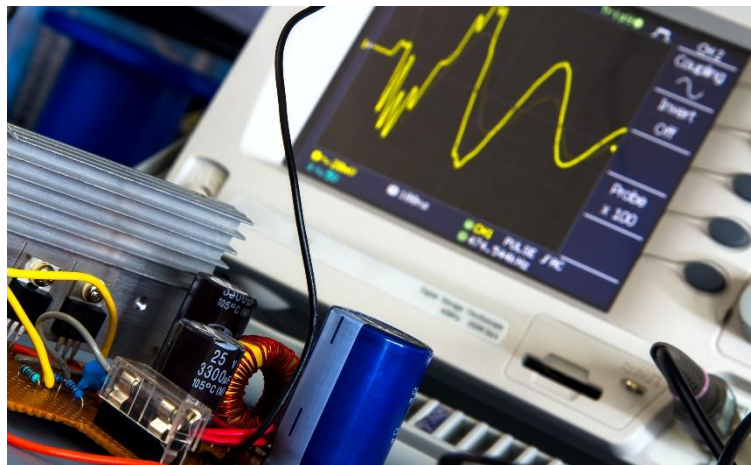
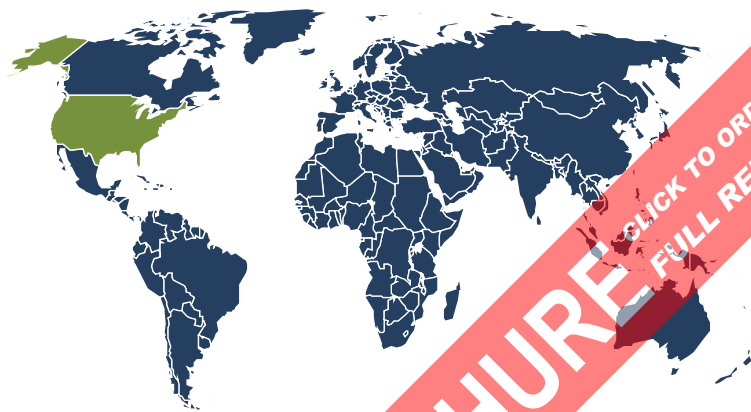


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# Analytical Instruments: United States

December 2017



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# Table of Contents

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<b>1. Highlights</b>	<b>3</b>
<b>2. Market Environment</b>	<b>4</b>
Historical Trends	4
Key Economic Indicators	7
Trade	8
Environmental & Regulatory Factors	9
Research & Development Trends	11
<b>3. Segmentation &amp; Forecasts</b>	<b>14</b>
Demand	14
Laboratory Instruments	15
Process Control Instruments	17
Electrical Measuring Equipment	19
Other Instruments	21
Shipments	24
Laboratory Instruments	25
Process Control Instruments	25
Electrical Measuring Equipment	26
Other Instruments	27
<b>4. Industry Structure</b>	<b>28</b>
Industry Characteristics	28
Market Leaders	30
Agilent Technologies	30
Danaher	31
Thermo Fisher Scientific	31
<b>5. About This Report</b>	<b>33</b>
Scope & Method	33
Sources	33
Industry Codes	34
Resources	35

