at a reduced cost.

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**Country Database: Cost \$ 1250, less the Coupon value of \$300.**

#### **Delivery**

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# PureData Database

## Crystals for Electronic Applications



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## Crystals for Electronic Applications World Report Database



### CRYSTALS FOR ELECTRONIC APPLICATIONS WORLD REPORT

The Crystals for Electronic Applications Report has the following information. The base report has 59 chapters, plus the Excel spreadsheets & Access databases specified.

This research provides World Data on Crystals for Electronic Applications. The report is available in several Editions and Parts and the contents and cost of each part is shown below. The Client can choose the Edition required; and subsequently any Parts that are required from the After-Sales Service.

### Report Description

#### Crystals for Electronic Applications

The Crystals for Electronic Applications World Report provides data on the net market for the Products and Services covered in each of 205 countries. The Products and Services covered (Crystals for Electronic Applications) are classified by the Major Products and each Product / Service is then further defined and analysed by subsidiary Product. 8 Products/Markets are covered, 2162 pages, 9804 spreadsheets, 9648 database tables, 580 illustrations. Updated monthly. 12 month After-Sales Service.

### Overview

#### CRYSTALS FOR ELECTRONIC APPLICATIONS WORLD REPORT

The Crystals for Electronic Applications World Report gives Market Consumption / Products / Services for over 200 countries by each Product by 3 Time series: From 2007, Forecast to 2028.

Countries covered include: Albania, Algeria, Angola, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Dominica, Dominican Republic, Ecuador, Egypt, Eire, El Salvador, Eritrea, Estonia, Ethiopia, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Malta, Martinique, Mexico, Moldova, Montenegro, Morocco, Mozambique, Namibia, Netherlands, Netherlands Antilles, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Puerto Rico, Qatar, Reunion, Romania, Russia, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Venezuela, Vietnam, Zambia, Zimbabwe.

59 MARKET RESEARCH CHAPTERS. SPREADSHEET CHAPTERS: Market Consumption - in US\$ by Country by Product/Service by Year. Market, Financial, Competitive, Market Segmentation, Industry, Critical Parameters, Marketing Costs, Markets, Decision Makers, Performance, Product Launch.

WORLD & NATIONAL REPORT MARKET DATABASE & SPREADSHEETS. FINANCIAL SPREADSHEETS & DATABASES. INDUSTRY SPREADSHEETS & DATABASES.

Data includes Market Consumption by individual Product / Service, Per-Capita Consumption, Marketing Costs & Margins,

## Crystals for Electronic Applications

Product Launch Data, Buyers, End Users & Customer Profile, Consumer Demographics. Historic Balance Sheets, Forecast Financial Data, Industry Profile, National Data.

The report is on a DVD containing the entire web and databases; it is also delivered as an online download. Merge text, tables & databases for your own reports, spreadsheet calculations & modelling.

8 Products/Markets covered, 2162 pages, 9804 spreadsheets, 9648 database tables, 580 illustrations. Updated monthly. 12 month After-Sales Service.

## Contents

### CRYSTALS FOR ELECTRONIC APPLICATIONS WORLD REPORT

The Market for Crystals for Electronic Applications in each country by Products & Services.

The Crystals for Electronic Applications World Report covers:

**TIME SERIES:** Historic from 2007, Forecast to 2028. Consumption given at industry / distribution channel / service or product line level.

**PRODUCTS & MARKETS COVERED:**

### CRYSTALS FOR ELECTRONIC APPLICATIONS

Crystals for Electronic Applications  
Crystals: Mounted Quartz: Miscellaneous Applications  
Crystals: Mounted ADP / Salt / Ruby / Garnet: Miscellaneous Applications  
Filters: Quartz and other piezoelectric  
Frequency Control Crystals: Quartz  
Frequency Control Crystals: ADP / Salt / Ruby / Garnet  
Oscillators: Crystal

### 59 MARKET RESEARCH CHAPTERS

1 Administration, 2 Advertising, 3 Buyers - Commercial Operations, 4 Buyers - Competitors, 5 Buyers - Major City, 6 Buyers - Products, 7 Buyers - Trade Cell, 8 Competitive Industry Analysis, 9 Competitor Analysis, 10 Country Focus, 11 Distribution, 12 Business Decision Scenarios, 13 Capital Costs Scenarios, 14 Cashflow Option Scenarios, 15 Cost Structure Scenarios, 16 Historic Industry Balance Sheet, 17 Historic Marketing Costs & Margins, 18 Investment + Cost Reduction Scenarios, 19 Market Climate Scenarios, 20 Marketing Costs, 21 Marketing Expenditure Scenarios, 22 Marketing Margins, 23 Strategic Options Scenarios, 24 Survival Scenarios, 25 Tactical Options Scenarios, 26 Geographic Data, 27 Industry Norms, 28 Major City Market Analysis, 29 Capital Access Scenarios, 30 Market Cashflow Scenarios, 31 Economic Climate Scenarios, 32 Market Investment + Costs Scenarios, 33 Marketing Expenditure Scenarios, 34 Market Risk Scenarios, 35 Market Strategic Options, 36 Market Survival Options, 37 Market Tactical Options, 38 Marketing Expenditure -v- Market Share, 39 Marketing Strategy Development, 40 Markets, 41 Operational Analysis, 42 Overseas Development, 43 Personnel Management, 44 Physical Distribution + Customer Handling, 45 Pricing, 46 Process + Order Handling, 47 Product Analysis, 48 Product Development, 49 Product Marketing Factors, 50 Product Mix, 51 Product Summary, 52 Profit Risk Scenarios, 53 Promotional Mix, 54 Salesforce Decisions, 55 Sales Promotion, 56 Surveys, 57 Targets -Product + Market, 58 Technology, 59 Trade Cell Analysis.

### SPREADSHEET CHAPTERS

**PRODUCT CONSUMPTION** - in US\$ by Country by Product/Service by Year: From 2007, Forecast to 2028. Market, Financial, Competitive, Market Segmentation, Industry, Critical Parameters, Marketing Costs, Markets, Decision Makers, Performance, Product Launch.

**WORLD & NATIONAL REPORT MARKET DATABASE & SPREADSHEETS:** 1332 World Database tables & Spreadsheets covering business scenarios. 1435 World Database tables & Spreadsheets covering Markets, Market Forecast, Financial Forecast, Financial Margins, Historic Financial, Historic Costs, Industry Norms for each country. 3816 National Database tables & Spreadsheets covering business scenarios.

**FINANCIAL SPREADSHEETS & DATABASES:** 188 Balance Sheet, Financial Margins & Ratios for each of 103 Business Scenarios - by Country by Year: From 2007, Forecast to 2028.

**INDUSTRY SPREADSHEETS & DATABASES:** 820 Database tables & Spreadsheets covering Historic Industry Balance Sheet Data, Forecast Industry Financial Data, Industry Profiles & Norms - by Country by Year - From 2007, Forecast to 2028.

**NATIONAL DATA** - by Country by Year.

## Crystals for Electronic Applications

The report is produced on a DVD containing the entire report web and databases; it is also delivered as an online download. Readers can access & reproduce the information for their own documents or reports. Tables & databases as Access & Excel files to enable readers to produce their own spreadsheet calculations and modelling.

8 Products covered for over 200 Countries: 2162 pages, 9804 spreadsheets, 9648 database tables, 580 diagrams & maps.

This database is updated monthly. 12 months Full After-Sales Services & Updates available from the publishers.

This report is also available as 9 Regional Reports: Canada and the USA, Central America (31 countries), South America (13 countries), Europe (45 countries), Eurasia (4 countries), Middle East (19 Countries), Africa (54 countries), Asia (48 countries), and Oceania (20 countries). This report is also available for individual countries.

