Data sheet

CTX Series

OCM

Optical Channel Monitoring, 2/4/6/8-port

Figure 1:OCM Board

Main Features

- Modulation Format Independent
- Support full C-band 50GHz/100GHz ITU.Grid
- Flex BW: 37.5+Nx12.5 GHz
- Integrates 1:2/1:4/1:6/1:8 MENS switch
- Up to 2/4/6/8-port OCM
- Support SNMP, GUI NMS Danriver iCEO B/S

Description

OCM are based on a high-speed scanning filter design with high resolution for flexible-spectrum applications. It is offered in 4/8-port configurations. Multiport versions are able to Scan in turn for ultrafine network channel power control. High-resolution filter design is a key to high adjacent-channel accuracy and superchannel carrier discrimination and power monitoring. Finally, for fully flexible spectrum monitoring, the OCM card report spectral power over any user-specified spectral range or provide continuous spectral density across the full C-band spectrum.

The OCM card measures the optical power, frequency and OSNR of the optical channels in the fiber, that enables the user to monitor these features of each fiber and shows a full, accurate and detailed picture of the wavelengths used in the fiber. It's ideal for embedded DWDM monitoring for ROADM/OADM multi-haul and third-party wavelengths applications.

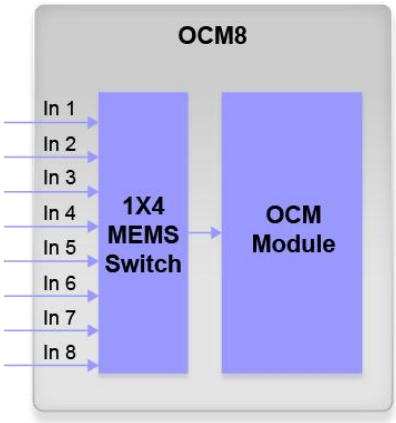
The OCM card can perform full non-disruptive monitoring and analysis of the DWDM network,The solution provides accurate visibility of the fiber characterization and operating wavelengths for optimizing network performance and saving network managers time and OPEX expenses associated with identifying and repairing faults.

Benefits

- Power monitoring for all channels.
- In-service detection of fiber tap, Non-intrusive
- Monitoring up to 8 fibers simultaneously by the OCM
- Controlled using iCEO NMS

Applications

- In service measurements for DWDM networks
- ROADM/OADM/VMUX equalization
- Smart EDFA & RAMAN gain equalization
- Remote power monitoring & control



Technical Specifications

Parameter	Min	Max	Condition
Operating Frequency Range(THz)	191.3	196.1	
Channel Spacing	Configurable		50GHz channels spacing. L-band: 88 channels maximum
Maximum Number of Channels	-	96	
Bit Rates(Gb/s)	2.5/10/40/100/400/1000 Flex-BW		
Modulation Format Independence (RZ, NRZ, ODB, NRZ-DPSK, RZ-DQPSK, DP-QPSK, OFDM, Nyquist)	Yes		
Input Signal Power Range(dBm)	-40	-10	Power measured in 37.5 GHz bandwidth
Total Input Power(dBm)	-	7	
OSNR Range (RBW 0.1 nm)(dB)	13	-	
Scan update period(ms)	-	500	
Absolute Power Accuracy(dB)	-	± 1.0	
Absolute Total Power Accuracy(dB)	-	± 1.0	
Relative Power Accuracy(dB)	-	1	
Absolute Frequency Accuracy(GHz)	-	± 12.5	
PDL(dB)	-	± 0.15	
Optical Return Loss(dB)	30	-	
Port			
Number of Inputs	2/4/6/8		
Performance Monitoring			
Wavelength	Channel number/Frequency		
Optical Power	Channel power, Total power		
OSNR	OSNR value		
Physical feature			
Dimensions(HxWxD mm)	20x192x223		
Weight (kg)	0.3		
Package options	Plug-in Card		
Platform	CTX6600 I/II/V		
Slot assignment	1 slot		
Connector	LC		
Environment			
Operating Temperature	-5°C to 50°C		
Storage	-20°C to 85°C		
Humidity	5% ~ 85% RH non-condensing		
Power Supply			
Power Input	DC -48V input from backplane		
Power Consumption	< 20		
Compliance			
Standards	FCC,RoHS 5/6		