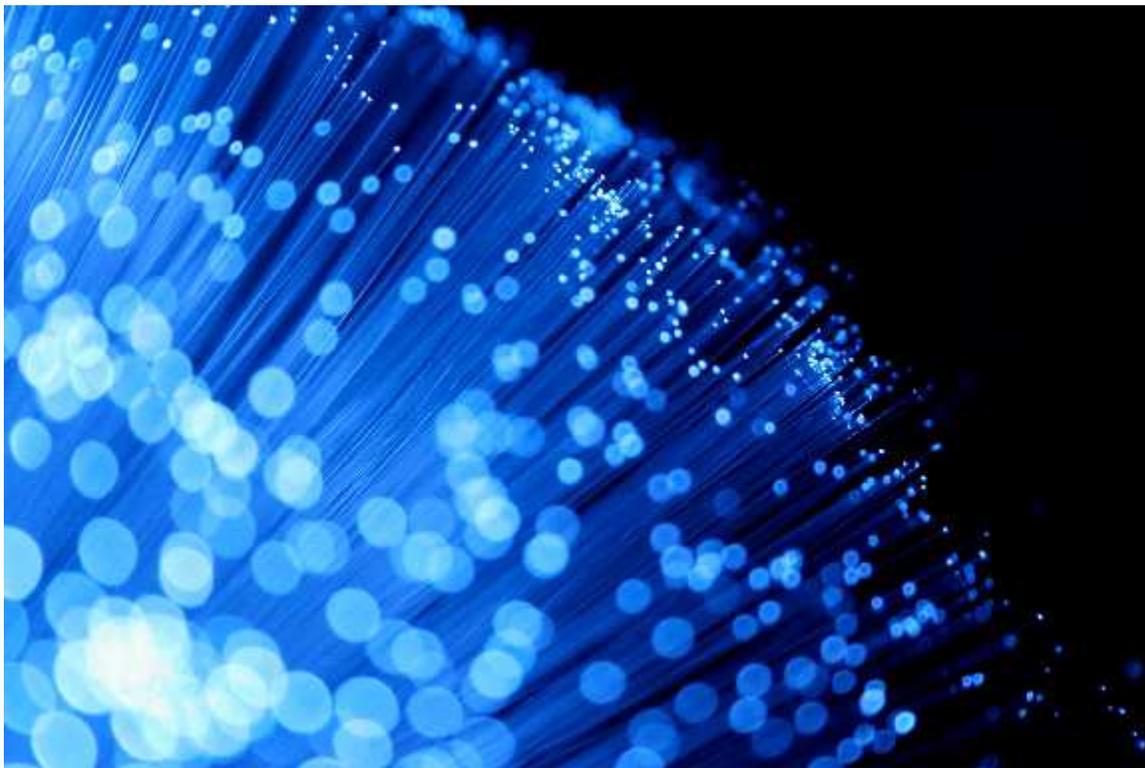**Announcement**

Inspection Probe, Scope and Cleaner for Fiber Optic Connectors
Global Market Forecast & Analysis
2016-2026

Report Released
May 31, 2017

Inspection Probe, Scope and Cleaner for Fiber Optic Connectors
Global Market Forecast & Analysis
2016-2026

Release Date: May 31, 2017
Text Pages (PDF):   467 pages
Excel File: Market Forecast Database
PowerPoint File: Summary Data Figures
Standard Fee: USD 4,490

Report Description

This report provides the ElectroniCast Forecast of portable probes and scopes and the associated devices that inspect and/or clean fiber optic connectors. Product/technology and manufacturer/supplier competitive analysis is also provided.

All of the products featured in this report are small/handheld field-use units; however, for comparison purposes, our forecast for larger (bench-top) integrated scope probe/cleaner units ais also be provided.