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## **DATABASE EDITIONS**

### **Crystals for Electronic Applications**

The report on Crystals for Electronic Applications is available in several editions, and also there are various additional elements available from the After-Sales Service.

#### **World Report**

The World Report gives market data for Crystals for Electronic Applications on each of the Product and Market Sectors for about 200 countries. There are data caveats on country data because in certain countries the data may not be available.

Cost: \$ 2850

#### **Regional Report**

There are 9 Regional reports available which give market data for Crystals for Electronic Applications on each of the Product and Market Sectors for countries in a particular Region. There are data caveats for some country data because in certain countries the data may not be available.

1. Canada & USA
2. Central America (31 Countries)
3. South America (13 Countries)
4. Europe (44 Countries)
5. Eurasia (4 Countries)
6. Middle East (19 Countries)
7. Africa (54 Countries)
8. Asia (24 Countries)
9. Oceania (17 Countries)

See the countries in each Regional Report : Appendix 1

Cost: \$ 1850

#### **Country Report**

There are Crystals for Electronic Applications Country Reports available for most countries. Country Reports provide detailed information on the target country.

Cost: \$ 1250

#### **Town & Country Report**

The Crystals for Electronic Applications Town + Country Reports provides users with commercial intelligence on markets and industry in a particular country, plus market, financial and industry data on each of the significant Cities and Towns in the country. For the larger countries, like China, India, the USA, Brazil, et al, the data is generally limited to the top 500 Cities and Towns within the country.

Cost: \$ 2850

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## CRYSTALS FOR ELECTRONIC APPLICATIONS

### Markets & Products

The report will give market data for each of the below Crystals for Electronic Applications Product and Market Sectors, by year Historic: from 2007, and a Forecast by year to 2028. Data will be given for about 200 countries.

To see what such Country spreadsheets looks like see:

<http://www.datagroup.org/MOM.xls>

[http://www.datagroup.org/XLS\\_File\\_Samples/Germany\\_Market.xls](http://www.datagroup.org/XLS_File_Samples/Germany_Market.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/Germany\\_Market\\_Values.xls](http://www.datagroup.org/XLS_File_Samples/Germany_Market_Values.xls) (US\$, Euros, Yen & Yuan)

In addition aggregate Market data is given as:

World / Global Totals (in US\$, Euros, Yen and Yuan)

[http://www.datagroup.org/XLS\\_File\\_Samples/WORLD\\_Market\\_Values\\_Dollar\\_Euro.xls](http://www.datagroup.org/XLS_File_Samples/WORLD_Market_Values_Dollar_Euro.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/WORLD\\_Market\\_Values\\_Yen\\_Yuan.xls](http://www.datagroup.org/XLS_File_Samples/WORLD_Market_Values_Yen_Yuan.xls)

9 Regional (Canada & USA, Central America, South America, Europe, Eurasia, Middle East, Africa, Asia, Oceania) Totals (in US\$, Euros, Yen and Yuan):

[http://www.datagroup.org/XLS\\_File\\_Samples/Europe\\_Market\\_Values\\_Dollar\\_Euro.xls](http://www.datagroup.org/XLS_File_Samples/Europe_Market_Values_Dollar_Euro.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/Europe\\_Market\\_Values\\_Yen\\_Yuan.xls](http://www.datagroup.org/XLS_File_Samples/Europe_Market_Values_Yen_Yuan.xls)

Year / Country Totals (2007 to 2028).

[http://www.datagroup.org/XLS\\_File\\_Samples/Year\\_2010\\_Country\\_Values\\_Dollars.xls](http://www.datagroup.org/XLS_File_Samples/Year_2010_Country_Values_Dollars.xls)

The Crystals for Electronic Applications World Report provides data on the net market for the Products and Services covered in each of 205 countries. The Products and Services covered (Crystals for Electronic Applications) are classified by the Major Products and each Product / Service is then further defined and analysed by subsidiary Product. 8 Products/Markets are covered, 2162 pages, 9804 spreadsheets, 9648 database tables, 580 illustrations. Updated monthly. 12 month After-Sales Service.

NAICS / SIC Product definition: M04669\_L : Crystals for Electronic Applications

### Products & Markets covered

#### CRYSTALS FOR ELECTRONIC APPLICATIONS

1. Crystals for Electronic Applications
2. Crystals: Mounted Quartz: Miscellaneous Applications
3. Crystals: Mounted ADP / Salt / Ruby / Garnet: Miscellaneous Applications
4. Filters: Quartz and other piezoelectric
5. Frequency Control Crystals: Quartz
6. Frequency Control Crystals: ADP / Salt / Ruby / Garnet
7. Oscillators: Crystal

## Geographic Coverage

Albania	Germany	Nicaragua
Algeria	Ghana	Nigeria
Angola	Greece	Norway
Argentina	Guadeloupe	Oman
Armenia	Guatemala	Pakistan
Aruba	Guinea	Panama
Australia	Guinea-Bissau	Papua
Austria	Guyana	Paraguay
Azerbaijan	Haiti	Peru
Bahamas	Honduras	Philippines
Bahrain	Hong Kong	Poland
Bangladesh	Hungary	Portugal
Barbados	Iceland	Puerto Rico
Belarus	India	Qatar
Belgium	Indonesia	Reunion
Belize	Iran	Romania
Bhutan	Iraq	Russia
Bolivia	Ireland	Saudi Arabia
Bosnia + Herzegovina	Israel	Senegal
Botswana	Italy	Serbia + Montenegro
Brazil	Jamaica	Sierra Leone
Brunei	Japan	Singapore
Bulgaria	Jordan	Slovakia
Burma	Kazakhstan	Slovenia
Cambodia	Kenya	South Africa
Cameroon	Korea South	Spain
Canada	Kuwait	Sri Lanka
Chile	Kyrgyzstan	Sudan
China	Laos	Suriname
Colombia	Latvia	Swaziland
Republic of Congo	Lebanon	Sweden
D R Congo - Zaire	Lesotho	Switzerland
Costa Rica	Liberia	Syria
Cote d'Ivoire	Libya	Taiwan
Croatia	Lithuania	Tajikistan
Cuba	Luxembourg	Tanzania
Cyprus	Macedonia	Thailand
Czech Republic	Madagascar	Trinidad
Denmark	Malawi	Tunisia
Dominica	Malaysia	Turkey
Dominican Republic	Martinique	Turkmenistan
Ecuador	Mauritius	Uganda
Egypt	Micronesia	Ukraine
El Salvador	Mexico	United Arab Emirates
Estonia	Moldova	United Kingdom
Ethiopia	Mongolia	United States
Finland	Morocco	Uruguay
France	Mozambique	Uzbekistan
French Guiana	Namibia	Venezuela
Gabon	Netherlands	Vietnam
Gambia	Netherlands Antilles	Zambia
Georgia	New Zealand	Zimbabwe

**See Data Caveat below.**

## Financial data

The databases will give Financial data for each of the below Crystals for Electronic Applications Financial Data and Margins, by country, by year Historic from 2007, and a Forecast by year to 2028. Data will be given for EACH of the countries covered.

