We Are Optical Networking

A1820 Optical Channel Monitor

Remotely accessible Optical Channel Monitor

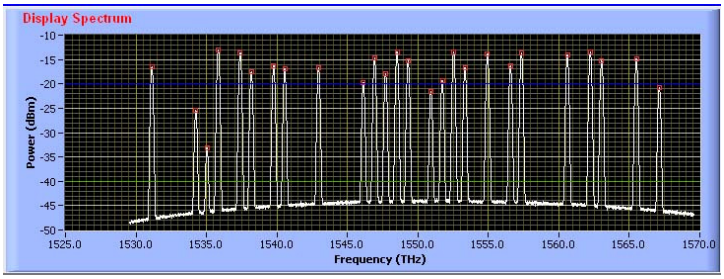
The A1820 Optical Channel Monitor is an ultra-high performance DWDM channel monitor ideal for DWDM transmission systems with channel monitoring requirements. The A1820 monitors DWDM signals on 100GHz spacing. The optical characteristic of the entire C band are updated on a 1 second basis.

The A1820 can optionally support up to four monitors, each of which operates independently. These channels can be used to monitor both eastbound and westbound traffic simultaneously.

The A1820 OCM is well suited to monitor networks employing WDM equipment such as Avvio Networks' ROADM and A15xx series products.

The A1820 can be used in conjunction with Avvio Networks' GUI based Element Management System. The EMS uses a SNMP V2 MIB to communicate with the OCM, and provides a graphical depiction of the network's current status, including channel power and OSNR. The A1820 and EMS allow an operator located in a remote NOC to immediately detect and respond to network problems related to wavelength power, and to view network segments to determine which wavelengths are currently in use.

Preliminary



Features

Supports all protocols up to 10G

Ultra-high monitoring performance

Full scanning over the entire C band

Serial and Ethernet interface

Interpolated OSNR

Works with Avvio Networks' Element Management System

#	Wavelength (nm)	Frequency (THz)	Power (dBm)	OSNR (dB)
1	1531.125	195.799	-16.46	0.00
2	1534.240	195.401	-25.51	0.00
3	1535.045	195.299	-33.09	0.00
4	1535.832	195.199	-13.05	0.00
5	1537.387	195.001	-13.59	0.00
6	1538.186	194.900	-17.60	0.00
7	1539.776	194.699	-16.29	0.00
8	1540.547	194.601	-16.84	0.00
9	1542.956	194.298	-16.75	0.00
10	1546.129	193.899	-19.68	0.00
11	1546.917	193.800	-14.75	0.00
12	1547.705	193.701	-17.91	0.00

The A1820 Regenerator/repeater is a member of Avvio Networks' family of intelligent optical networking products. For more information, please send an email to: sales@avvionetworks.com. Avvio Networks is a trademark of Avvio Networks

Avvio Networks' advanced optical networking products set the standard for a new breed of cost-effective networks and services.

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Technical Specifications

Optical Characteristics

Symbol	Parameter	Min	Max	Unit
$\triangle P$	Absolute Power Accuracy		∓0.7	dB
$\triangle P_T$	Absolute Total Power Accuracy		∓1.0	dB
δP	Relative Power Accuracy		∓0.3	dB
OSNR	OSNR Accuracy		∓1.5	dB
$\triangle \lambda$	Absolute Wavelength Accuracy		∓75	pm
PR	Power Repeatability		∓0.1	dB
PDL	Polarization Dependent Loss		∓0.3	dB
RL	Optical Return Loss	30		dB

Operating Conditions

Parameter	Min	Typ	Max	Unit
Input Signal Power Range	-40		-10	dBm
Adjacent Channel Power Divergence			20	dB
OSNR Range (Noise level > -50dBm)	10		28	dB
Scan and report time		1.0		sec
Maximum Number of Channels			45	CH

System Management

Craft Port	RS-232 (9600, 8, N, 1)
Remote Provisioning	Telnet, SNMP (V2)
MIBs supported:	
(MIB-II)	Avvio Networks Enterprise MIB. Avvio Networks OCM MIB

Power Requirements

Power Input	-40 to –72VDC (-48VDC nom)
Power Consumption	30W typical

Environmental

Temperature, Relative Humidity, Vibration, Shock, Flammability	Meets Bellcore NEBS (GR63) TR-NWT-0000-63 Level 3
EMI, EMC	Complies with FCC part 15 class A, UL950 and CE, and NEBS requirements

Dimensions

Chassis size	1.75" X 15" X 17" (19" rack mount)

Lit number: A1820.2