Model 8800 & Model 8200

Photonics Test System

Key Features

- *Modular platform enables flexible, user-defined test setup*
- *Eight and two-channel systems*
- *Numerous modules available to cater to all your photonics test needs: Stabilized Light Sources, Optical Power Meters, Optical Switches, Optical Attenuators*
- *Interconnect several systems to increase channel density*
- *LabVIEW drivers are available*
- *Benchtop or rack mounted configurations*

Model 8200 Rear Panel

The Model 8800 and Model 8200 are modular instrumentation platforms, allowing the end-user to configure an application-specific photonics test system. Multiple systems can be interconnected to increase channel density.

These instruments feature eight and two plug-in bays, respectively, accommodating a variety of interchangeable plug-in modules including: stabilized light sources, optical power meters, optical attenuators and optical switches. Many other modules are currently in development, resulting in an ever growing module portfolio.

The 8800/8200 platform is primarily targeting testing and qualification of fiber-optic components in an R&D, QA/QC or manufacturing environment. The instruments' versatility, enabled by the multitude of available modules, also makes it extremely useful in fiber optic sensor, medical and bio-photonic applications.

The instrument mainframe contains the power supply, central processor and communication functions. Fold-out legs are included and rack mount kits are optional, allowing either benchtop or instrumentation rack configurations.

Both mainframes feature an auto-detect mechanism, recognizing the modules inserted upon powerup. A backlit LCD display is used to display either module-specific status information, or test-specific data. Modules can be individually addressed by selecting one of eight keys, located around the display, or by pressing a short-cut key, located on each module.

The LabView software drivers enables the user to link various modules, thereby defining a specific test configuration. The software also allows connectivity to external instruments, further extending the platform's utility.

The Model 8800/8200 can be controlled via their internal soft-key addressable menu structure, or remotely by a PC via RS-232C, or GPIB/IEEE-488.2 connections.

Selection Guide

Test/PTS Module	WDM/DFB Light Source	FP Light Source	PUMP Light Source	OPM/FOPM Optical Meter	FOSW Optical Switch	VFOA Optical Attenuator
General						
Optical Power				•	•	•
Wavelength					•	
Power vs. Wavelength				•	•	
Dynamic Range (detector)	•	•		•		•
Fiber Optic Components						
Attenuation	•	•	•	•		
Insertion Loss	•	•	•	•	•	
Return Loss	•	•	•	•	•	
Coupling/Splitting Ratio	•	•	•	•	•	
Crosstalk	•	•	•	•	•	
Polarization Dependent Loss	•	•	•	•		
Stimulated Brillouin Scattering	•		•	•		•
Multi-port FO Components	•	•	•	•	•	•
EDFA						
Small Signal Gain	•			•		•
Gain Tilt	•			•		•
Noise Figure	•			•		

Model 8800/8200 Instrument Modules

Instrument modules for the 8800 and 8200 mainframes can be ordered separately. For more information on specific modules please see the following pages:

Module Type	Page
Stabilized Light Sources	
DFB LD for WDM	91
F-P LD	93
Pump LD	94
Power Meters	
Free Space	95
Fiber Optic	96
Optical Attenuator	97
Optical Switches	98

Model 8800 and 8200 Modules are easily interchanged and can be replaced within minutes. Modules are identified by the mainframe for smooth plug-and-play.

Mainframe Specifications

	8800	8200
Display Type	LCD graphical display 128 x 128 pixels	
Display Backlighting	Green LED	
Display Controls	Brightness, contrast and invert screen	
Output Connectors		
RS-232C	9-pin male D-sub	
GPIB	24-pin IEEE-488	
Bus Extender	37-pin D-sub	
Group Sync Inc	BNC	
Group Sync Out	BNC	
Chassis Ground	4mm banana jack	
Power Requirements		
90 to 132 volts	5 Amp max	2.5 Amp max
198 to 250 volts	2.5 Amp max 50 to 60 Hz	1.25 Amp max 50 to 60 Hz
[in. (cm)]Dimensions (H x W x D)	5.23 (13.3) x 17.26 (43.8) x 16.28 (41.4)	5.23 (13.3) x 8.86 (22.5) x 16.28 (41.4)
Mainframe Weight [lb (kg)]	25 (11.3)	16 (7.3)
Operating Temperature	0 to 40°C (<70% humidity noncondensing)	
Storage Temperature	-20 to 60°C (<90% humidity noncondensing)	
Laser Safety Features	Laser enable password protected button, interlock, output delay (meets CDRH US 21 CFR 1040.10)	

Ordering Information

Model	Description
8800	8-Channel Photonics Test System Mainframe
8200	2-Channel Photonics Test System Mainframe
8800-RACK	8800 Rack Mount Kit