



Test&Measurement

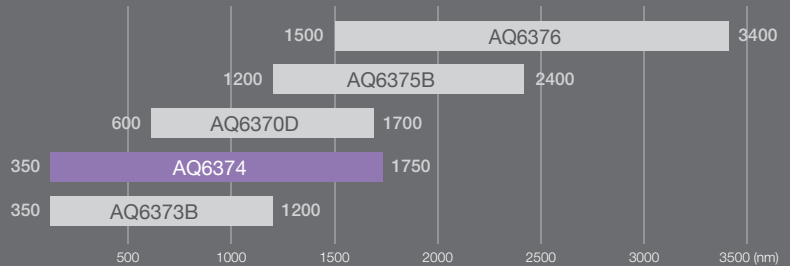
Precision Making



Optical Spectrum Analyser - AQ6374

The AQ6374 can accelerate the development and manufacturing of short wavelength lasers, LEDs and passive optical devices used for lighting/signaling, biomedical, material processing, consumer electronic products and telecommunication applications.

AQ6374 The OSA for applications in VIS + Telecom regions



World class optical performance and unique characteristics

Built-in air purge system

To reduce drastically the influence of water vapour absorptions on the measurement.

8 wavelength resolution settings: from 10 nm down to 50 pm

To enable the user to choose the best value according to the characteristics of the device or system under test.

7 level sensitivity settings: from -55 dBm down to -80 dBm

To set the instrument according to the test application and measurement speed requirements. Taking advantage of the very high sensitivity, low power optical signals can be measured accurately and quickly, without any need to use averaging over many measurements.

An incredibly wide measurement power range: 100 dB

The high quality photodetector and the smart design of the gain circuitry enable the AQ6374 to measure very weak signals with great accuracy and also very strong ones without getting damaged.

High close-in dynamic range: 60 dB

Thanks to the sharp spectral characteristics of the AQ6374 monochromator, signals in close proximity can be clearly separated and accurately measured.

High wavelength accuracy: up to ± 0.05 nm

The wavelength calibration is possible using an external reference source and the built-in Wavelength Calibration function.

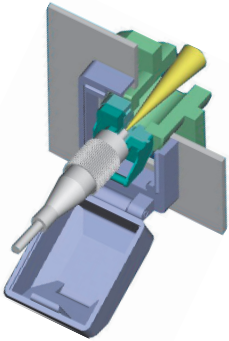
Fast measurement: only 0.5 sec for 100 nm span

With sensitivity set to NORM_AUTO (-60 dBm).

Special free space optical input

The unique optical input of the AQ6374 is not only able to accept standard SM and MM fibres but also fibres with large cores with diameters up to 800 μ m.

Free space optical input



The optical input structure designed for the AQ6370 Series is the most effective to guarantee high coupling efficiency, measurements repeatability and zero maintenance.

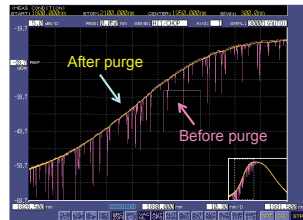
The free space optical input is, in fact:

- Dual purpose:** accepts both SM and MM (up to 800 µm core diameter) fibres without the high insertion loss due to the mismatch between MM and SM fibres
- Versatile:** accepts both /PC and /APC connectors
- Worry-free:** no internal fibre can be scratched by inaccurate coupling of fibres
- Maintenance-free:** no internal fibre can get dirty

Built-in air purge system



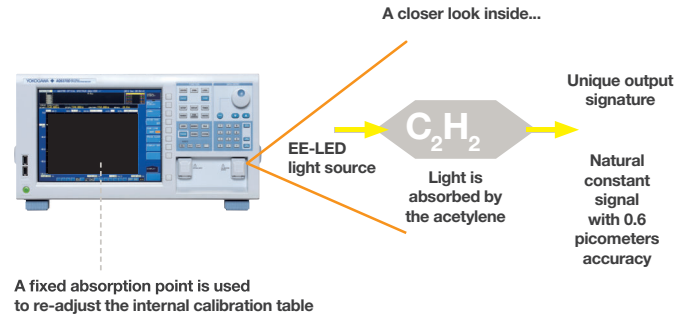
Purge gas ports (input and output)



Effect of purging (dry-air, 1 hour) water vapor absorptions around 1900 nm

By continuously supplying an air-purging gas, such as nitrogen, to the monochromator through the connectors on the back panel, the AQ6374 can drastically reduce the influence of water vapour absorptions, thus providing more reliable and accurate measurements than even before.

Built-in calibration source



Vibration, shock and changes in ambient temperature affect the measurement accuracy of high precision instruments. We want our OSAs to be able to always deliver the precise measurements they were designed for, therefore our instruments are equipped with a light source for calibration. The calibration process is fully automatic and only takes 2 minutes to complete. It includes:

- The Optical Alignment function, which automatically aligns the optical path in the monochromator to assure the level accuracy;
- The Wavelength Calibration function, which automatically calibrates the spectrum analyser with the reference source to ensure the wavelength accuracy.

15 Built-in analysis functions

- WDM (OSNR)
- Optical Fibre Amplifier
- DFB-LD
- FP-LD (VCSEL)
- LED
- Spectral Width
- Data logging
- Chromaticity coordinates
- Notch Width
- SMSR
- PMD
- Optical Power
- Optical Filter
- Go/No-Go Judgment
- Level fluctuations

The AQ6370 OSA Series delivers:

Reliability – The most trusted OSAs in the world thanks to their unmatched measurement accuracy, robustness and proven quality.

Performance – Best in class, state of the art and high-precision instruments that keep pace with the ever changing and fast evolving optical technology.

Expertise – For more than 30 years our R&D and product specialist teams have been listening to the needs of OSA users to continuously provide them with innovative and effective solutions for their measuring challenges.