



DWDM OCM (Optical Channel Monitor) module

Part Number: FOCM-AEC-T80-xx-xxx



Overview

The DWDM OCM modules, FOCM provides accurate optical power and frequency measurement of C-Band DWDM wavelength signal with MAX 80*50GHz channels and up to 400Gbps data rate per channel. It can monitor wavelength range from 1528nm to 1569nm including signal spectrum, channel optical power, wavelength, OSNR and so on. FOCM is widely used in DWDM Network as well as ROADM dynamic monitoring applications.

Applications

- DWDM network monitoring
- EDFA Gain Tilt Control
- ROADM Power Balancing
- Advanced Modulation Analysis
- Long-Haul transmission system

Features

- Compliant with GR-1209/1221 and ITU-T G.697
- High stability, sensitivity and accuracy
- Large dynamic range
- Short scan time



Specification

Parameters	Min	Typ	Max	Unit
Operating Wavelength	1528		1569	nm
Wavelength Resolution	0.01		0.025	nm
Wavelength Accuracy			±0.05	nm
Data Rate, per channel			400	Gb/s
Monitoring Channels counts (50GHz)			80	
Input Power, per channel			+30	dBm
Input Power Return Loss			1.0	dB
Power Resolution			0.05	dBm
Power Accuracy			±0.8	dB
Scan and Report Time	0.5		1	Sec
Operating Temperature	-15		+65	°C
Storage Temperature	-40		+85	°C
Relative Humidity	5		95	RH%
Electrical Interface Connector	60 Pin Male, 2.0mm Pitch, Dual-Row			
Dimension	220mm (W) x 110mm (D) x 26mm (H)			
Fiber Cable	SMF 900um White Tight Buffer 100±2cm (default length)			
Fiber Connector	SC/UPC or LC/UPC 0.9mm			

Pin Description

Column	Row-1	Row-2	I/O Direction	Description
1	D0	D1	I/O	Date Bus Bit 0(LSB), 1
2	D2	D3	I/O	Date Bus Bit 2, 3
3	D4	D5	I/O	Date Bus Bit 4, 5
4	D6	D7	I/O	Date Bus Bit 6, 7
5	D8	D9	I/O	Date Bus Bit 8, 9
6	D10	D11	I/O	Date Bus Bit 10, 11
7	D12	D13	I/O	Date Bus Bit 12, 13
8	D14	D15	I/O	Date Bus Bit 14, 15 (MSB)
9	/RESET	NC	I	Reset OCM Optical Module, Strobe≥220ns, Active low
10	/START	NC	I	Start Mission, Strobe≥220ns, Active low

