

XG-PON1 ONU Optical Transceiver SFP+ Module

The XG-PON1 ONU Transceiver is designed for XG-PON1 transmission. The module incorporates 2.48832Gb/s 1270nm burst-mode transmitter and 9.95328Gb/s 1577nm continuous-mode receiver. An integrated WDM coupler can separate 1270nm input light and 1577nm output light. The metallic package guarantees excellent EMI and EMC characteristics, which totally comply with international relevant standards.

Specifications

(tested under recommended operating conditions, unless otherwise noted)

Parameter	Symbol	Unit	Value		
			Min	typical	Max
Electrical Characteristics					
Power Consumption		W	-	-	1.5
LVPECL Single Ended Data Input Swing		mV	100	-	800
CML Single Ended Data Output Swing		mV	300		500
Differential Data input impedance			-	100	-
Signal Level(LVTTL)	VOH	V	2.4	-	Vcc
	VOL	V	0	-	0.8
Optical transmitter Characteristics					
Data Rate		Mbps	--	2488.32	-
Center Wavelength Range	c	nm	1260	-	1280
Spectral Width(@-20dB)		nm	-	-	1
Launch Optical Power	P _o	dBm	+2	-	+7
Off level light		dBm			-45
Burst turn on/off time	T _{on} /T _{off}	bit	-	-	32
Extinction Ratio 1	EX	dB	8.2	-	-
Eye Diagram	Compliant with ITU-T G.987.2				
Transmitter dispersion penalty 2	TDP	dB	-	-	0.5
Optical receiver Characteristics					
Data Rate		Mbps	-	9953.28	-
Center Wavelength Range	c	nm	1575		1580
Receiver Sensitivity 3	S	dBm	-	-	-28.0
Overload Input Optical Power	P _{in}	dBm	-8.0		

LOS

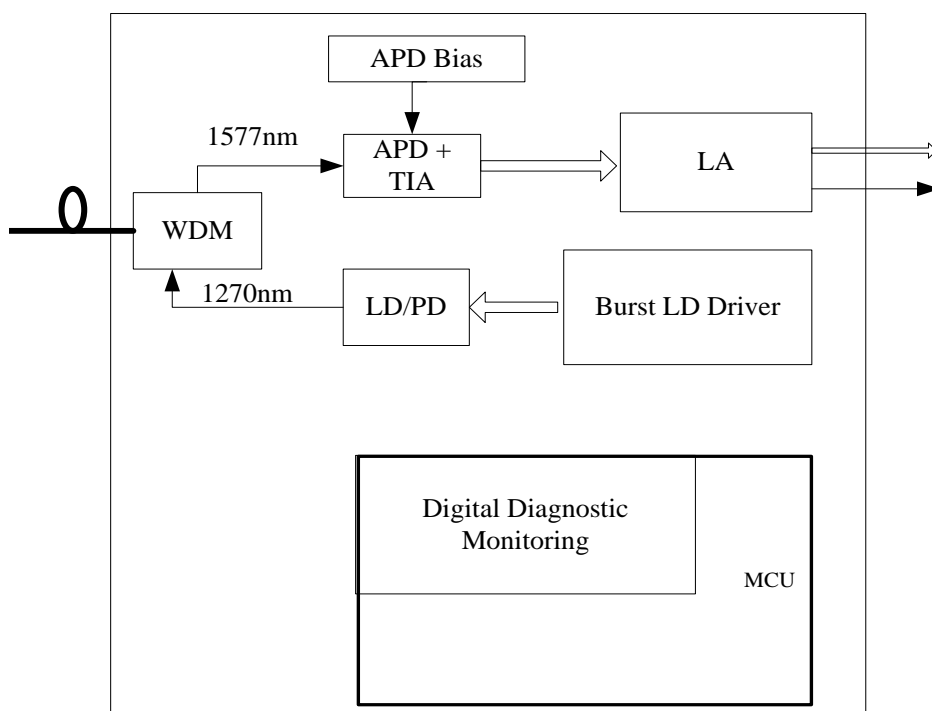
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Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
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Recommended Operating Conditions

Principle diagram

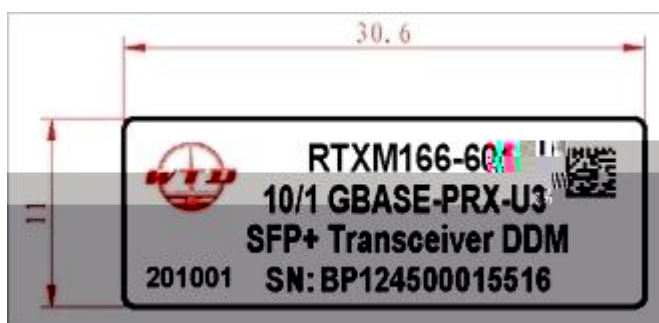
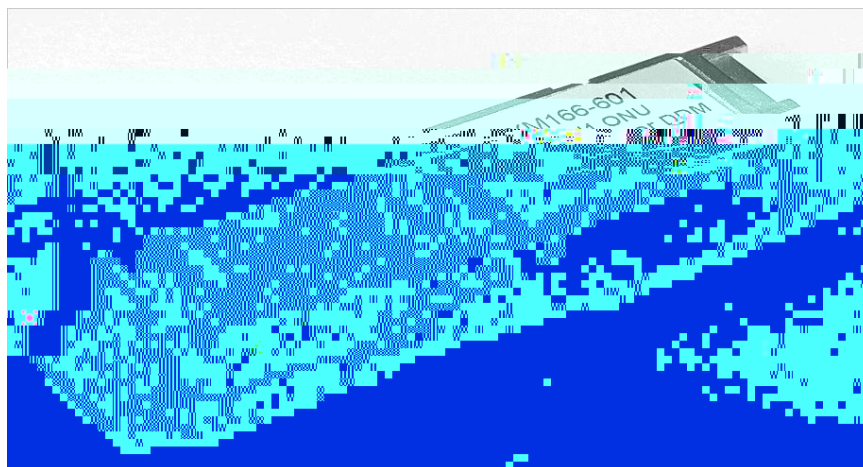


Optic Ports Definition

Single SC receptacle optical interface

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Product appearance and Label



Regulatory Compliance

Feature	Test Method	Performance
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883E Method 3015.7	Class 1 (>1.5kV) Human Body Model
Electrostatic Discharge (ESD) Immunity	IEC61000-4-2	LV4(Air discharge 15kV,Contact discharge 8kV) Performance criterion B
Electromagnetic Interference (EMI)	CISPR22 ITE Class B EN55022 Class B	Compliant with standards
Immunity	IEC61000-4-3 Class 2 EN55024	

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Update Information