This report provides an analysis (review) of 2016 and a 10-year forecast (2016-2026) of the worldwide market consumption segmented into the following geographic regions:

- Global
  - America
    - North America
    - Rest of America
  - Europe, Middle East, Africa (EMEA)
  - Asia Pacific
    - China
    - Rest of APAC

The global market is further segmented into the following application categories:

- Core
- Metro
- Access
- Data Center (in Private Enterprise)

The market forecast data are segmented by the following functions:

- Consumption Value (US$, million)
- Quantity (number/by 1,000 units)
- Average Selling Prices (ASP $, each)

Product/Device Definitions

The following product types, as detailed below, also segment the market forecast:

Hand-Held Product Categories:

- Total (Scope/Probe, Cleaner, Integrated Scope/Cleaner)

   o Hand-held microscope for fiber connector inspection

      ▪ Microscope (Eyepiece-type) for fiber connector inspection
      ▪ Microscope/Probe for use with video monitor (monitor not included)
      ▪ Microscope/Probe – integrated with video monitor

   o Hand-held cleaning tools for fiber optic connectors
      ▪ Inexpensive-type devices
      ▪ System-type devices

   o Hand-held integrated microscope/cleaner for fiber connectors

      ▪ Microscope/Cleaner (Eyepiece-type) for fiber connector inspection
         • Eyepiece scope and Inexpensive-type cleaner (Pattern 1)
         • Eyepiece scope and System device-type cleaner (Pattern 2)

      ▪ Microscope/Probe and Cleaner, monitor optional
         • Scope/Probe and Inexpensive cleaner (Pattern 3)
         • Scope/Probe and System device cleaner (Pattern 4)
         • Scope/Probe/Monitor and Inexpensive cleaner (Pattern 5)
         • Scope/Probe/Monitor and System device cleaner (Pattern 6)

Separate Excel File for Bench-Top Integrated Device

Information Base for the Market Forecast

Primary Research   This study is based on analysis of information obtained continually since 2012, but updated through the end of May of 2017. During this period, ElectroniCast analysts performed interviews with authoritative and representative individuals in the fiber optics industry plus telecommunications, datacom, military/aerospace and other communication industries, instrumentation/laboratory – R&D and factory/manufacturing, from the standpoint of both suppliers and users of fiber optic connectors, and connector inspection (scope/probe) and cleaning tools/devices. The interviews were conducted principally with:

- Engineers, marketing personnel and management at manufacturers of fiber optic connectors, transceivers and receivers, as well other components used in the fabrication of optoelectronic transceivers, cable assemblies, test/measurement equipment, and installation apparatus

- Design group leaders, engineers, marketing personnel and market planners at major users and potential users of cable, cable assemblies, connectors, installation apparatus, passive devices and transceivers, such as telecommunication transmission, switching and distribution equipment producers, data communications equipment producers, optical instrumentation system producers and others.

- Other industry experts, including those focused on standards activities, trade associations, and investments

The interviews covered issues of technology, R&D support, pricing, contract size, reliability, documentation, installation/maintenance crafts, standards, supplier competition and other topics. Customers also were interviewed, to obtain their estimates of quantities received and average prices paid, as a crosscheck of vendor estimates. Customer estimates of historical and expected near term future growth of their application are obtained. Their views of use of new technology products were obtained.

The analyst then considered customer expectations of near term growth in their application, plus forecasted economic payback of investment, technology trends and changes in government regulations in each geographical region, to derive estimated growth rates of quantity and price of each product subset in each application. These forecasted growth rates are combined with the estimated baseline data to obtain the long-range forecasts at the lowest detailed level of each product and application.

Secondary Research   A full review of published information was also performed to supplement information obtained through interviews. The following sources were reviewed:
- Professional technical journals and papers; conference proceedings
- Trade press articles
- Company profile, product literature, and financial information
- Additional information based on previous ElectroniCast market studies
- Personal knowledge of the research team

In analyzing and forecasting the complexities of the world region markets for fiber optic components and devices, it is essential that the market research team have a good and a deep understanding of the technology and of the industry. ElectroniCast members who participated in this report were qualified.

Bottom-up Methodology   ElectroniCast forecasts are developed initially at the lowest detail level, and then summed to successively higher levels. The background market research focuses on the amount of each type of product used in each application in the base year (last year: 2016), and the prices paid at the first transaction from the manufacturer. This forms the base year data. ElectroniCast analysts then forecast the growth rates in component quantity use in each application, along with price trends, based on competitive, economic and technology forecast trends, and apply these to derive long term forecasts at the lowest application levels. The usage growth rate forecasts depend heavily on analysis of overall end user trends toward optical communication equipment usage and economic payback.