### Balance Sheet Data

To see what such a spreadsheet looks like: <http://www.datagroup.org/FOM.xls>

Total Sales, Domestic Sales, Exports, Pre-tax Profit, Interest Paid, Non-trading Income, Operating Profit, Depreciation: Structures, Depreciation: Plant and Equipment, Depreciation: Miscellaneous Items, Total Depreciation, Trading Profit, Intangible Assets, Intermediate Assets, Fixed Assets: Structures, Fixed Assets: Plant and Equipment, Fixed Assets: Miscellaneous Items, Fixed Assets, Capital Expenditure on Structures, Capital Expenditure on Plant and Equipment, Capital Expenditure on Vehicles, Capital Expenditure on Data Processing Equipment, Capital Expenditure on Miscellaneous Items, Total Capital Expenditure, Retirements: Structures, Retirements: Plant and Equipment, Retirements: Miscellaneous Items, Total Retirements, Total Fixed Assets, Finished Product Stocks, Work in Progress as Stocks, Materials as Stocks, Total Stocks / Inventory, Debtors, Total Maintenance Costs, Services Purchased, Miscellaneous Current Assets, Total Current Assets, Total Assets, Creditors, Short Term Loans, Miscellaneous Current Liabilities, Total Current Liabilities, Net Assets / Capital Employed, Shareholders Funds, Long Term Loans, Miscellaneous Long Term Liabilities, Workers, Hours Worked, Work in 1st Quarter, Work in 2nd Quarter, Work in 3rd Quarter, Work in 4th Quarter, Total Employees, Raw Materials Cost, Finished Materials Cost, Fuel Cost, Electricity Cost, Total Input Supplies / Materials and Energy Costs, Payroll Costs, Wages, Directors' Remunerations, Employee Benefits, Employee Commissions, Total Employees Remunerations, Sub Contractors, Rental & Leasing: Structures, Rental & Leasing: Plant and Equipment, Total Rental & Leasing Costs, Maintenance: Structures, Maintenance: Plant and Equipment, Communications Costs, Miscellaneous Expenses, Sales Personnel Variable & Commission Costs, Sales Expenses and Costs, Sales Materials Costs, Total Sales Costs, Distribution Fixed Costs, Distribution Variable Costs, Warehousing Fixed Costs, Warehousing Variable Costs, Physical Handling Fixed Costs, Physical Handling Variable Costs, Physical Process Fixed Costs, Physical Process Variable Costs, Total Distribution and Handling Costs, Mailing & Correspondence Costs, Media Advertising Costs, Advertising Materials & Print Costs, POS & Display Costs, Exhibition & Events Costs, Total Advertising Costs, Product Returns & Rejection Costs, Product Installation & Re-Installation Costs, Product Breakdown & Post Installation Costs, Product Systems & Configuration Costs, Product Service & Maintenance Costs, Customer Problem Solving & Customer Complaint Costs, Total After-Sales Costs, Total Marketing Costs, New Technology Expenditure, New Production Technology Expenditure, Total Research and Development Expenditure, Total Operational & Process Costs, Debtors within Agreed Terms, Debtors Outside Agreed Terms, Un-recoverable Debts.

### Financial Margins & Ratios Data

To see what such a spreadsheet looks like: <http://www.datagroup.org/GOM.xls>

Return on Capital, Return on Assets, Return on Shareholders' Funds, Pre-tax Profit Margins, Operating Profit Margin, Trading Profit Margin, Return on Investment, Assets Utilisation (given as a ratio of Sales to Total Assets), Sales as a ratio of Fixed Assets, Stock Turnover (Sales as a ratio of Stocks), Credit Period, Creditors' Ratio (given as Creditors divided by Sales times 365 days), Default Debtors given as a Ratio of Total Debtors, Un-Recoverable Debts given as a Ratio of Total Debts, Working Capital / Sales, Materials & Energy Costs as a % of Sales, Added Value, Investment as a Ratio of Added Value, Value of Plant & Equipment as a % of Sales, Vertical Integration (Value Added as a % of Sales), Research & Development Investment as a % of Sales, Capital Expenditure Investment as a % of Sales, Marketing Costs as a % of Sales, Current Ratio (Current Assets as a ratio of Current Liabilities), Quick Ratio, Borrowing Ratio (or Total Debt as a ratio of Net Worth), Equity Ratio (Shareholders Funds as a ratio of Total Liabilities), Income Gearing, Total Debt as a ratio of Working Capital, Debt Gearing Ratio (Long Term Loans as a ratio of Net Worth), Average Remuneration (all employees - full and part), Profit per Employee, Sales per Employee, Remunerations / Sales, Fixed Assets per Employee, Capital Employed per Employee, Total Assets per Employee, Value of Average Investment per Employee, Value Added per Employee, Materials Costs as a % of Sales, Wage Costs as a % of Sales, Payroll and Wages as a Ratio to Materials, Variable Costs as a % of Sales, Fixed Costs as a % of Sales, Fixed Costs as a Ratio of Variable Costs, Distribution Costs as a % of Sales, Warehousing Costs as a % of Sales, Physical Costs as a % of Sales, Fixed as a Ratio of Variable Distribution Costs, Fixed as a Ratio of Variable Warehousing Costs, Fixed as a Ratio of Variable Physical Costs, Fixed as a Ratio of Variable Total Distribution & Handling Costs, Product Returns & Rejections Costs as a % of Sales, Product Installation & Associated Costs as a % of Sales, Product Breakdown & Associated Costs as a % of Sales, Product Systems & Associated Costs as a % of Sales, Product Service & Associated Costs as a % of Sales, Customer Complaint & Associated Costs as a % of Sales, Stock Work in Progress & Materials as a Ratio of Finished Products, Stock Materials as a Ratio of Work in Progress, Un-recoverable Debts as a Ratio of Total Debt, Un-recoverable Debts as a Ratio of Debts Within Agreed Terms, Total Sales Costs as a % of Sales, Total Distribution & Handling Costs as a % of Sales, Total Advertising Costs as a % of Sales, Total After-Sales Costs as a % of Sales, Total Customer Compensation Costs as a % of Sales, Total Variable Marketing Costs as a % of Sales, Total Fixed Marketing Costs as a % of Sales, Total Fixed Marketing Costs as a Ratio of Total Variable Marketing Co, Variable Sales Personnel Costs as a Ratio of Marketing Costs, Variable Distribution & Handling Costs as a Ratio of Marketing Costs, Variable Advertising Costs as a Ratio of Marketing Costs, Variable After-Sales Costs as a Ratio of Marketing Costs, Sales Personnel Variable Costs as a Ratio of Sales, Sales Personnel Variable Costs as a Ratio of Debtors, Sales Personnel Variable Costs as a Ratio of Un-Recoverable Debtors, Exports as a % of Sales, \$ Hourly Pay Rate, \$ Hourly Wage Rate, Capital Employed.



## General Contents

### Crystals for Electronic Applications World Report

This report provides users with commercial intelligence on markets and industries in over 200 countries. The report analyses the world markets with a basic point of reference, namely a base country. The Client can select the base reference country when ordering the database.

These reports are formatted to give both a narrative description of the various matters covered as well as provide readers with the ability to directly use the Chapters (via Microsoft Word or compatible word processors) to produce their own reports and documentation. Experienced users will be able to use the spreadsheet and databases to generate highly detailed narrative reports, charts and graphics - as well as sophisticated business and commercial forecasts and models. The databases are provided in both Excel spreadsheets and an Access database. Explanatory notes are provided as Word documents or in PDF formats.

As an entry level product the narrative is necessarily illustrative in its terminology and seeks to provide a basic degree of business logic and theory which indicates the rational applied in the forecasting and modelling methodology.

