

# Evolving Wireless Power and Data Interconnects

Research Report P-640-14  
November 2014



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Report No.: P-640-14  
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Bishop and Associates, Inc. has just released a new seven chapter research report providing a detailed analysis of the Wireless Power and Data Interconnect Market. The report covers connector sales data for the years 2014 through 2019 by appropriate wireless technology and market sector. Forecasts are also broken out in some sectors by sub-sector.



Separable copper connectors have provided the mechanism for assembly and operation of electronic devices that have changed our world. Connectors have evolved to meet the sometimes conflicting series of packaging and performance challenges including higher:

- Pin counts
- Signal density
- Current density
- Signal speeds
- Mechanical durability
- Signal integrity
- Environmental resistance

All at a lower cost and delivered in a highly competitive global market.

The explosive market for mobile devices has begun to change the paradigm of connectivity with demand for interfaces that free the device from the tether of signal and power cables. A host of both short and long range wireless connectivity standards such as Wi-Fi, Bluetooth and RFID offer wireless links are effectively replacing traditional connectors on an expanding universe of remote and mobile devices. At the same time, wireless charging technology offers the convenience of consumer-friendly battery charging while eliminating the need for a power connector on the device.

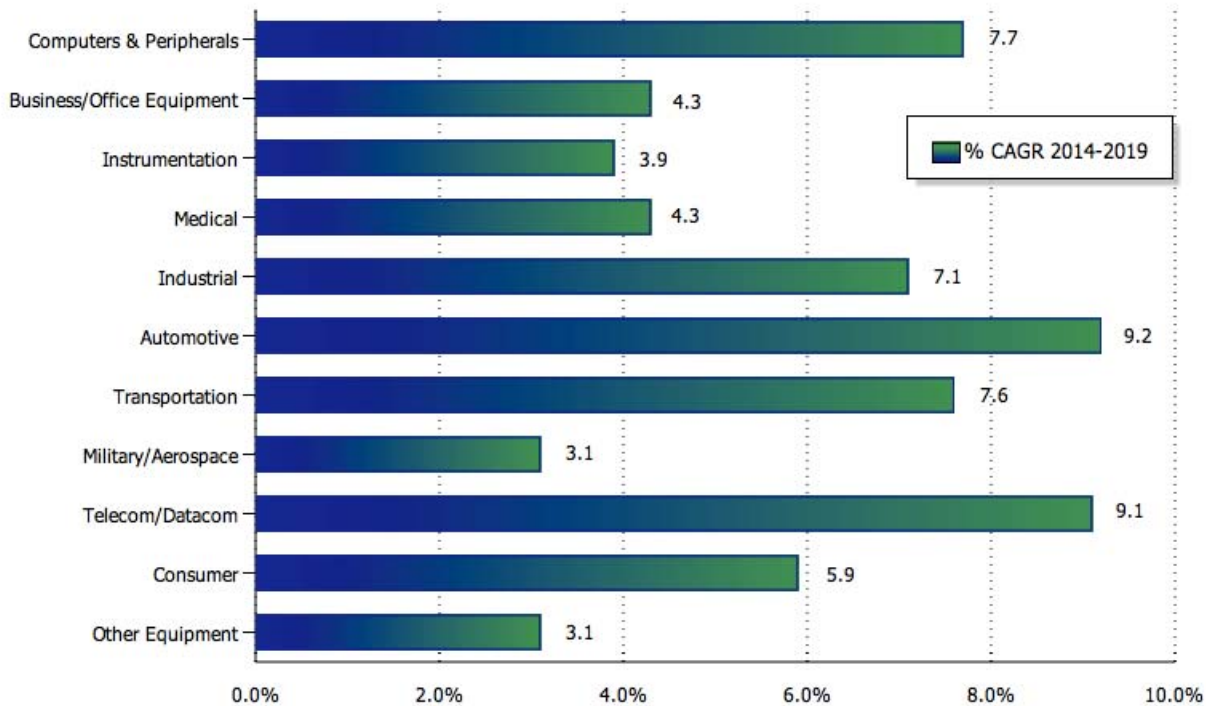
As more electronic devices become mobile, the implications for standard copper interfaces continue to grow. The expanding array of wireless interconnection options is providing new challenges and opportunities for designers of electronic devices as well as connector manufacturers.

