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Yokogawa Test & Measurement Releases Sensor Modules for AQ2200 Test System

- Ideal for production line testing and inspection of optical communication devices -

Yokogawa Test & Measurement Corporation announces that it has developed the AQ2200-212 sensor module and the AQ2200-222 dual sensor module for the AQ2200 series multi-application test system, and will be releasing them on July 14. These new optical sensor modules are ideal for the production line testing and inspection of semiconductor lasers, optical transceivers, optical fiber cables, and other essential components of optical communication networks.

Development Background

With the widening use of high-bandwidth Internet, smartphone, and other communication services, the expansion of data centers for cloud services, and the deployment of 5th generation (5G) mobile communication systems, the demand for components such as the optical transceivers used in optical transmitters is growing year by year. To meet this demand, there is a need to speed up the testing and inspection of optical components on production lines. Space can also be at a premium on these production lines, so compact measurement equipment solutions are required.

To meet these needs, Yokogawa has developed the AQ2200-212 sensor module and the AQ2200-222 dual-sensor module.

Product Features

1. Suitable for a wider range of applications

The AQ2200-212 sensor module with a single high-speed optical power meter and the AQ2200-222 dual-sensor module with two high-speed optical power meters improve measurement throughput on optical equipment production lines by reducing averaging times to as little as 100 µs. In addition, the AQ2200-212 sensor module is equipped with an analog output port that enables high-speed monitoring of variations in power levels.

2. Wide wavelength and power ranges

The wavelengths commonly used in optical communications (e.g. 850, 1310, 1550 nm) can all be covered with a single AQ2200-212 or AQ2200-222 module. Both modules can also measure optical power levels of up to +15 dBm (decibel per mW) to meet the measurement needs of today's high-power semiconductor lasers and optical transceivers.

3. High-speed, seamless measurement of wide power level changes

The ability to quickly and seamlessly measure optical power level changes as wide as 30 dB is required to measure the current-light output (I-L) characteristics of optical components such as optical transceivers and laser modules. Conventional measurement solutions lack this capability as it is often required to change the gain of the amplifier circuit. With the extension of their single-range power range to 30 dB, the AQ2200-212 and AQ2200-222 modules can quickly and seamlessly measure I-L characteristics.

Major Target Markets

• Developers and manufacturers of optical communication products such as optical transmitters and optical transceivers

Applications

• Manufacturing testing, inspection, and evaluation of optical communication products such as optical transmitters and optical transceivers

About the AQ2200 multi-application test system

To evaluate optical characteristics when developing and manufacturing optical transmission systems, several components are needed: light sources, optical switches for changing the path of optical signals, variable optical attenuators, and optical power meters. The AQ2200 multi-application test system accommodates a variety of plug-in modules that perform all of these functions. Users can combine these modules to configure a measurement system that meets their particular evaluation requirements. Up to 5 users can access the same frame controller simultaneously, contributing to space saving on production lines.

For more information

https://tmi.yokogawa.com/solutions/products/optical-measuring-instruments/multi-application-test-system/

About Yokogawa

Founded in 1915, Yokogawa engages in broad-ranging activities in the areas of measurement, control, and information. The industrial automation business provides vital products, services, and solutions to a diverse range of process industries including oil, chemicals, natural gas, power, iron and steel, and pulp and paper. With the life innovation business, the company aims to radically improve productivity across the pharmaceutical and food industry value chains. The test & measurement, aviation, and other businesses continue to provide essential instruments and equipment with industry-leading precision and reliability. Yokogawa co-innovates with its customers through a global network of 114 companies spanning 62 countries, generating US$3.7 billion in sales in FY2019. For more information, please visit www.yokogawa.com.