The databases are specifically designed to provide users with a uniform and consistent numeric measure of both (normally) quantifiable values as well as conceptual factors which are (usually) only capable of qualification. Experienced users will know how to apply forecasting and modelling software to the numeric data provided to generate highly detailed and discrete business planning models. The databases provided in this report can be used directly with databases on other product, markets and industries in other countries. The databases are specifically designed to be transnational, currency neutral, inflation and purchasing parity adjusted, product parity and product equivalent adjusted, opportunity cost adjusted, and numerically compatible; they all can be linked or merged programmatically in business planning models to provide multi-national and multi-level analysis.

The report databases are designed to give a common definition, unit of measure and quantification of markets in over 200 countries. These reports rely on data collection at various levels of the product flow; this effectively means, the producer, the distribution channels and the end user or consumers. This data is then correlated with any national and international statistical data produced by official agencies. Unfortunately, product flow data gathering in some countries is difficult, and furthermore the official statistical data is both inaccurate and sparse. In such circumstances, in some countries, we have to flag a Data Caveat as a warning.

#### Choice of Base Reference Country

As report databases are generated specifically for each client order, the client can select which Base Country the database uses. The choice of a Base Country is important as it puts the database into the client's own perspective. This is important, for example, in respect of Purchasing Parity data or the results of End User Survey data where the world data is presented from the relative position of the Base Country. Where a client does not specify a Base Reference country, the database is generated with the Base Reference country being the same country as the client.

## Market Research Contents

Please also see the Notes to the contents: [Notes](#)

Within each heading there are links with detailed descriptions and explanation of the contents; these can be opened when the link is clicked.

Chapters	Pages	Volumes	Diagrams, Maps & Illustrations	Spreadsheets & Database tables
59	2162	Online & DVD	c. 550	Excel Spreadsheets: 9804 Access tables: 9648

The Crystals for Electronic Applications World Report provides data on the net market for the Products and Services covered in each of 205 countries. The Products and Services covered (Crystals for Electronic Applications) are classified by the Major Products and each Product / Service is then further defined and analysed by subsidiary Product. 8 Products/Markets are covered, 2162 pages, 9804 spreadsheets, 9648 database tables, 580 illustrations. Updated monthly. 12 month After-Sales Service.

### NAICS / SIC coded reports and databases

This database is a Market database which is designed to be compatible with U.S. government databases.

For NAICS / SIC coded reports & databases, the report structures, datasets, field names, et al, are analogues of U.S. Department of Commerce and U.S. Census databases, and are designed to provide compatibility with U.S. Government databases, but in a worldwide context. The products are described under their NAICS or SIC coding. This coding system classifies products within Product Codes.

For a full explanation of the NAICS coding system see: <http://www.census.gov/eos/www/naics/>

These product / revenue lines codes are of course determined by the U.S. Government agencies.

However if users want additional data then this can be extracted from the various databases and surveys as part of the After-Sales Service.

## Databases & Structures

### Root Folder



#### Crystals for Electronic Applications Report Database

This folder contains a number of general files, plus the various main Chapter Files.

#### Summary Documents

The Report contains 2 Summary documents for the Market Research which can be opened in a Browser or as a Word document and paginated.

If required these files can then be saved as PDF files:-

1. [MR\\_Executive\\_Summary\\_Brief.html](#) will render into about 70 pages.
2. [MR\\_Executive\\_Summary.html](#) will render into about 950 pages.

-  **Market Research**

This folder contains the main Market Research files.

-  **Corporate Research**

Where the database is specified as having Corporate Intelligence, this folder contains the main Corporate Research files.

-  **Research Data**

This folder contains the Market Research files which are specific to this edition of the report.

-  **BUSINESS PLANNING**

This folder contains the Business Plan Documents & Boilerplates

**Also see the Business Plan Images folder in Toolkit 1**

-  **BASE\_FOLDERS** Significant folders include:-

-  **CHAPTERS in HTM** HTM files listing the Chapter contents

-  **Cities** HTM files listing Cities & Towns in the database

-  **HELP** Help documents **Also see the HELP folder in Toolkit 1**

-  **MAPS**

-  **MDB** Access databases

-  MarketResearch.mdb
  -  MarketResearch.mdb Table List

-  World.mdb
  -  World.mdb Table List


-  World\_Product\_Sectors.mdb
  -  World\_Product\_Sectors.mdb Table List

-  Corporate.mdb
  -  Corporate.mdb Table List

-  Base.mdb General & Database Reference tables in



'Base\_mdb\_Database.zip' file [Size 75.8MB]

-  **Data.exe** Supplemental Database extraction [Optional. 547 databases for Modelling Level products. Size 2.56GB]
-  **Auxiliary\_Data.exe** Auxiliary Database extraction [Optional. 44 databases for Modelling Level products. Size 298MB]
-  **Data\_Help.exe** Help file extraction [Optional. 10,400 help files for Modelling Level products. Size 34MB]
-  **NAICS**  Classifications
-  **REFERENCE** Reference documents:   &  links to external databases  
**Also see the REFERENCE folder in Toolkit 1**
-  **XLS**  Business Planning & Database Reference Spreadsheets
-  **XLS\_Corporate**  Corporate Spreadsheets
  -  Corporate File List
-  **XLS\_MarketResearch**  Market Research Spreadsheets
  -  Market Research File List

### Documents & Manuals

There are additional resources to be found in Toolkit 1 which can be used to assist the interpretation and manipulation of the database. These are:-

1. Data Manuals on the Report Contents
2. Documents & Templates on the Report Contents
3. Help files on the Report Contents
4. Manuals & Templates on the Report Contents

For a detailed Table of Contents for each chapter, database or spreadsheet: **click on the Blue headings shown below. This will open a page in your browser which fully specifies the contents of that heading.**

## Spreadsheets

[Financial](#)   
[Industry](#)   
[Market](#) 

[Competitive](#)   
[Critical Parameters](#)   
[Decision Makers](#)   
[Market Segmentation](#)   
[Marketing Costs](#)   
[Performance](#)   
[Product Launch](#) 

## Chapters

- 1 OVERSEAS DEVELOPMENT
- 2 ADMINISTRATION
- 3 ADVERTISING
- 4 BUYERS – COMMERCIAL OPERATIONS
- 5 BUYERS – COMPETITORS
- 6 BUYERS – MAJOR CITY
- 7 BUYERS – PRODUCTS
- 8 BUYERS – TRADE CELL
- 9 COMPETITIVE INDUSTRY ANALYSIS
- 10 COMPETITOR ANALYSIS
- 11 COUNTRY FOCUS
- 12 DISTRIBUTION
- 13 FINANCIAL - BUSINESS DECISION SCENARIOS
- 14 FINANCIAL - CAPITAL COSTS FINANCIAL SCENARIOS
- 15 FINANCIAL - CASHFLOW OPTION SCENARIOS
- 16 FINANCIAL - COST STRUCTURE SCENARIOS
- 17 FINANCIAL - HISTORIC INDUSTRY BALANCE SHEET
- 18 FINANCIAL - HISTORIC MARKETING COSTS & MARGINS
- 19 FINANCIAL - INVESTMENT + COST REDUCTION SCENARIOS
- 20 FINANCIAL - MARKET CLIMATE SCENARIOS
- 21 FINANCIAL – MARKETING COSTS
- 22 FINANCIAL - MARKETING EXPENDITURE SCENARIOS
- 23 FINANCIAL – MARKETING MARGINS
- 24 FINANCIAL - STRATEGIC OPTIONS SCENARIOS
- 25 FINANCIAL - SURVIVAL SCENARIOS
- 26 FINANCIAL - TACTICAL OPTIONS SCENARIOS
- 27 GEOGRAPHIC DATA
- 28 INDUSTRY - NORMS
- 29 MAJOR CITY MARKET ANALYSIS
- 30 MARKET CAPITAL ACCESS SCENARIOS
- 31 MARKET CASHFLOW SCENARIOS
- 32 MARKET ECONOMIC CLIMATE SCENARIOS

