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PRESS RELEASE

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Yokogawa's AQ6375B Combines World-class Optical Performance with Ease of Operation and Maintenance

The new Yokogawa AQ6375B is an optical spectrum analyzer operating in the Short-Wavelength Infrared Region (SWIR), covering wavelengths from 1200 to 2400 nm. With a design based on the company's highly successful AQ6375 instrument, the new analyzer combines high measurement performance with ease of operation, and incorporates a number of new features including a gas purging feature, a built-in cut-off filter, data-logging capabilities, a double-speed mode, and support for Windows file sharing.

The AQ6375B offers high wavelength accuracy of ±0.05 nm (1520 to 1580 nm) ±0.50 nm (full range) and high wavelength resolution of 0.05 nm, a wide close-in dynamic range of 55 dB, and a wide measurement level range from +20 dBm to -70 dBm. The use of an advanced monochromator design helps to separate spectral signals in close proximity to one another, and improves the dynamic range by reducing the influence of stray light.

In conjunction with new high-speed circuitry and noise reduction techniques, the monochromator also enables the AQ6375B to achieve a high measurement speed: up to 0.5 sec/100 nm. The double-speed mode makes it possible to measure an optical signal in half the

time compared with the conventional mode, with only a 2 dB penalty over the standard sensitivity value.

A free-space optical input makes it possible to connect multimode and single-mode fibers on the same instrument. It also provides a low and stable insertion loss for multimode fibers, which helps to maintain the excellent measurement efficiency as well as increasing measurement repeatability. The lack of physical contact also eliminates the possibility of damage when fibers are connected.

The new purging feature is designed to minimize the influence of water-vapor absorption on spectral measurements carried out in the SWIR region. By continuously supplying a pure purge gas such as nitrogen to the monochromator through the dedicated connectors on the back pane, these absorption effects are significantly reduced.

Also new is the built-in cut-off filter for the high-order diffracted light generated by the monochromator at wavelengths equal to integral multiples of the input wavelength. By cutting incoming light below 1150 nm with the built-in filter, the AQ6375B reduces the influence of secondary diffracted light on the measurement by 50dB or more at wavelengths up to approximately 2300 nm. As a result, the measured data are always reliable and replicate the real signal under test.

A new data-logging function is available on the AQ6375B for recording analysis results such as Distributed Feedback Laser Diode (DFB-LD) analysis and multi-peak measurements at up to 10,000 points per channel with time stamps. Recorded data can be displayed in table and graphical formats. This function is useful for the long-term stability testing and temperature cycle testing of systems and devices. The optical spectrum of each measurement can also be stored for reviewing and troubleshooting.

For transferring acquired data for subsequent analysis, a Windows file sharing function is available in addition to the existing Ethernet/GPIB and USB interfaces. This uses Windows Explorer to access the user area of internal memory via the Ethernet interface using the Windows SMB (Server Message Block) function.

Applications for the AQ6375B cover the analysis of telecom devices and systems operating in single-mode transmission in all the windows of optical communications from the beginning of the O-band at 1260 nm to the end of the U-band at 1675 nm.

The AQ6375B is also suitable for measurements in other areas such as environmental monitoring – including the sensing of gases such as NOx and CO_2 – atmospheric observation and the medical and biomedical sector for virus sensing and checking surgical equipment. This includes manufacturers of optical devices in these sectors using the AQ6375B for both R&D and production testing.

For further information about the AQ6375B, visit tmi.yokogawa.com.

About Yokogawa Test & Measurement

Yokogawa has been developing measurement solutions for nearly 100 years, consistently finding new ways to give R&D teams the tools they need to gain the best insights from their measurement strategies. The company has pioneered accurate power measurement throughout its history. In 2002, it became a leading supplier of optical Test & Measurement instruments following the acquisition of Ando Electric. Today, with more than 30 years of experience in optical testing, Yokogawa offers a broad range of optical instruments and is the market leader for Optical Spectrum Analyzers in research and test laboratory environments.

Yokogawa instruments are renowned for maintaining high levels of precision and for continuing to deliver value for far longer than the typical shelf-life of such equipment. Yokogawa believes that precise and effective measurement lies at the heart of successful innovation – and has focused its own R&D on providing the tools that researchers and engineers need to address challenges great and small.

Yokogawa takes pride in its reputation for quality, both in the products it delivers – often adding new features in response to specific client requests – and the level of service and advice provided to clients, helping to devise measurement strategies for even the most challenging environments.

Meet the precision makers at tmi.yokogawa.com.

About Yokogawa Corporation of America

Yokogawa Corporation of America (http://yokogawa.com/us) is a leading provider of Industrial Automation and Test and Measurement solutions. Combining superior technology with engineering, system integration, project management, and maintenance services, Yokogawa delivers field-proven operational efficiency, safety, and reliability. Yokogawa Corporation of America is headquartered in Sugar Land, TX, and is the North American Division of Yokogawa Electric Corporation's global network of 25 manufacturing facilities and 4 regional project engineering centers.

About Yokogawa

Yokogawa's global network of 88 companies spans over a total of 56 countries. Founded in 1915, the US$3.5 billion company engages in cutting-edge research and innovation. Yokogawa is active in the industrial automation and control (IA), test and measurement, aviation, and other business segments. The IA segment plays a vital role in a wide range of industries including oil, chemicals, natural gas, power, iron and steel, pulp and paper, pharmaceuticals, and food. For more information about Yokogawa, please visit our website www.yokogawa.com.