

CABLES AND CONNECTORS ARE GOING TO BE VITAL FOR DELIVERING THE ULTRA-FAST DATA PROCESSING SPEEDS REQUIRED IN INDUSTRY 5.0



The Cable and Connector Market:

How the Future is Shaping Up

Demand for cables and connectors is rising. After a small drop during the Covid-19 pandemic, the market is showing increasing buoyancy as innovative electronic applications and devices are being introduced with diverse shapes and combinations to transmit power and data. We explore the current and projected future market, along with the sectors experiencing surging demand for these vital products.

ables and connectors continue to be in high demand as more devices seek connection to the internet, other machines, and new networks. Despite the growing prominence of wireless technologies, cables and connectors still provide the foundation for connectivity across a diverse range of industries.

Given the multitude of uses, the value of the global cables and connectors market is considerable. Various sources estimate that the global cables and connectors market will be worth approximately \$160bn by 2030, with the Asia-Pacific region accounting for the largest share.

However, according to GlobalData's Job Analytics, the US has dominated the number of jobs posted that relate to cables and connectors in the past 12 months, with 88% of the global total between April 2022 and April 2023. Therefore, there is a possibility that the US will further expand its share of the global market in the years ahead.

Factors driving the global growth include the expanded levels of connectivity for electric cars and smart technologies, alongside increased uses in robust military and space applications. Furthermore, the roll-out of 5G networks, the rising adoption of Internet of Things devices, HDTVs, and the prevalence of data centres are also factors contributing to the demand for cables and connectors.

Another significant area of growth for cables and connectors is in the industrial internet, which is quickly increasing in value. Over five years, GlobalData research suggests that the value of the industrial internet market has soared from approximately \$60bn in 2018 to an estimated \$145bn by 2023.

The data covers the sectors of agriculture, construction and engineering, energy, manufacturing, mining, and utilities. From these sectors, the biggest market is utilities, with more than \$40bn. However, the energy sector may close the gap as net zero targets start to be prioritised, with increased uses of sensors to monitor assets and drive efficiencies in operations towards decarbonisation.

Over the five years analysed, the region with the largest global market share is again Asia-Pacific, which is projected to grow at a CAGR of 17.6% and is driven largely by activities in China.

Overcoming Challenges with Cables and Connectors

With technology constantly evolving, greater demands are arising for faster data processing, transfer, and storage while maintaining robust privacy protections.

Yet in newer industries such as the commercial space sector, there may not be an existing cable or connector available on the market to meet the demands of its intended application.

The same issue may also apply to growing industries such as robotics, particularly when moving from the prototype phase to commercial manufacturing. And robotics looks set to be a further industry where cables and connectors will be in significant demand as the automated workforce helps address the global workers shortage.

Both these highlighted emerging industries have considerable complexities in operations, with reliability highly sought-after for cables and connectors.

Consequently, custom-fit solutions are often required. To meet these precise demands, Omnetics can manufacture cables and connectors that are customised to meet the exact requirements of their intended industrial purpose. The ruggedness of the company's connectors has also been proven in unforgiving space environments, with uses in space shuttles and the Mars Rover.

"At Omnetics, we understand that emerging industries require innovative solutions to meet their unique challenges," says a company spokesperson. "That's why we are committed to developing interconnection systems that deliver the high-performance and reliability needed to succeed in these dynamic markets."

And with predictions that cables and connectors will need to be capable of handling data speeds of 10GB a second in the not-too-distant future, Omnetics is well-placed to provide the necessary solutions in a rapidly changing technological landscape.