33	MARKET INVESTMENT + COSTS SCENARIOS
34	MARKET MARKETING EXPENDITURE SCENARIOS
35	MARKET RISK SCENARIOS
36	MARKET STRATEGIC OPTION SCENARIOS
37	MARKET SURVIVAL OPTION SCENARIOS
38	MARKET TACTICAL OPTION SCENARIOS
39	MARKETING EXPENDITURE -v- MARKET SHARE
40	MARKETING STRATEGY DEVELOPMENT
41	MARKETS
42	OPERATIONAL ANALYSIS
43	PERSONNEL MANAGEMENT
44	PHYSICAL DISTRIBUTION + CUSTOMER HANDLING
45	PRICING
46	PROCESS + ORDER HANDLING
47	PRODUCT ANALYSIS
48	PRODUCT DEVELOPMENT
49	PRODUCT MARKETING FACTORS
50	PRODUCT MIX
51	PRODUCT SUMMARY
52	PROFIT RISK SCENARIOS
53	PROMOTIONAL MIX
54	SALESFORCE DECISIONS
55	SALES PROMOTION
56	SURVEYS
57	TARGETS - PRODUCT + MARKET
58	TECHNOLOGY
59	TRADE CELL ANALYSIS

## Crystals for Electronic Applications

<b>Countries</b>	<b>Market</b>	<b>Market Forecast</b>	<b>Financial Forecast</b>	<b>Financial Margins</b>	<b>Historic Financial</b>	<b>Historic Costs</b>	<b>Industry Norms</b>
Albania	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Algeria	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Angola	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Argentina	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Armenia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Aruba	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Australia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Austria	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Azerbaijan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bahamas	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bahrain	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bangladesh	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Barbados	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Belarus	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Belgium	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Belize	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bermuda	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bhutan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bolivia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bosnia & Herzegovina	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Botswana	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Brazil	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Brunei	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Bulgaria	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Cambodia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Cameroon	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Canada	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Chad	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Chile	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
China	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Colombia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Costa Rica	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Cote d'Ivoire	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Croatia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Cuba	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Cyprus	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Czech Republic	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Denmark	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Dominica	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Dominican Republic	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Ecuador	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Egypt	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
El Salvador	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Estonia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Ethiopia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Finland	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
France	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
French Guiana	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Gabon	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Gambia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Georgia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Germany	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Ghana	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Greece	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Guadeloupe	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Guatemala	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Guinea	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Guinea-Bissau	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Guyana	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Haiti	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Honduras	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Hong Kong	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Hungary	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Iceland	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
India	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Indonesia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Iran	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms

## Crystals for Electronic Applications

Iraq	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Ireland	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Israel	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Italy	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Jamaica	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Japan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Jordan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Kazakhstan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Kenya	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Kuwait	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Kyrgyzstan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Laos	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Latvia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Lebanon	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Lesotho	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Liberia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Libya	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Liechtenstein	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Lithuania	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Luxembourg	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Macedonia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Madagascar	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Malawi	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Malaysia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Malta	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Martinique	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Mauritius	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Mexico	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Moldova	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Monaco	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Mongolia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Morocco	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Mozambique	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Namibia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Nepal	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Netherlands	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Netherlands Antilles	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
New Caledonia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
New Zealand	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Nicaragua	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Nigeria	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Norway	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Oman	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Pakistan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Panama	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Papua New Guinea	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Paraguay	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Peru	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Philippines	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Poland	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Portugal	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Puerto Rico	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Qatar	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Reunion	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Romania	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Russia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Saudi Arabia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Senegal	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Serbia & Montenegro	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Sierra Leone	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Singapore	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Slovakia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Slovenia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
South Africa	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
South Korea	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Spain	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Sri Lanka	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Suriname	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Swaziland	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Sweden	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Switzerland	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms



## Crystals for Electronic Applications

Syria	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Taiwan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Tajikistan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Tanzania	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Thailand	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Trinidad & Tobago	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Tunisia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Turkey	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Turkmenistan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Uganda	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Ukraine	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
United Arab Emirates	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
United Kingdom	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
United States	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Uruguay	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Uzbekistan	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Venezuela	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Vietnam	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Virgin Islands	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Zambia	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms
Zimbabwe	Market	Forecast	Forecast	Forecast	Historic	Historic	Norms

### The Data Caveat

The report databases are designed to give a common definition, unit of measure and quantification of markets in over 200 countries. These reports rely on data collection at various levels of the product flow; this effectively means, the producer, the distribution channels and the end user or consumers. This data is then correlated with any national and international statistical data produced by official agencies. Unfortunately, product flow data gathering in some countries is difficult, and furthermore the official statistical data is both inaccurate and sparse. In such circumstances, in some countries, we have to flag a Data Caveat as a warning. What this means is that in some countries the data is not sufficiently verifiable for statistical purposes and in those cases the data may not be presented.

## Methodology

For more information on methodology please download a copy of the Methodology Manual:

[http://www.datagroup.org/DataGroup\\_Methodology\\_Manual.pdf](http://www.datagroup.org/DataGroup_Methodology_Manual.pdf)

## Deliverables

The Database Edition is provided as follows:

1. Executive Summary Word document ( 411 pages) + Executive Summary PDF ( 411 pages).  
World Edition: Executive Brief (90 html pages) + Executive Summary (900 html pages).
2. Online downloadable Zipped version of the report.
3. Back-up DVD with Report and Report Database (Optional).
4. 12 months After-Sales Service.
5. 1-2 hour Teleconference / Teamviewer presentation if required. See After-Sales Service.
6. Dedicated web site access for the report & databases if required. See After-Sales Service.

## About this Database

As an entry level product the narrative is necessarily illustrative in its terminology and seeks to provide a basic degree of business logic and theory which indicates the rationale applied in the forecasting and modelling methodology. First time users should read the Database Introduction and the Notes & Definitions links found in each Chapter. There are statistical nuances to some of the spreadsheets & databases which will help the user to fine-tune their models & forecasts to obtain greater accuracy.

### Data Product levels

Because of the sheer volume of data potentially available it has been necessary to create a number of product levels which can provide clients with as little or as much data as needed.

#### Database Entry level

Entry level products provide the most basic degree of information supplied. This product can be used to build upon for various business forecasting and planning application. A World Report will have a database of over 9,000 record sets.

#### Corporate Modelling level

The Corporate level modelling products provide the tools and information for medium and long term corporate forecasting and planning. Typically this level have over 24,000 record sets.

#### Econometric Modelling level

The Econometric level modelling products provide the tools and information for industry level, national, and international medium & long term forecasting and planning. Over 39,000 record sets.

#### Presentation level

The Presentation level products provide the information sought by a client company in a graphical or audio-visual format which is bespoke for the particular needs and applications of the client.

## Toolkits

To assist users there are various Toolkits available on request.

The Files, Data, Documents, Software, Tools, Utilities and other items provided on these DVDs are supplied for the sole use of the recipient. These items are the property of the publishers concerned and they may not be released or distributed without the express permission of the publisher of each item.



### Toolkit 1

1. Data Manuals
2. Document Templates
3. Help files
4. Manuals Templates
5. Microsoft Utilities
6. OpenOffice
7. Business Plan Images
8. Reference files
9. US Census Data Tools
10. Utilities & Tools

Because all DataGroup & Data Institute database are directly compatible with U.S. Government databases it is sometimes useful for users to use US Government data handling tools to manage not only US Government data, but also the data provided by DataGroup and Data Institute. Alternatively, if you are already using this US Government software you can simply access the DataGroup & Data Institute databases with the same software. In generate DataGroup & Data Institute use the same database parameters, structures and field names as those found in US Government databases, and thus users can correlate and query databases without undue difficulty.

