

# **UBI-SFP-XGS-Ustick-SUPC-SO**

Ubiquiti compatible, SFP+ XGSPON ONU-stick with MAC, Tx 1270nm, Rx 1577nm, SC/UPC connectors, Commercial Temperature



# **1. PRODUCT SPECIFICATIONS & FEATURES**

- Brand Compatibility: Ubiquiti
- Form Factor: SFP+
- Operating Data Rate: 10G
- Protocol: XGSPON
- Fiber Type: SMF
- Technique: LR
- Lane count: 2
- Channel(s)/ Wavelength(s): 1270nmTx / 1577nmRx
- Distance: 20 km

- V Power Budget: 19 dB
- Connector: SC/UPC
- ✓ Default temp: 0°C to 70°C
- Compliant with SFP+ MSA specification
- Digital diagnostic monitor interface (also called DOM or DDM)
- Laser Type: DFB
- Receiver Type: CW APD/TIA



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## 2. ABSOLUTE CHARACTERISTICS

PARAMETERS	SYMBOLS	MIN.	TYP.	MAX.	UNIT
SIGNAL INPUT VOLTAGE	Vin	-0.3	-	Vcc+0.3	V
POWER SUPPLY VOLTAGE	Vcc	0	-	3.6	V
OPERATING TEMPERATURE	Tcase	0	-	70	°C
STORAGE TEMPERATURE	Ts	-40	-	85	°C

# **3. ELECTRICAL CONDITIONS**

PARAMETERS	SYMBOLS	MIN.	TYP.	MAX.	UNIT
SUPPLY CURRENT	lcc	-	-	900	mA
SUPPLY VOLTAGE	Vcc	3.135	3.30	3.465	V

# 4. OPTICAL CHARACTERISTICS

#### RECEIVER

PARAMETERS	SYMBOLS	MIN.	TYP.	MAX.	UNIT
OPTICAL WAVELENGTH	λC	1575	1577	1581	nm
LOS HYSTERESIS	LOSH	0.5	-	6	dB
LOS ASSERT	LOSA	-44	-	-	dBm
LOS DE-ASSERT	LOSD	-	-	-29	dBm
RECEIVER MAX. SENSITIVITY	Pmin	-	-	-28	dBm
DAMAGE THRESHOLD	Pmax	-9dB	-	-	dBm
OPTICAL RETURN LOSS	ORL	-	-	-	dB



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#### TRANSCEIVER

PARAMETERS	SYMBOLS	MIN.	TYP.	MAX.	UNIT
OPTICAL WAVELENGTH	λC	1260	1270	1280	nm
OPTICAL EXTINCTION RATIO	ER	6	-	-	dB
SIDE MODE SUPPRESSION RATIO	SMSR	30	-	-	dB
SPECTRAL WIDTH	Δλ	-	-	1	nm
OPTICAL TRANSMIT POWER	Pout	4	-	9	dBm

# **5. DOM PARAMETERS**

PARAMETERS	MIN.	TYP.	MAX.	UNIT
RECEIVE POWER MONITOR ACCURACY	-2	-	2	dB
TRANSMIT POWER MONITOR	-2	-	2	dB
LASER BIAS CURRENT MONITOR ACCURACY	-10	-	10	%
TRANSCEIVER TEMPERATURE MONITOR ACCURACY	-5	-	5	°C
INTERNALLY MEASURED TRANSCEIVER SUPPLY VOLTAGE	-	-	3	%



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### 6. WARNINGS & SYMBOLS



This is a CLASS 1 LASER product; be cautious. There is visible laser radiation present. Avoid long term viewing of the laser.



Solid Optics EN N.V. has tested the equipment based on European legislation and it is safe, doesn't intervene with other electronic devices and that it is not affected by interference from other Electronic devices.



Hazardous Goods; Our optical transceivers comply with Directive 2011/65/EU (RoHS II) and 2002/95 EC (RoHS I)

Laser Class 1

Our products comply with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007



Only (dis)connect the Optical Transceivers in a EPA (ESD Protected Area) while using only certified equipment and taking all necessary precautions as detailed in this chapter.

# 7. DISCLAIMER & COPYRIGHT

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