Ideal Measurement Solution for Optical Devices and Optical Transmission Systems

The AQ2200 Multi Application Test System is the ideal system for measuring and evaluating a wide range of optical devices and optical transmission systems. A variety of measurement modules are available, including the following: grid tunable laser source, high-speed optical sensors, high-resolution and high-speed variable optical attenuators and optical transceiver interfaces. These modules can be installed in any combination on a single platform, providing an ideal measurement system for a variety of applications.

The AQ2200 Multi Application Test System is available in two different frame controller platforms. Each model has a certain number of slots for housing modules, so you can select the best platform size for your measurement application.

Frame and Module Lineup

Frame Controller

AQ2211 Frame controller (3 slots)
AQ2212 Frame controller (9 slots)

Light Source Module

AQ2200-131 Grid TLS module (C/L band, 1 channel)
AQ2200-132 Grid TLS module (C/L band, 2 channels)

Sensor Module

AQ2200-221 Sensor module (2 channels)
AQ2200-215 Sensor module (high power +30 dBm)

Optical Attenuator Module

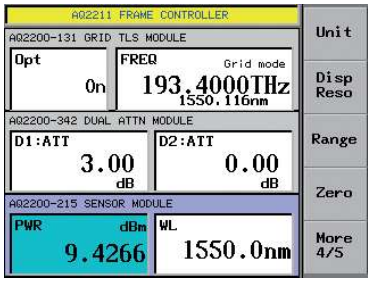
AQ2200-312 ATTN module (standard)
AQ2200-332 ATTN module (built-in monitor power meter)
AQ2200-342 DUAL ATTN module (built-in monitor power meters, 2 channels)

Optical Switch Module

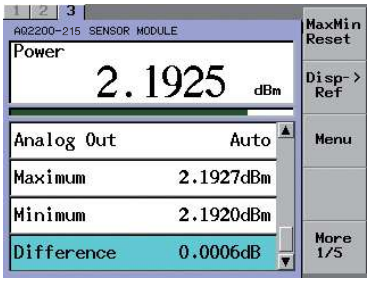
AQ2200-421 OSW module (1×2 or 2×2, 2 channels)
AQ2200-411 OSW module (1×4 or 1×8)
AQ2200-412 OSW module (1×16)

Modules for Optical Transceiver

AQ2200-642 Transceiver interface module
AQ2200-651 SG module



AQ2211 Frame Controller Screen (SUMMARY)



AQ2211 Frame Controller Screen (DETAIL)

Frame controller with convenient functions

◆Hot-swappable

Measurement modules can be inserted or removed without turning off the power. This hot-swapping capability makes it easier to reconfigure your system.

◆USB storage

The USB makes it easy to quickly save and load data. It saves measurement data in CSV and a screen shot in bmp, so that they can easily be imported into almost any PC application.

◆Multi user function

Up to 5 users can access to the same frame controller simultaneously.
This function contributes to cost-saving and space-saving by sharing a frame.

◆Various remote interfaces

The AQ2211 and AQ2212 frame controllers are equipped with not only IEEE488.2 compliant GP-IB but also Ethernet and USB for remote operation.

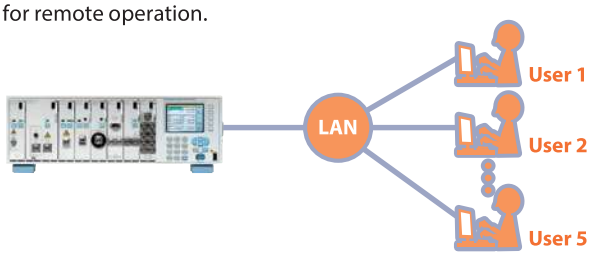


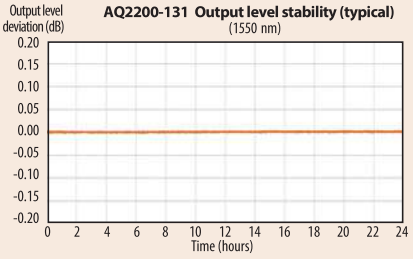
Image of Multi user function

Module Lineup

Light Source

Grid Tunable Laser Source (AQ2200-131/-132)