### Toolkit 2

1. Database Utilities
2. Enterprise Resource Planning
3. Integrated Development Environment

If you intend to implement DataGroup and Data Institute databases online (internet or intranet) then an Integrated Development Environment is often the easiest route to data dissemination and data manipulation.

### Toolkit 3

There are about 40 Statistical packages provided in this Toolkit. These are Open-Source packages which are generally free to use: [acsIX](#), [ADaMSoft](#), [ADMB](#), [AMPL](#), [Analyse-it](#), [Analytica](#), [Angoss](#), [APMonitor](#), [ASReml](#), [Automlab](#), [Baudline](#), [Bayesian Filtering Library](#), [BMDP](#), [BV4.1](#), [CalEst](#), [Ch](#), [Chronux](#), [COMSOL Script](#), [CSPRO](#), [DADiSP](#), [DAP](#), [Data Applied](#), [Dataplot](#), [Demetra+](#), [EJS](#), [ELKI](#), [Epi Info](#), [Euler Mathematical Toolbox](#), [EViews](#), [FAME](#), [FEniCS Project](#), [Fityk](#), [FlexPro](#), [GAUSS](#), [Genedata Analyst](#), [GenStat](#), [GeoDA](#), [GLIM](#), [GNU Data Language](#), [GraphPad InStat](#), [GraphPad Prism](#), [gretl](#), [Hermes](#), [IBM SPSS Modeler](#), [IBM SPSS Statistics](#), [IDAMS/WinIDAMS](#), [IDL](#), [IGOR Pro](#), [IMSL Num. Libraries](#), [Izenda](#), [JAGS](#), [JHepWork](#), [JMP](#), [JMulTi](#), [Julia](#), [KPP](#), [LabPlot](#), [LISREL](#), [Macsyma](#), [Madagascar](#), [MadArtSoft](#), [Madeline](#), [Maple](#), [Mathcad](#), [Mathemagix](#), [Mathematica](#), [MATLAB](#), [MCSim](#), [MedCalc](#), [Minitab](#), [MINUIT](#), [MLwiN](#), [Mondrian](#), [NCAR Com Language](#), [NCSS](#), [NMath Stats](#), [Go Publisher](#), [NumXL](#), [Octave](#), [O-Matrix](#), [OpenBUGS](#), [OpenEpi](#), [OpenMx](#), [OptimJ](#), [Orange](#), [Origin](#), [OriginPro](#), [PARI/GP](#), [Partek](#), [PAW](#), [Perl DL](#), [Ploticus](#), [Primer-E Primer](#), [PSPP](#), [PV-WAVE](#), [Q research software](#), [QtiPlot](#), [Quantum](#), [R](#), [R Commander](#), [R Rattle GUI](#), [RapidMiner](#), [RATS](#), [Revolution Analytics](#), [ROOT](#), [Sage](#), [SALOME](#), [Salstat](#), [SAS](#), [scikit-learn](#), [Scilab](#), [SciPy](#), [SHAZAM](#), [Shogun](#), [SigmaStat](#), [SigmaXL](#), [Simfit](#), [Simul](#), [SOCR](#), [SOFA Statistics](#), [SPC XL](#), [Speakeasy](#), [S-PLUS](#), [SPSS](#), [Stata](#), [Statgraphics](#), [STATISTICA](#), [Statistical Lab](#), [Stat-JR](#), [Stats Helper](#), [StatXact](#), [SUDAAN](#), [Systat](#), [The Unscrambler](#), [Trilinos](#), [Unistat](#), [VisSim](#), [Waffles](#), [Weka](#), [WinBUGS](#), [Winpepi](#), [X-12-ARIMA](#), [XLfit](#), [Xlisp-stat](#), [XploRe](#), [Yorick](#).

### Toolkit 4

Utilities & resources for clients using databases on Microsoft Server 2003 systems.

### Toolkit 5

Utilities & resources for clients using databases on Microsoft Server 2008 systems. Also, Microsoft Server 2012 migration utilities.

## Proprietary Software package compatibility

If you use proprietary corporate planning software then it is easy to use these databases as they are compatible with the following packages:-

### Some Compatible Software products (See the Database Support site for a full list)

Project Management Software: 24SevenOffice, Assembla, AtTask, Basecamp, Central Desktop, Cerebro, Clarizen, codeBeamer, Collabive, Concerto, Contactizer, CredAbility.info, dotProject, Easy Projects .NET, eGroupWare, FastTrack Schedule, Feng Office Community Edition, FogBugz, GanttProject, Gemini, Genius Inside, Glasscubes, Huddle, Hyperoffice, InLoox, JIRA, Journyx, Kayako, KForge, KPlato, Launchpad, LiquidPlanner, LisaProject, MacProject, MantisBT, MatchWare MindView 3 Business, Merlin, MicroPlanner X-Pert, Microsoft Office Project Server, Microsoft Project, Mingle, O3spaces, OmniPlan, Open Workbench, OpenProj, Oracle Project Portfolio Management, Planisware 5, Planner Suite, Pmplus+, Primavera Project Planner, Project KickStart, Project.net, Project-Open, Projectplace, ProjectSpaces, Projektron BCS, PSNext, QdPM, QuickBase, Redmine, Rachota, SAP RPM, Smartsheet, TaskJuggler, Teamcenter, Teamwork, Tenrox, Trac, TrackerSuite.Net, Ubidesk, VPMi, WorkLenz, WorkPLAN Enterprise, workspace.com, WebSPOC, Wrike, Zoho Projects

ERP Packages: Adempiere, BlueErp, Compiere, Dolibarr, Fedena, GNU Enterprise, JFire, Kualifoundation, LedgerSMB, OFBiz, Openbravo, OpenERP, Opentaps, Postbooks, SQL-Ledger, Tryton, WebERP, 1C:Enterprise, 24SevenOffice Start / Premium / Professional, abas ERP, Accpac, Agresso Business World, AMS Advantage, BatchMaster ERP, Bowen & Groves, CGram Enterprise, Clear Enterprise, Comarch Altum, Compass ERP, Compiere, Comprehensive Patient Administrator, COA Solutions Ltd - Smart Business Suite, Consona Corporation – Intuitive / Made2manage / AXIS / Cimnet / Encompix / DTR, Epicor Enterprise, Global Shop Solutions One-System ERP Solutions, HansaWorld, ERP Adage (Adage), ERP LN (Baan), ERP LX (BPCS), ERP SL (SyteLine), ERP Swan (Swan), ERP SX.Enterprise (SX.Enterprise), ERP VE (Visual Enterprise), ERP XA (MAPICS), IFS Applications, JD Edwards EnterpriseOne & JD Edwards World, JustFoodERP.com, kVASy4, Kingdee, Lawson M3 / Movex, Lawson S3, Log-net, Maximo (MRO), Microsoft Dynamics AX, Microsoft Dynamics GP, Microsoft Dynamics NAV, Microsoft Dynamics SL, Momentum, MyWorkPLAN, NetSuite, Openda QX, OpenMFG, Oracle e-Business Suite, Paradigm, PeopleSoft, Plex Online, QAD Enterprise Applications, Ramco Enterprise Series 4.x, Ramco e.Applications, Ramco On Demand ERP, MAS 90, MAS 200, MAS 500, Technology One, SAGE ACCPPAC, SAGE Pro ERP, SAGE ERP X3, SAP Business Suite, SAP Business ByDesign, SAP Business One, SAP Business All-in-One, TaskHub, SYSPRO, SYS-APPS, mySAP, Visibility.net, WorkPLAN Enterprise

Enterprise Feedback Management Systems: SynGro, Perseus (Vovici), Clicktools, DatStat, Inquisite, SPSS, FIRM (Confirmit), NetReflector, Allegiance, Enetrix, Satmetrix, RightNow Technologies, Mindshare Technologies, Data Illusion, KeySurvey (WorldAPP), Kinetic Data, CustomerSat (MarketTools), Medallia, Interview SA, Surveynomics, Invoke Solutions, Qualtrics, Fizzback, Grimmersoft, QuestManager, QuestBack, Globalpark, DataCycles, Dub Studios, eLustro, Kinesis Survey Technologies, Knowledge Wave, myK (myKnowledge), mySurveyLab.com, QuickSearch, Ransys, ResponseTek Networks Corp., TalkFreely, XTCO, Zarca

## Resource Web

Sometimes clients also want the data loaded onto a password protected dedicated website for the use of their staff and/or any other persons they may authorise.

