

Yokogawa launches new Optical Spectrum Analyzers covering short and mid wavelength infrared range

-The AQ6375E and AQ6376E combine short and mid-wavelength infrared with extreme optical precision to aid the development of measurement lasers-

Yokogawa has launched two new optical spectrum analyzers (OSAs) to fulfill market demands for an instrument capable of measuring a wide range of wavelengths to meet new needs in optical product development and manufacturing.

The Yokogawa AQ6375E and AQ6376E are the only grating based OSAs covering SWIR (Short-Wavelength InfraRed) over 2 μm and MWIR (Mid-Wavelength InfraRed) over 3 μm with world class optical performance.

Building on the pedigree of Yokogawa's AQ6375B and AQ6376 OSAs, the new OSAs are offered in four versions.

The AQ6375E Standard has a wavelength range of 1200-2400nm; the AQ6375E Extended Wavelength version has a wavelength range of 1000-2500nm; the AQ6375E Limited version has a wavelength range of 1200-2400nm (with reduced wavelength resolution); and the AQ6376E Standard has a wavelength range of 1500-3400nm.

The choice of wavelengths available gives developers increased flexibility to apply the OSAs in a wide range of applications.

These include environmental measurement and gas sensing, where the AQ637xE can be used in the measurement of gas absorption spectra and the characterization of light sources used in Laser Absorption Spectroscopy.

Other major uses for the new OSAs are medical care and biotechnology and industrial laser applications.

Typical applications will include the development and measurement of lasers; the characterization of broadband light sources such as supercontinuum light sources; optical passive devices; and optical fibers.

The AQ637xE also uses an air purging feature to compensate for another cause of possible error. In the SWIR and MWIR region, there are wavelengths where light shows strong absorptions due to the presence of water vapor and carbon dioxide, which can both disturb the spectral measurement.

High order diffracted light is also compensated for through a built-in cut filter in all versions except the AQ6375E-01 limited model. This is required because the monochromator generates high order diffracted light, which has wavelengths equal to the integral multiples of the input wavelength. The built-in filters reduce this higher-order diffracted light, minimizing its influence on the accuracy of the measurement.

To improve measurement efficiency and productivity, the AQ637xE features a new application (APP) mode, transforming a versatile OSA into a machine dedicated to a device under test (DUT).

APP mode provides a DUT-specific user interface that allows the user to move from configuration settings to test results without the need to know the wide variety of OSA settings. The AQ637xE comes pre-installed with several basic applications such as WDM test, DFB-LD test, and FP-LD test. A guide through wizard leads the user through an easy set up process for specific measurements and analysis.

New or additional testing applications will be made available for download from the Yokogawa website and can be added to the AQ637xE by future firmware updates.

Enhanced user friendliness is achieved with the unit's high-resolution, responsive 10.4-inch multi-touch capacitive LCD touchscreen, which makes operating the device even simpler and more intuitive.

Users can change measurement conditions, perform analysis and change the optical spectrum view as simple as operating a tablet device.

About Yokogawa Test & Measurement

Yokogawa has been developing measurement solutions for over 100 years, consistently finding new ways to give R&D teams the tools they need to gain the best insights from their measurement strategies. As well as offering a wide ranging product lineup and an extensive range of calibration and other services, the company has pioneered accurate optical measurement throughout its history, and is the market leader in optical spectrum analyzers.

Yokogawa Test&Measurement 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. The company 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.

About Yokogawa

Yokogawa provides advanced solutions in the areas of measurement, control, and information to customers across a broad range of industries, including energy, chemicals, materials, pharmaceuticals, and food. Yokogawa addresses customer issues regarding the optimization of production, assets, and the supply chain with the effective application of digital technologies, enabling the transition to autonomous operations.

Founded in Tokyo in 1915, Yokogawa continues to work toward a sustainable society through its 17,000+ employees in a global network of 122 companies spanning 61 countries.

For more information, please visit www.yokogawa.com.