

AQ2200

Multi Application Test System

AQ2201 and AQ2202 Frame Controllers



Ideal Measurement Solution for Optical Devices and Optical Transmitters

- A broad lineup of measurement modules
- Measurement module “hot-swapping” capability
- Easy-to-view TFT display
- A variety of external interfaces (GP-IB, Ethernet, USB)

Please note the following when purchasing AQ2200 Series products.

* See the individual module catalogs for details on the measurement modules that can be installed in the AQ2201 and AQ2202 frame controllers.

Multi Application Test System



Ideal Test System for Optical Component Measurements

The AQ2200 Multi Application Test System is the ideal system for measuring and evaluating a wide range of optical devices and optical transmitters. A variety of measurement modules are available, including the following: a high-stability light source, a wideband tunable light source, a high-speed optical sensor with low PDL, a high-resolution variable optical attenuator, a small-sized bit error module with an integrated pulse pattern generator (PPG) and error detector (ED), an optical modulator with variable extinction ratio, and an optical receiver supporting two wavelengths (1310 and 1550 nm). These modules can be installed in any combination on a single platform, providing an ideal measurement system for a variety of applications.

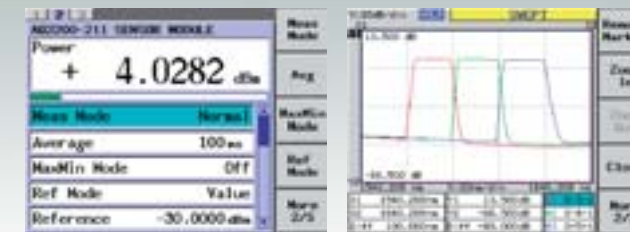
The AQ2200 Multi Application Test System is available in two different frame controller platforms. Each model has a certain number of slots for connecting modules, so you can select the best platform size for your intended measurement applications.

Frame Controllers

The AQ2201 and AQ2202 frame controllers are platforms for the AQ2200 Multi Application Test System. These frame controllers contain a variety of measurement applications that enable you to get the information you need without connecting an external controller PC. In addition, they have three different external interfaces, so you can always use the best interface for a particular measurement application.

● Easy-to-view color display

The AQ2201 and AQ2202 both have a 320×240-dot, wide-viewing-angle, high-resolution color TFT display for easy viewing. Even detailed graphs are easy to view on this display.



Measurement value display screen

Graph display screen

● Remote monitoring and measurement through a LAN

The AQ2201 and AQ2202 support Ethernet as well as GP-IB, which is the standard interface for measuring instruments. Ethernet support makes remote monitoring and control even easier.



Frame and Measurement Module Lineup

- AQ2201 Frame controller (3 slots)
- AQ2202 Frame controller (9 slots)
- AQ2200-111 DFB-LD module
- AQ2200-136 TLS module
- AQ2200-141 FP-LD module
- AQ2200-142 DUAL FP-LD module
- AQ2200-201 Interface module
- AQ2200-211 Sensor module (high sensitivity, long wavelength)
- AQ2200-231 Optical sensor head (large diameter, long wavelength)
- AQ2200-241 Optical sensor head (large diameter, short wavelength)
- AQ2200-311 ATTN module
- AQ2200-601 10 Gbit/s BERT module
- AQ2200-621 10 Gbit/s optical modulator (1.55 μm)
- AQ2200-622 10 Gbit/s optical modulator (1.31 μm)
- AQ2200-631 10 Gbit/s optical receiver (1.31/1.55 μm)



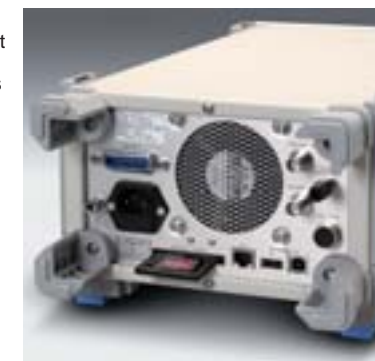
* See the individual module catalogs for details on the measurement modules that can be installed in the AQ2201 and AQ2202 frame controllers.

Selection Guide

Modules	Test	Mux/DeMux	Filter	Coupler, Splitter	AWG	Isolator	Switch	Attenuator	Amplifier	Tx/Rx	Modulator	WDM System
Tunable Laser		✓	✓	✓	✓	✓	✓	✓				
DFB-LD				✓					✓	✓	✓	✓
FP-LD				✓		✓	✓					
SENSOR		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ATTN									✓	✓		✓
10 Gbit/s BERT										✓	✓	✓
10 Gbit/s Optical Modulator										✓		
10 Gbit/s Optical Receiver										✓		
Frame Controller		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

● Compact Flash (CF) card for data storage

The CF card slot makes it easy to quickly save and load data. Measurements are saved in CSV format, so they can be easily imported into almost any PC application.



