



BaySpec's CWDM Series Optical Channel Performance Monitor is an embedded, integrated spectrum analyzer delivering precise measurements and powerful processing capabilities to coarse wavelength division multiplexing (CWDM) applications compliant with the ITU-T G.695 standard.

Coarse Wave Division Multiplexing (CWDM) combines up to 18 wavelengths onto a single fiber. CWDM technology uses ITU standard 20nm spacing between the wavelengths from 1260nm to 1640nm. High reliability (GR-63/1209/1221 qualified) is achieved through a rugged mechanical design with no moving parts. Periodic calibration is not required. Input/Output (I/O) is provided through a dual port RAM interface accessed through ADD/DAT bus direct connection or serial (RS232 or USB) communications.

The IntelliGuard® OCPM CWDM employs a highly efficient Volume Phase Grating (VPG®) as the spectral dispersion element and an ultra-sensitive InGaAs array detector as the detection element, thereby providing high-speed parallel processing and continuous spectrum measurements. As an input, the device uses a tapped signal from the main data transmission link through a single mode fiber, then collimating it with a micro lens. The signal is spectrally dispersed with the VPG® and the diffracted field is focused onto an InGaAs array detector. The control electronics read out the processed digital signal to extract required information. Both the raw data and the processed data are available to the host through the supported interfaces.

### Key Features:

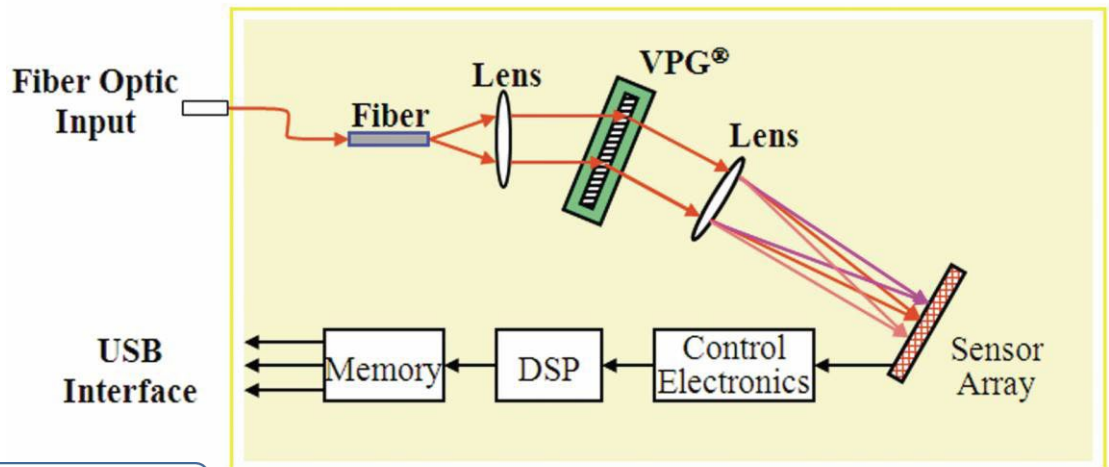
- Wide wavelength range 1260-1640nm
- Ultra-fast real-time response time in <50 ms
- Athermal design enabling battery operated handheld operation
- High reliability - No moving parts, GR-63/1209/1221 qualified
- Compact, card-mountable design - 68 x 96 x 15.8 mm<sup>3</sup>

### Applications:

- OEM module for portable handheld field test equipment
- Physical layer monitoring for provisioning and commissioning optical networks
- Real time fault detection and isolation in CWDM systems
- CWDM component R&D test equipment
- Channel power, wavelength and OSNR measurements

### Compliance

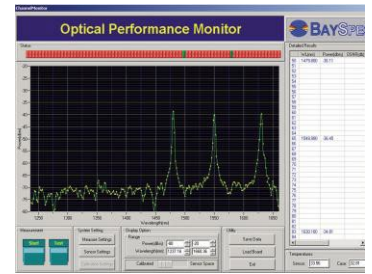
- Telcordia GR-63/1209/1221-CORE qualified