Cross-Correlation Increases Accuracy   The quantities of fiber optic test/inspection and connector cleaning devices and other installation/maintenance tools, fiber optic installation apparatus, fiber cable, connectors, sensors, transceivers, transport terminals, optical add/drop MUX, photonic switches and other products used in a particular application are interrelated. Since ElectroniCast conducts annual analysis and forecast updates in each fiber optic related product field, accurate current quantity estimates in each application are part of this corporate database. These quantities are cross-correlated as a "sanity check."

ElectroniCast, each year since 1985, has conducted extensive research and updated our multiple-client forecasts of each fiber optic component category. As technology and applications have advanced, the number of component subsets covered by the forecasts has expanded impressively.

About ElectroniCast

ElectroniCast, founded in 1981, specializes in forecasting technology and global market trends in fiber optics communication components and devices, as well providing market data on light emitting diodes used in lighting.

As an independent consultancy we offer multi-client and custom market research studies to the world's leading companies based on comprehensive, in- depth analysis of quantitative and qualitative factors. This includes technology forecasting, markets and applications forecasting, strategic planning, competitive analysis, customer-satisfaction surveys and marketing/sales consultation. ElectroniCast, founded as a technology-based independent consulting firm, meets the information needs of the investment community, industry planners and related suppliers.

Director of Study

Stephen Montgomery, MBA in Technology Management, President at ElectroniCast Consultants. He joined ElectroniCast in 1990 and has specialized in photonics and fiber optic components market & technology forecasting at ElectroniCast for over 25-years. He has given numerous presentations and published a number of articles on optical communication markets, technology, applications and installations. He is a member of the Editorial Advisory Board of LIGHTWAVE magazine (PennWell Publishing) and writes a monthly article covering the optical communication industry for OPTCOM Magazine in Japan (Kogyo Tsushin Co., Ltd.).

Proprietary Statement

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ElectroniCast, in addition to multiple-client programs, conducts proprietary custom studies for single clients in all areas of management planning and interest. Other independent consultants, therefore, are considered directly competitive. ElectroniCast proprietary information may not be provided to such consultants without written permission from ElectroniCast Consultants.

One-Fee Policy

All employees of the client company/organization may use this report, worldwide at the consultant service subscription fee shown in the front pages of this announcement.

Report Outline

1   Executive Summary
1.1   Overview
1.2   Fiber Optic Connector – Overview
1.3   Fiber Optic Networks – Overview
2   Microscope with Cleaner for Optical Fiber Connectors Market Forecast
2.1   Overview
2.2   Microscope (with Eyepiece) for Fiber Connector Inspection Market Forecast
2.3   Microscope/Probe for Video Monitor for Connector Inspection Market Forecast
2.4   Microscope/Probe with Video Monitor for Connector Inspection Market Forecast
2.5   Hand-Held Cleaning Tools (Inexpensive Devices) Market Forecast
2.6   Hand-Held Cleaning Tools (System Devices) Market Forecast
2.7   Integrated Hand-held Microscope/Cleaner for Fiber Connectors Market Forecast
2.7.1   Overview
2.7.2   Market Forecast: Pattern 1
2.7.3   Market Forecast: Pattern 2
2.7.4   Market Forecast: Pattern 3
2.7.5   Market Forecast: Pattern 4
2.7.6   Market Forecast: Pattern 5
2.7.7   Market Forecast: Pattern 6
3   Microscope with Cleaner for Optical Fiber Connectors
3.1   Overview
3.2   Market Forecast – Bench-Top Unit
3.3   Comparing Elements
4   Competitor profiles and Product Listing and 2016 Market Share
5   Research Methodology
6   Definitions
7   Market Forecast Data Base (Introduction to the Excel Worksheets)

Market Forecast Data Base – Excel Spreadsheets:

Excel File (Hand-Held Devices)
- Global
  - America
    - North America
    - Rest of America
  - EMEA
  - Asia Pacific
    - China
    - Rest of APAC

Product and Competitor Matrix; Category List

Excel File (Bench-Top Integrated Devices)

PowerPoint Slides

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