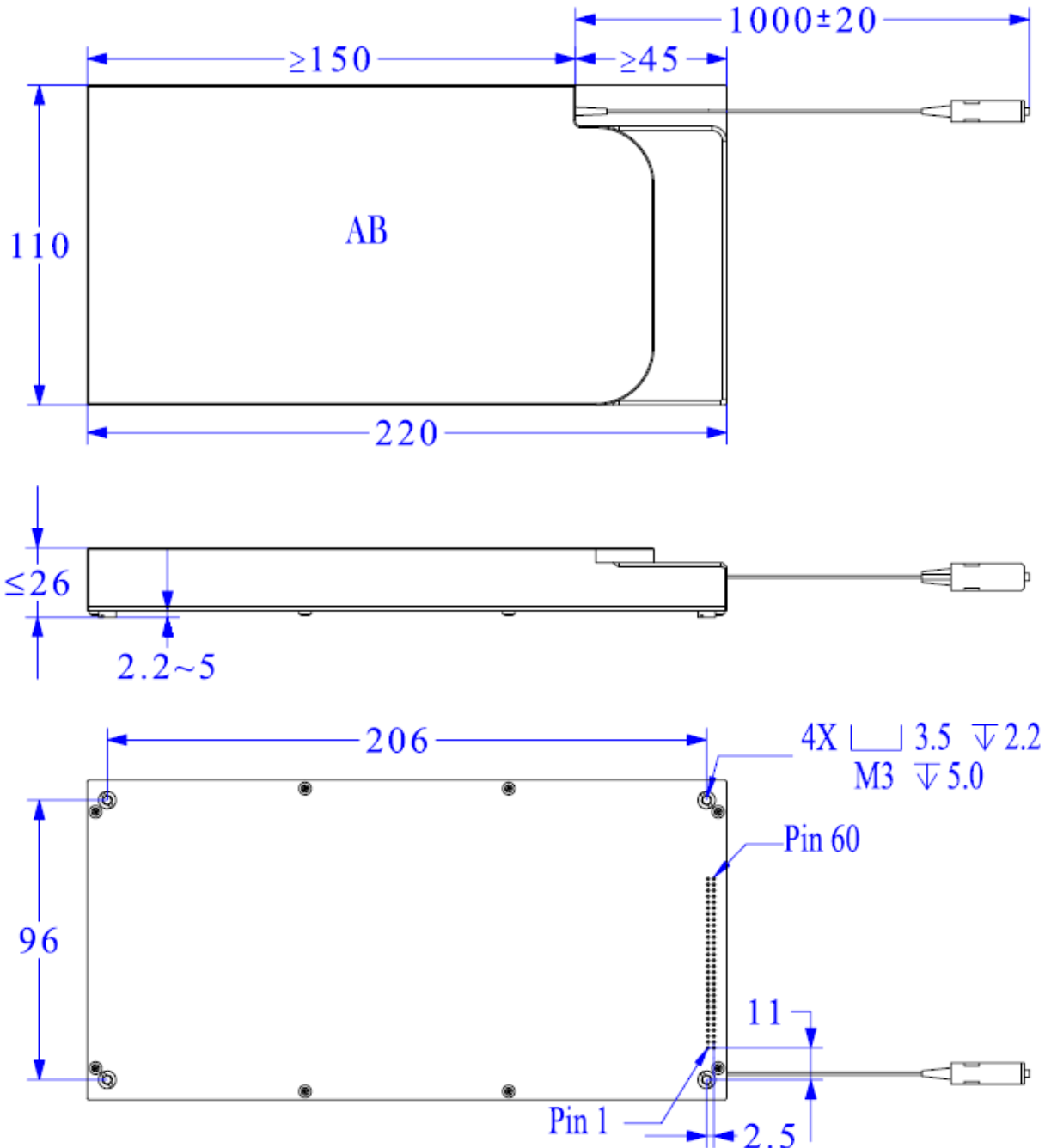


11	/DONE	NC	O	Mission Done, Strobe \geq 220ns, Active low
12	/ERROR	NC	O	Detect Error, Strobe \geq 220ns, Active low
13	NC	NC		
14	+3.3 V	+3.3 V	I	3.3 V Power Supply
15	DGND	DGND	I	Digital Ground
16	+5V(A)	+5V(A)	I	5 V Power Supply A
17	DGND	DGND	I	Digital Ground
18	+5V(B)	+5V(B)	I	5 V Power Supply B (for TEC use only)
19	GND	GND	I	Analog Ground
20	+15V	-15V	I	\pm 15V Power Supply
21	GND	GND	I	Analog Ground
22	/BUSY	NC	O	Module Busy, Active Low
23	/CE	/OER	I	DPRAM Chip Enable, Active low DPRAM Read Enable, Active low, Optional
24	/WE	NC	I	High: Read from DPRAM Low: Write into DPRAM
25	A0	A1	I	Address Bus Bit 0(LSB), 1
26	A2	A3	I	Address Bus Bit 2, 3
27	A4	A5	I	Address Bus Bit 4, 5
28	A6	A7	I	Address Bus Bit 6, 7
29	A8	A9	I	Address Bus Bit 8, 9
30	A10	NC	I	Address Bus Bit 10 (MSB)

Note: NC indicates that the function of this pin is 'Not Connected' and may be used for setup etc by the manufacturer. The pin will not be connected on board.



Mechanical Dimensions



4-M3 screw holes (7.2mm depth) for mounting
(All Dimensions are ± 0.20 mm Unless Otherwise Specified, Unit: mm)



Ordering Information

FOCM-AEC-T80-□□-□□□

Module Type

A- Type-A

Wavelength Range

EC- Extended C-Band

MAX Data Rate per Channel

T- 400Gbps

MAX 50GHz Channel Counts

80- 80 Channels

Connector Type

LP- LC/PC	LA- LC/APC	SP- SC/PC	SA- SC/APC
FP- FC/PC	FA- FC/APC	UP- MU/PC	UA- MU/APC
EP- E2000/PC	EA- E2000/APC	TP- ST/PC	XX- Free End

Product and Customization Code

xxx- Depends on Customers' Requirement
 None- No Customization