Parameter	Data	Unit
Wavelength Range	1260 - 1640	nm
Number of Channels	86+	#
Channel Spacing	4.5	nm
Absolute Wavelength Accuracy	± 1	nm
Relative Wavelength Accuracy	± 0.5	nm
Channel Input Power Range	-65 to -15 or specify	dBm
Spectral Resolution	<5	nm
Dynamic Range	50	dB
Power Resolution	0.1	dB
PDL	0.3	dB
Response Time	<50 for processed data (<1 ms for raw data)	ms
Size	68 x 96 x 15.8*	mm <sup>3</sup>
Interface	USB, RS-232 or Dual-port RAM	
Weight	<260	g
Power Consumption (in power-Down Mode)	< 2.0 (<10 mW)	W

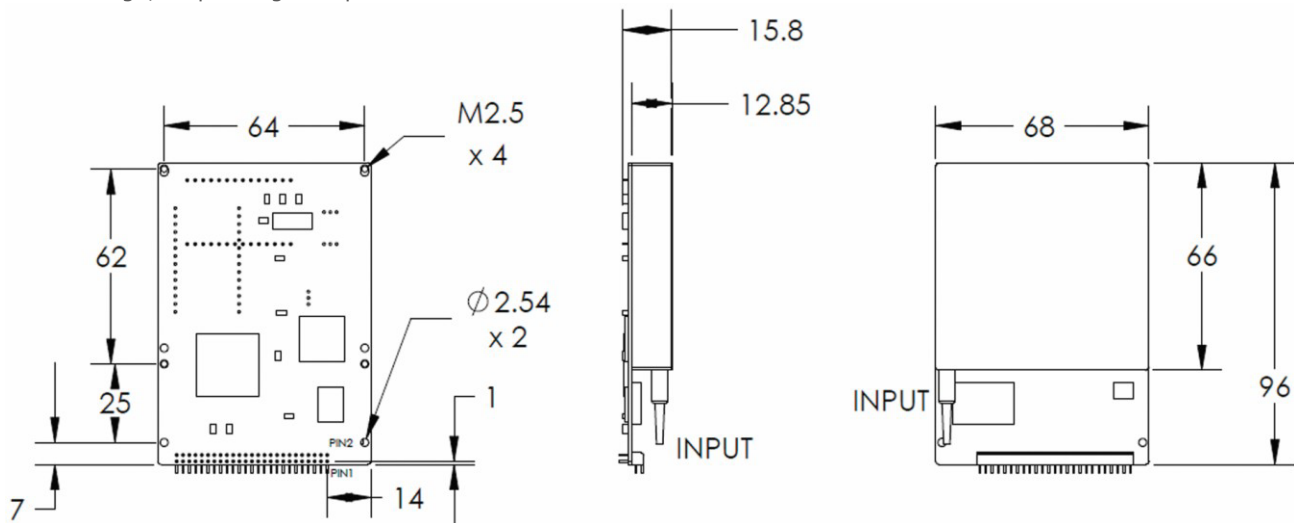
\*Subject to Change, Depending on specifications

### Sense 2020 Software

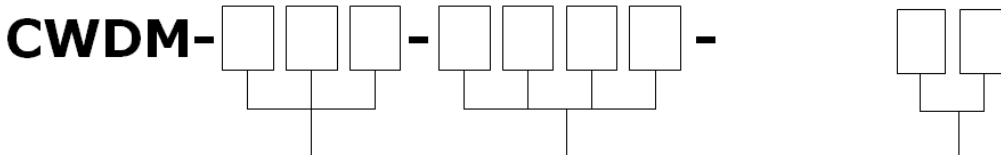


BaySpec's Sense 2020 software included, a Windows-based package with flexible data acquisition, processing and output functionality

BaySpec SDK, a software development kit for new applications development and integration into to your host software systems.



### Part Number Selection:



Code	Channel Number	Code	Starting Wavelength	Code	Connector Type
086	86		Please specify the shortest wavelength i.e. :	NC	No connector
xxx	TBD			FA	FC/APC
		1260	1260.00 nm	FP	FC/PC
				SA	SA/APC
				SP	SA/PC
				LA	LC/APC
				LP	LC/PC
				XY	TBD