# List of Tables & Figures

---

Figure 1   Key Trends in US Analytical Instrument Demand, 2016 – 2021	3
Figure 2   US Analytical Instrument Demand Trends, 2006 – 2016	4
Figure 3   US Analytical Instrument Demand & Shipment Trends, 2006 – 2016	5
Table 1   Key Indicators for US Analytical Instrument Demand, 2006 – 2021 (US\$ bil)	7
Figure 4   US Analytical Instrument Trade, 2006 – 2016 (US\$ mil)	8
Table 2   US Analytical Instrument Trade, 2006 – 2016 (US\$ mil)	8
Figure 5   US Research & Development Expenditures by Source of Funds, 2006 – 2021 (US\$ bil)	11
Table 3   US Research & Development Expenditures by Source of Funds, 2006 – 2021 (US\$ bil)	11
Figure 6   US Research & Development Spending Trends, 2006 – 2016 (US\$ bil)	12
Table 4   US Research & Development Spending Trends, 2006 – 2016 (US\$ bil)	12
Figure 7   US Analytical Instrument Demand by Product, 2006 – 2021 (US\$ mil)	14
Table 5   US Analytical Instrument Demand by Product, 2006 – 2021 (US\$ mil)	14
Figure 8   US Laboratory Instrument Demand & Pharmaceutical Demand, 2006 – 2021	16
Figure 9   US Process Control Instrument Demand & Industrial Equip Nonres Fixed Investment, 2006 – 2021	18
Figure 10   US Electrical Measuring Equipment Demand & Electronic Component Shipments, 2006 – 2021	20
Figure 11   US Analytical Instrument Demand by Product, 2006 – 2021 (%)	23
Figure 12   US Analytical Instrument Shipments by Product, 2006 – 2021 (US\$ mil)	24
Table 6   US Analytical Instrument Shipments by Product, 2006 – 2021 (US\$ mil)	24
Figure 13   US Analytical Instrument Shipments by Product, 2006 – 2021 (%)	27
Figure 14   US Analytical Instrument Revenue Concentration by Segment, Largest Four Firms, 2002 – 2012 (%)	29
Table 7   Leading Suppliers to the US Analytical Instrument Market by Product	30
Table 8   Industry Codes Related to Analytical Instrument	34

# About This Report

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## Scope & Method

This report forecasts US analytical instrument demand and shipments in US dollars at the manufacturer level to 2021. Total demand and shipments are segmented by product in terms of:

- laboratory instruments
- process control instruments
- electrical measuring equipment
- other instruments such as those for materials testing, meteorological observation, and surveying

Analytical instruments consist of devices used for scientific research and industrial processes. Excluded from the report are diagnostic and therapeutic equipment, gauges and counting devices, search and navigation equipment, commercial and household appliance controls, irradiation equipment, watches and clocks, and optical instruments and lenses. Re-exports of analytical instruments are excluded from demand figures.

To illustrate historical trends, total demand, total shipments, the various segments, and trade are provided in annual series from 2006 to 2016.

This report quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or  $r^2$ . The most stable data series relative to the trend carries an  $r^2$  value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading suppliers, are covered in this report. A full outline of report items by page is available in the Table of Contents.

## Sources

*Analytical Instruments: United States* (FF80013) represents the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources including:

## About This Report

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- national, regional, and international non-governmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group.

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

## Industry Codes

Table 8 | Industry Codes Related to Analytical Instrument

NAICS/SCIAN 2007		SIC	
North American Industry Classification System		Standard Industrial Classification	
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	3823	Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	3825	Instruments for Measuring and Testing of Electricity and Electrical Signals
334516	Analytical Laboratory Instrument Manufacturing	3826	Laboratory Analytical Instruments
334519	Other Measuring and Controlling Device Manufacturing	3829	Measuring and Controlling Devices, NEC

Source: US Census Bureau

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## Resources

### The Freedonia Group

#### Freedonia Industry Studies

*Consumer Water Treatment Systems*, October 2017

*Global Industrial and Institutional Cleaning Chemicals*, October 2017

*Global Water Disinfection Equipment*, August 2017

#### Freedonia Focus Reports

*Control Technologies: United States*

*Dermatological Drugs: United States*

*Energy: United States*

*Industrial Castings: United States*

*Industrial Valves: United States*

*Manufacturing: United States*

*Medical Equipment & Supplies: United States*

*Pharmaceuticals: United States*

#### Freedonia Custom Research

### Trade Publications

*Analytical Chemistry*

*Chemical & Engineering News*

*Chromatography Today*

*Labmate Online*

*Laboratory Equipment*

*News Medical*

*R&D Magazine*

*Spectroscopy*

### Agencies & Associations

American Chemical Society

AOAC International

China Food and Drug Administration

Federal Communications Commission

National Aeronautics and Space Administration

National Electrical Manufacturers Association

National Science Foundation

United States Census Bureau

United States Food and Drug Administration

United States International Trade Commission