- Frequency (Wavelength) range: C/L-band
- 1 and 2 channel modules
- Grid spacing: min. 25 GHz (0.2 nm) and manual (0.1 GHz)
- Dither function



Optical Power Meter Improved measurement throughput

High-Power (AQ2200-215)

- High power measurement: +30 dBm
- Power range: -70 to +30 dBm
- Averaging time: 100 µs (minimum sampling intervals)

Dual-Channel (AQ2200-221)

- Compact: Two high-performance sensors in a module.
- Power range: -70 to +10 dBm
- Averaging time : 200 µs (minimum sampling intervals)

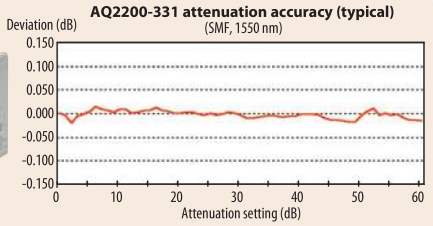
Optical Attenuator Providing low insertion loss and fast control

Standard type (AQ2200-312)

- Low insertion loss: 1.0 dB (typ.)
- Wide attenuation range: 0 to 60 dB (in steps of 0.001 dB)
- Wide wavelength range: 1200 to 1700 nm
- Monitor output (optional)
- Low polarization dependence loss: 0.1 dBp-p or less

ATTN w/ Built-in Monitor Power Meter (AQ2200-332)

- Attenuation accuracy: within ±0.1 dB
- The output monitor function allows for directly setting the optical power
- SMF (10/125 µm) or MMF (50/125 µm or 62.5/125 µm)
- Bulte-in optical shutter: 90 dB or more



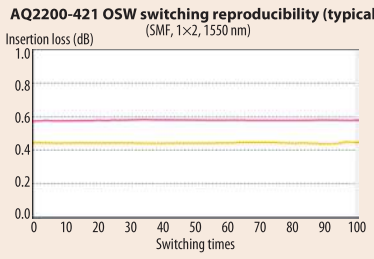
Dual Optical Attenuator (AQ2200-342)

- Wavelength range: 1260 to 1640 nm
- Attenuation range: 0 to 40 dB
- Fast attenuation control: 100 ms
- Built-in optical shutter: 70 dB or more
- Built-in monitor power meter

Optical Switch Superior switching reproducibility

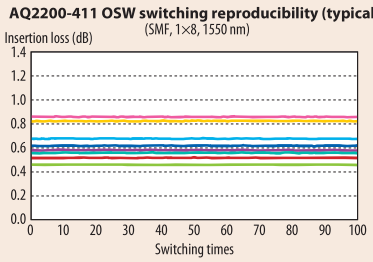
1×2, 2×2 Dual Optical Switch (AQ2200-421)

- Compact: Two optical switches in a one-slot size module
- SMF (10/125 µm) or MMF (50/125 µm or 62.5/125 µm)
- Low insertion loss: 1.0 dB (typ.)
- Switching reproducibility: ±0.01 dB



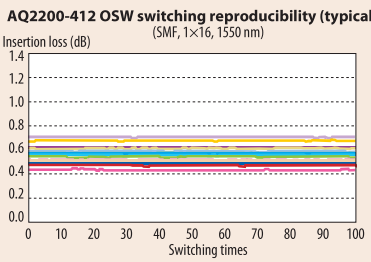
1×4, 1×8 Optical Switch (AQ2200-411)

- SMF (10/125 µm) or MMF (50/125 µm or 62.5/125 µm)
- Switching reproducibility: ±0.01dB
- Low insertion loss: 1.0 dB (typ.)



1×16 Optical Switch (AQ2200-412)

- SMF (10/125 µm) or MMF (50/125 µm)
- Switching reproducibility: ±0.01dB
- Low insertion loss: 1.0 dB (typ.)



Optical Transceiver Test Simplifying 10G transceiver test environment

Transceiver I/F module (AQ2200-642)

- Compatible with XFP, SFP+, XENPAK, etc.
- Power supply and current monitor
- I^2C/MDIO interfaces
- Control signal transmission
- Status signal monitor
- Resistance value monitor

SG module (AQ2200-651)

- RF output : 5 channels
- Clock output : 620.0 to 720.0 MHz
  155.0 to 180.0 MHz
- 10 MHz reference input and output