● Measurement module "hot-swapping" capability

Measurement modules can be inserted or removed without turning off the power. This hot-swapping capability makes it easier to reconfigure your system. (warm-up time still required to ensure accurate measurements.)

● Standard functions supporting a variety of measurement applications

Functions for a variety of measurement applications are included as standard features in the AQ2201 and AQ2202 platforms, so you can get to work right away without connecting an external PC or setting up a control program.

Examples of included functions

Optical power stability measurement:

This function measures and records optical power over extended periods of time. Fluctuations in optical power can be graphed and analyzed (maximum value, minimum value, etc.).

Short-term optical power fluctuation measurement:

This function measures and records momentary fluctuations in optical power. Fluctuations in optical power can be graphed and analyzed (maximum value, minimum value, etc.).

Wavelength dependent loss measurement:

This function measures loss characteristics over wavelength, synchronizing the wavelength sweep of the TLS module with the sensor module. Results can be graphed and analyzed using filters.

Bit error rate test:

This function can be used to measure the bit error rate using the pulse pattern generator (PPG) and error detector (ED) built into the 10 Gbit/s BERT module. Measurement conditions can be set and operating status information (elapsed measurement time, logging display, measurement results display, etc.) can be displayed.

Specifications

AQ2201 Frame Controller

Item	Product specifications	
Slots	3	
Display	Color LCD, 320 × 240 dots	
Interface	GP-IB	Conforms to IEEE-488.2
	Ethernet	Conforms to 10BASE-T, RJ-45 connector
	USB (planned)	Conforms to Rev. 1.1, type A/B connector
Storage media	CompactFlash card	
Power supply	100 V to 240 V, 50/60 Hz	
	170 VA	

AQ2202 Frame Controller

Item	Product specifications	
Slots	9	
Display	Color LCD, 320 × 240 dots	
Interface	GP-IB	Conforms to IEEE-488.2
	Ethernet	Conforms to 10BASE-T, RJ-45 connector
	USB (planned)	Conforms to Rev. 1.1, type A/B connector
Storage media	CompactFlash card	
Power supply	100 V to 240 V, 50/60 Hz	
	580 VA	

See GS810518900 for details.

Model

Product name: AQ2201 frame controller

Model: 810518900-□
 □ Power cord
 D: UL3P
 F: VDE Standard (CEE-C7)
 G: SAA Standard (SAA-3P)
 Q: BS Standard (BS546 3P)
 H: BS Standard (BS 2P)

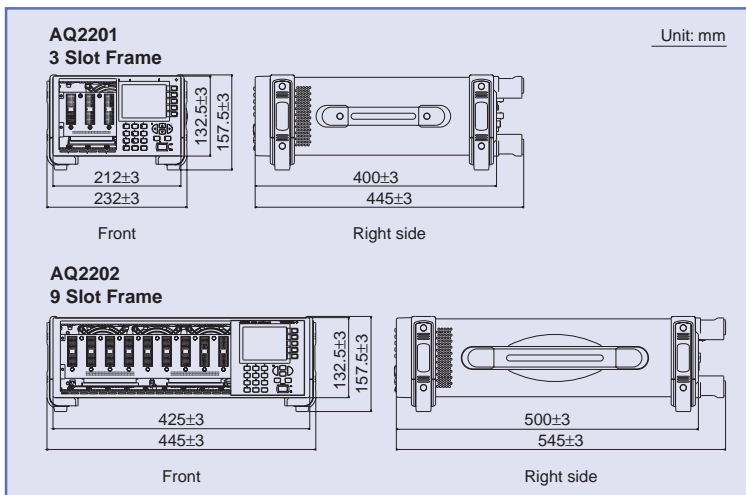
Product name: AQ2202 frame controller

Model: 810518920-□
 □ Power cord
 D: UL3P
 F: VDE Standard (CEE-C7)
 G: SAA Standard (SAA-3P)
 Q: BS Standard (BS546 3P)
 H: BS Standard (BS 2P)

Accessories

Model	Product name	Specifications
810518926	AQ2200-901 blank panel	Fits one slot
819601000	19-inch rack mount kit A (132.5)	For mounting AQ2202
819601200	19-inch rack mount kit C (132.5)	For mounting AQ2201 on right side
819601300	19-inch rack mount kit D (132.5)	For mounting AQ2201 on left side

External Dimensions Guide



Note



Pursuant to the Foreign Exchange and Foreign Trade Control Law, Japanese government approval may be required to export this product from Japan.
 The information presented in this bulletin is subject to change without notice due to performance and quality improvements.