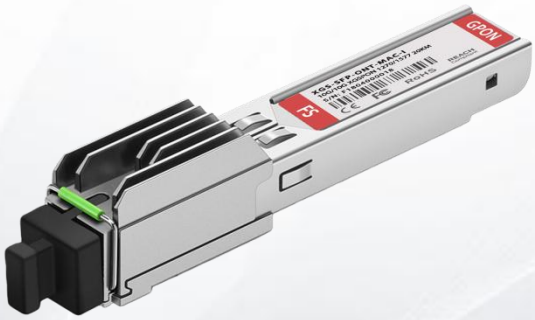
9.953G XGS PON Stick with MAC ONU 1270/1577nm 20km Transceiver (Industrial)

XGS-SFP-ONT-MAC-I



Application

- FTTH, FTTC, FTTB
- XGS- PON Access network
- 10G Access networks

Features

- Compliant with ITU-T G.9807.1 XGS PON standards
- 10G bps Downstream Receiver
- 10G bps Burst Mode Upstream Transmitter
- Power Supply: +3.6V
- Power consumption<2.1W
- Temperature Range: -40~ 85°C
- Humidity: 5 ~ 95% relative humidity, non- condensed

Description

To extend the 10GPON deployment in existing access network for business and residential subscribers, XGS PON ONT SFP+ XGS-SFP-ONT-MAC-I provides the standard SFP+ package, which can easily replace the Ethernet SFP+ module existing in Ethernet gateway, switch, router or backhaul equipment etc.

Equipped with ITU-T G.9807.1 compliant XGS PON interface, XGS-SFP-ONT-MAC-I incorporates interoperability, key customers' specific requirements and cost- efficiency. By integrating XGS PON MAC and standard compliant OMCI stack, XGS-SFP-ONT-MAC-I provides all XGS PON functionality and full range FCAPS management features including supervision, monitoring and maintenance.

Product Specifications

I. Absolute Ratings

Parameter	Symbol	Min	Max	Unit
Storage Temperature	T_S	-40	+85	° C
Case Operating Temperature	Tc	-40	+85	° C
Supply Voltage	$V_{cc}T$, R		3.6	V
Relative Humidity	RH	0	85	%

II. Electrical Characteristics (TOP = Tc, Vcc= 3.13 to 3.47 Volts)

Parameter	Min	Max	Unit
Tx_DIS= HIGH (Transmitter OFF / DISABLED)	2	V_{cc}+0.4	V
Tx_DIS = LOW (Transmitter ON / ENABLED)	0	0.8	V
Tx_Fault = HIGH (Transmitter fault)	V_{cc}-0.2	V_{cc}+0.4	V
Tx_Fault = LOW (Transmitter normal)	0	0.4	V
Rx_LOS = HIGH (Receiver OFF)	V_{cc}-0.2	V_{cc}+0.4	V
Rx_LOS = LOW (Receiver ON)	0	0.4	V

III. Optical Characteristics (TOP = Tc, Vcc= 3.13 to 3.47 Volts)

Parameter	Min	Max	Unit
Transmitter Optical Characteristics			
Laser	DFB (Burst)		
Average power	4	9	dBm
Optical Wavelength	1260	1280	nm
Side Mode Suppression Mode	30		dB
Extinction Ratio	6		dB
Rx_LOS = LOW (Receiver ON)	0	0.4	V
Receiver Optical Characteristics			
Type	APD+TIA		
Optical Wavelength	1575	1580	nm
Sensitivity	-28.5		dBm
Overload		-8	dB

V. DDM Information (SFF-8472 compliant)

A2 (HEX) address table for Alarms, Warnings and Measured values

Parameter	Alarm Threshold				Warning Threshold				Measured Values		Alarm Bit Address (Position)		Warning Bit Address (Position)	
	High Value		Low Value		High Value		Low Value							
	MSB	LSB	MSB	LSB	MSB	LSB	MSB	LSB	MSB	LSB	High	Low	High	Low
Temp(1/256°C)	00	01	02	03	04	05	06	07	96	97	112(7)	112(6)	116(7)	116(6)
Vcc(100μV)	08	09	10	11	12	13	14	15	98	99	112(5)	112(4)	116(5)	116(4)
Tx Bias(2μA)	16	17	18	19	20	21	22	23	100	101	112(3)	112(2)	116(3)	116(2)
Tx Power(0.1μW)	24	25	26	27	28	29	30	31	102	103	112(1)	112(0)	116(1)	116(0)
Rx Power(0.1μW)	32	33	34	35	36	37	38	39	104	105	113(7)	113(6)	117(7)	117(6)

V. Pin Description

Pin	Name	Internal Pull-up/Pull-down	Active
1	Reserved (NC or connect to GND on host board)	pulldown(4.75K)	
2	Tx Fault	pulldown(22K)	High
3	Tx Disable	pullup(4.75K)	High
4	SDA	pulldown(22K)	
5	SCL	pulldown(22K)	
6	MOD-ABS	pulldown(100ohm)	
7	Dying Gasp	pullup(4.75K)	Low
8	RX_LOS	pulldown(22K)	High
9	Remote Reset	pulldown(22K)	Uptohost
10	VEET		
11	VEER		
12	RD-	AC coupled inside the module	
13	RD+	AC coupled inside the module	
14	VEER		
15	VCCR		
16	VCCT		
17	VEET		
18	TD+	AC coupled inside the module	
19	TD-	AC coupled inside the module	
20	VEET		

Order Information

Part Number	Description
XGS-SFP-ONT-MAC-I	10G XGSPON Stick ONU MAC 1270/1577nm 20km IND Transceiver