The main benefit of these Resource Webs is that the data is available to all the client's staff and professional advisors wherever they may be, and also when data is updated or new data is added then there is a common and know point of access for that data. Resource Webs are maintained for the use of the client for a period of 12 months from the data of the last data addition or update to that site.

These dedicated web sites are provided as part of the After-Sales Service.

<http://www.datagroup.org/about-resource-webs.html>

For a view of a typical Resource Web: <http://www.eni-italy.info> produced for ENI, the Italian Oil group

## Real Time Support

The After-Sales Service can offer client Real-Time Support. This usually involves using a software utility called TeamViewer (an installation program can be found in the Toolkit on your DVD or Hard Disk Drive) which allows the After-Sales Service support staff to directly link to the client's computer and work with the users in real time.

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## Research & Survey Methodology Analysis

Some client may wish to understand the statistical and methodological basis of the specific research conducted and this can be provided as part of the After-Sales Service.

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### Statistical Appraisal of Datasets (via the After-Sales Service)

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- **Sampling**
  - External Validity
  - Sampling Terminology
  - Statistical Terms in Sampling
  - Probability Sampling
  - Nonprobability Sampling
- **Measurement**
  - Construct Validity
    - Measurement of Validity Types
    - Construct Validity
    - Convergent & Discriminant Validity
    - Threats to Construct Validity
    - Nomological Networks
    - Multi-trait / Multi-method Matrix
    - Pattern Matching Construct Validity
  - Reliability
    - True Score
    - Measurement Error
    - Reliability
    - Type of Reliability Analysis
    - Validity
  - Levels of Measurement
  - Survey Research
    - Survey Type
    - Selecting the Survey Method
    - Construction of the Survey
      - Questions
      - Question Content
      - Response Format
      - Question Wording
      - Question Placement
    - Interviews
    - Appraisal of Survey Method
  - Scaling
    - General Issues in Scaling
    - Thurstone Scaling
    - Likert Scaling
    - Guttman Scaling
  - Qualitative Measures
    - Qualitative Discussion
    - Qualitative Data
    - Qualitative Approach
    - Qualitative Method
    - Qualitative Validity
  - Unobtrusive Measures
- **Design**
  - Internal Validity
    - Establishing Cause & Effect
    - Single Group Threats
      - Regression to the Mean
    - Multiple Group Threats
    - Social Interaction Threats
  - Design Development
  - Design Type
  - Experimental Designs
    - Two-Group Experimental Design
      - Probabilistic Equivalence
      - Random Assignment
    - Classifying Experimental Designs
    - Factorial Design
      - Factorial Design Variations
    - Randomized Block Design
    - Covariance Design
    - Hybrid Experimental Design
  - Quasi-Experimental Designs
    - Non-equivalent Groups Design
    - Regression-Discontinuity Design
    - Other Quasi-Experimental Design
  - Relationships of Pre-Post Designs
  - Formulation of the Designs
  - Modification & Experimentation
- **Analysis**
  - Conclusion Validity
    - Threats to Validity
    - Validity Improvements
    - Statistical Control
  - Data Preparation
  - Descriptive Statistics
    - Correlation
  - Inferential Statistics
    - T-Test
    - Indicator Variables
    - General Linear Model
    - Post-test-Only Analysis
    - Factorial Design Analysis
    - Randomized Block Analysis
    - Analysis of Covariance
    - Non-equivalent Group Analysis
    - Regression-Discontinuity Analysis
    - Regression Displacement Analysis

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The data for this particular datasets is correlated with base data norms, over several time series, to calculate the statistical parameters for the specific datasets. Client can order this analysis at any time during the 12 months After-Sales Service period.

## Appendix 1 : Regional Report country coverage

### Canada & USA

[Canada](#)  
[United States](#)

### Central America

[Antigua and Barbuda\\*](#)  
[Aruba](#)  
[Bahamas](#)  
[Barbados](#)  
[Belize](#)  
[Bermuda\\*](#)  
[Cayman Islands\\*](#)  
[Costa Rica](#)  
[Cuba](#)  
[Dominica](#)  
[Dominican Republic](#)  
[El Salvador](#)  
[Grenada\\*](#)  
[Guadeloupe](#)  
[Guatemala](#)  
[Haiti](#)  
[Honduras](#)  
[Jamaica](#)  
[Martinique](#)  
[Mexico](#)  
[Netherlands Antilles](#)  
[Nicaragua](#)  
[Panama](#)  
[Puerto Rico](#)  
[Saint Kitts and Nevis\\*](#)  
[Saint Lucia\\*](#)  
[Saint Vincent Grenadines\\*](#)  
[Trinidad and Tobago](#)  
[US Virgin Islands\\*](#)

### South America

[Argentina](#)  
[Bolivia](#)  
[Brazil](#)  
[Chile](#)  
[Colombia](#)  
[Ecuador](#)  
[French Guiana](#)  
[Guyana](#)  
[Paraguay](#)  
[Peru](#)  
[Suriname](#)  
[Uruguay](#)  
[Venezuela](#)

### Europe

[Albania](#)  
[Andorra\\*](#)  
[Armenia](#)  
[Austria](#)  
[Belarus](#)  
[Belgium](#)  
[Bosnia + Herzegovina](#)  
[Bulgaria](#)  
[Croatia](#)  
[Cyprus](#)  
[Czech Republic](#)  
[Denmark](#)  
[Finland](#)  
[France](#)  
[Eire](#)  
[Estonia](#)  
[Georgia](#)  
[Germany](#)  
[Greece](#)  
[Greenland\\*](#)  
[Hungary](#)  
[Iceland](#)  
[Italy](#)  
[Latvia](#)  
[Liechtenstein\\*](#)  
[Lithuania](#)  
[Luxembourg](#)  
[Macedonia](#)  
[Malta\\*](#)  
[Moldova](#)  
[Montenegro](#)  
[Netherlands](#)  
[Norway](#)  
[Poland](#)  
[Portugal](#)  
[Romania](#)  
[Serbia\\*](#)  
[Slovakia](#)  
[Slovenia](#)  
[Spain](#)  
[Sweden](#)  
[Switzerland](#)  
[United Kingdom](#)  
[Ukraine](#)

### Eurasia

[Kazakhstan](#)  
[Kyrgyzstan](#)  
[Russia](#)  
[Uzbekistan](#)