This market research report explores the evolution of input/output links both copper and wireless. From a system perspective, an I/O or power link can be a traditional connector and cable assembly or a wireless connection that serves the same function. The length of the link can vary from a few centimeters to miles which illustrates one of the advantages of wireless communication. Wireless link technology can be used to communicate between remote devices as well as be configured to replace copper pins and sockets in traditional connector applications. The establishment of the I/O and power link is invisible to the consumer which supports the user-friendly mandate.

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At this point, the impact of wireless interconnects on traditional connectors has been muted due to the fact that introduction of wireless technology typically requires the establishment of infrastructure to support it. Equipment such as cell phone towers, switches and wireless routers typically utilize traditional connectors that compensate for the elimination of a connector on the mobile or remote device. Traditional copper connector sales are projected to show solid growth over the five years.

**Worldwide Connector Industry Sales  
Compound Average Growth Rate - 2013 to 2019**



Of interest is the fact that many of the fastest growing product segments including industrial control, home automation, wearable electronics, and smart phone applications incorporate remote communication, making wireless data and power interconnect technology a key design consideration. The Internet-of-Things is expected to stimulate a host of new wirelessly connected devices.

This market research report explores each of the leading wireless power and data transmission technologies in terms of performance, supporting organizations / standards, as well as target applications.

Special emphasis is placed on emerging technologies such as millimeter wave transmission which is anticipated to be a possible solution to the looming shortage of available frequency bands. Unlike most wireless radio technologies, the specific characteristics of millimeter wave links lend themselves to point-to-point links that can directly eliminate a copper connector while offering high-speed communication through a dielectric surface. These connectors can offer nearly unlimited mechanical durability, zero mating forces, environmentally sealed device enclosures and freedom from contact damage.

Wireless connectivity will never replace traditional copper interfaces, but represents a growing market segment that in addition to fiber optic links, offers new options to designers of electronic products.

# Evolving Wireless Power and Data Interconnects

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## To Order Evolving Wireless Power and Data Interconnects



Research Report P-640-14, *Evolving Wireless Power and Data Interconnects* is available for \$2,750. If you would like additional information about this report, or would like to place an order, please complete the following information and fax or mail it to Bishop & Associates, Inc. Or place your order on our website: <http://store.bishopinc.com/>. Additional print copies of this report are available for \$275.

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## What's New ?

Bishop & Associates has recently completed several new research reports about the worldwide connector industry. A table of contents for each report can be found at <http://store.bishopinc.com>.

- **Report P-640-14**      **Evolving Wireless Power and Data Interconnects (November 2014) NEW**
- **Report T-910-14**      **Multi-Gigabit Datacom Connectors and Cable Assemblies Market (November 2014) NEW**
- **Report M-607-14**      **World Industrial Market for Connectors 2014 (October 2014) NEW**
- **Report M-121-14**      **Top 100 Connector Manufacturers (September 2014) NEW**
- **Report P-799-14**      **World Cable Assembly Market (August 2014) NEW**
- **Report C-122-14**      **Connector Industry Yearbook (August 2014) NEW**
- **Report F-2014-01**      **Connector Industry Forecast (July 2014)**
- **Report P-680-14**      **European Connector Market Handbook (June 2014)**
- **Report P-680-14**      **World RF Coax Connector Market (May 2014)**
- **Report M-4100-14**      **Non-Automotive Transportation Market for Connectors (May 2014)**
- **Report D-100-14**      **The World Distribution Market for Connectors (April 2014)**
- **Report P-660-14**      **Power Connectors in Computing and Datacom Applications (March 2014)**
- **Report M-700-14**      **Connector Market Handbook (March 2014)**
- **Report M-510-14**      **World Telecom Market for Connectors (February 2014)**
- **Report P-410-14**      **Server Systems and Connector Forecast 2010-2020 (January 2014)**

### ***THE BISHOP REPORT - CONNECTOR INDUSTRY YEARBOOK***

An annual subscription to [THE BISHOP REPORT](#) (12 issues) is available for \$1,150. As part of your Bishop Report subscription, you have admission to BishopReport.com, a website that provides quick access to prior issues of The Bishop Report, News Briefs, connector industry news, the connector industry forecast, and various industry statistics. An annual corporate subscription is available for \$2,950, which includes an unlimited number of subscribers and one PDF version of the Yearbook.

The [CONNECTOR INDUSTRY YEARBOOK](#) is available for \$1,450. However, Bishop & Associates offers a special combined price of \$1,750 for [THE BISHOP REPORT](#) and the [CONNECTOR INDUSTRY YEARBOOK](#) (an annual savings of \$850).

[Click here](#) to view an expanded report description, and a complete table of contents, for all Bishop & Associates' research reports.



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