### Middle East

[Afghanistan\\*](#)  
[Azerbaijan](#)  
[Bahrain](#)  
[Iran](#)  
[Iraq](#)  
[Israel](#)  
[Jordan](#)  
[Kuwait](#)  
[Lebanon](#)  
[Oman](#)  
[Pakistan](#)  
[Qatar](#)  
[Saudi Arabia](#)  
[Syria](#)  
[Tajikistan](#)  
[Turkey](#)  
[Turkmenistan](#)  
[United Arab Emirates](#)  
[Yemen\\*](#)

### Asia

[Bangladesh](#)  
[Brunei\\*](#)  
[Burma\\*](#)  
[Cambodia](#)  
[China](#)  
[India](#)  
[Indonesia](#)  
[Japan](#)  
[Laos](#)  
[Malaysia](#)  
[Mongolia\\*](#)  
[Nepal\\*](#)  
[North Korea\\*](#)  
[Philippines](#)  
[Singapore](#)  
[South Korea](#)  
[Sri Lanka](#)  
[Taiwan](#)  
[Thailand](#)  
[Vietnam](#)

### Oceania

[Australia](#)  
[Fiji Islands\\*](#)  
[French Polynesia\\*](#)  
[Kiribati\\*](#)  
[Micronesia\\*](#)  
[New Caledonia\\*](#)  
[New Zealand](#)  
[Papua New Guinea](#)

### Africa

[Algeria](#)  
[Angola](#)  
[Benin\\*](#)  
[Botswana](#)  
[Burkina Faso\\*](#)  
[Burundi\\*](#)  
[Cameroon](#)  
[Cape Verde\\*](#)  
[Cen African Rep\\*](#)  
[Chad\\*](#)  
[Cote d'Ivoire](#)  
[Democratic Republic Congo\\*](#)  
[Djibouti\\*](#)  
[Egypt](#)  
[Equatorial Guinea\\*](#)  
[Eritrea](#)  
[Ethiopia](#)  
[Gabon](#)  
[Gambia](#)  
[Ghana](#)  
[Guinea](#)  
[Guinea-Bissau](#)  
[Kenya](#)  
[Lesotho](#)  
[Liberia](#)  
[Libya](#)  
[Madagascar](#)  
[Malawi](#)  
[Mali\\*](#)  
[Mauritania\\*](#)  
[Morocco](#)  
[Mozambique](#)  
[Namibia](#)  
[Niger\\*](#)  
[Nigeria](#)  
[Republic Congo\\*](#)  
[Rwanda\\*](#)  
[S Tome Principe\\*](#)  
[Senegal](#)  
[Seychelles\\*](#)  
[Sierra Leone](#)  
[Somalia\\*](#)  
[South Africa](#)  
[Sudan\\*](#)  
[Swaziland](#)  
[Tanzania](#)  
[Tunisia](#)  
[Uganda](#)  
[Zambia](#)  
[Zimbabwe](#)

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The countries marked \* indicate a data caveat due to local survey conditions.

## Appendix 2 : About the After-Sales Service

The DataGroup / Data Institute After-Sales Service are an independent unit which provides support to DataGroup / Data Institute users. The After-Sales Service is a stand-alone unit which is not connected to any particular Distributor, Reseller or Retailer.

The support is provided on a contractual basis to Account Holders; and on an Ad Hoc basis to retail and non-account users.

### Database specificity

The After-Sales Service can only provide support for the specific database(s) licenced to the user. We cannot generally provide data from unrelated databases, unless there is a specific agreement for this.

### Costs

The current cost is \$95 per hour; this includes all researchers / computer / database access costs. This costing is based on work which is scheduled at off-peak times.

### Delivery

We normally seek to fulfil orders in 7-14 days. For more urgent After-Sales Service work the costs depend on the client's time frame and the availability of our researchers.

### Telephone Support

Account Holders receive telephone support via their Account Manager. We are unable to offer telephone support to Ad Hoc or retail clients unless there is a specific agreement for this.

### Online Support

Account Holders receive online support via their Account Manager. We are able to offer online support to Ad Hoc or retail clients by specific agreement for this.

### Quotations

Client will usually be provided with a formal proposal and quotation for After-Sales Service work. This will underline the work which is to be provided and the cost of that work.

## How to order After-Sales Services

The After-Sales Service is most effective if users plan their orders sequentially, i.e. extract the basic data which will then lead to more complex data or correlations. This also helps to reduce costs as the use of automated processing & standard data formats are always less expensive to produce than Ad Hoc work.

### Modular research

Once the After-Sales Service understands the general data requirements they will send the Client a Modular Proposal as a Word document. The Client can then select the Parts required, and amend or modify the information objectives.

The best method to organise the ordering of data is as follows:-

- 1 Additional Market Research Data
- 2 Distribution Channels & End Users
- 3 Survey Data
- 4 Corporate Data
- 5 Additional Requirements

Once a client has specified exactly what data is needed, and that specification is available, then the After-Sales Service will produce a written quotation of cost and delivery time.

## Database Products supported by the After-Sales Service

The After-Sales Service support most DataGroup / Data Institute products and databases, including those shown below.

### Database Compatibility

The increased use of Database Management Systems, Business Planning and Control Systems, Enterprise Resource Planning, Management Information Systems, and other tools amongst management professionals has produced a critical need for the harmonisation of data across various software applications and systems platforms. The After-Sales Service ensures that its output, where required, will be fully compatible with DataGroup / Data Institute products and databases.

For this reason all the databases and reports provided use harmonised database and data sets; thereby users can obtain any database from any of the publishers, for any of their brands, with the assurance that these databases are fully compatible and can be used in conjunction with one another and the various platforms, operating systems and software.



The DataGroup Stiftung has, since 2007, undertaken the harmonisation and convergence of the database specifications and definitions of the various database providers. This is to allow users a uniform and standardised reference to use with their planning and forecasting; and to allow cross-database functionality.

The data sets, modules and standards shown are now fully harmonised and standardised to allow data and software interflow and cross-platform usage of the databases. Users may obtain older data dictionaries and standards, and/or data sets and data dictionaries for their own national standards. The standard product and market definitions have been harmonised and are provided (in the standard database products supplied), often as the NAICS classifications. Users wishing to remain with the previous SIC classifications may obtain these databases under that classification system. Users requiring other (U.N., European, Japanese, et cetera) classification definitions and norms may obtain those as necessary. Accounting standards are also harmonised according to the U.S. regulatory norms; however other norms are available. Data dictionary and data definition bridges and converters are available to allow users to update or standardise their databases.

### Database Flowchart + Configuration

The flowchart provides the minimum configuration for the databases provided by the DataGroup / Data Institute publishers & brands. All the data, time and record sets of these databases are fully compatible.

[http://www.datagroup.org/BASE\\_FOLDERS/CHAPTER\\_HTM/Ch\\_dg\\_dataflow.htm](http://www.datagroup.org/BASE_FOLDERS/CHAPTER_HTM/Ch_dg_dataflow.htm)

The output provided by the After-Sales Service will respect the standard data configuration to ensure compatibility.



## About DataGroup

DataGroup was formed in 1974 by a group of management consultants and information technology specialists whom had previous worked with, amongst other organisations, the U.S. Department of Commerce, Bank of America, Chase Econometrics, The Marketing Strategies Institute, the OECD in Paris, and MITI in Tokyo. DataGroup was established in order to develop a systemised, computerised, and uniform methodology to facilitate real world forecasting models for macro-economic, micro-economic, market, product, and industry purposes.

For full details of DataGroup's history please see: [About DataGroup](#)

## DataGroup Clients

DataGroup do not publish a list of current client list due to client confidentiality; however a partial list of client in the period 1975 to 2000 is shown here: [DataGroup Client 1975-2000](#)



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