

# PRODUCT SPECIFICATIONS

## LUMINEX 1000BASE SINGLE MODE FIBER TRANCEIVER

Description: Technical specifications 1000Base Single Mode Fiber Transceiver | REVISION: 20230310-REV 1.0.1

**MADE IN BELGIUM**

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## 1. DISCRIPTION

### Luminex 1000Base-LX SFP SMF Transceiver 1310nm, 10km, LC, DMI

This single mode fiber (SMF) SFP transceiver provides 1000Base-LX throughput to up to 10km making use of a wavelength of 1310nm over a duplex LC connector. This easy to install and hot pluggable/swapable transceiver is programmed and tested to be fully compatible with the real time analytics and diagnostics functions built into GigaCore and Araneo and compliant with IEEE 802.3ah specification. Its wide temperature range ensures reliable operation in the most diverse applications.

ORDERING INFORMATION	
Product name:	Part numbers:
Luminex 1000Base-LX SFP SMF Transceiver 1310nm, 10km, LC, DMI	LU 90 01126



## 2. TECHNICAL SPECIFICATIONS

### FEATURES

INF-8074 compliant  
 SFF-8472 compliant  
 TAA compliant  
 Duplex LC connector  
 Single Mode Fiber  
 Hot pluggable  
 Remote diagnostics with Araneo  
 Industrial temperature range

### ENVIRONMENTAL

Operating temperature	-40°C to 85°C
Storage temperature	-40°C to 85°C
Humidity	5-85% RH

### CONNECTIVITY

Duplex LC connector

### MAXIMUM BITRATE

1,25Gbps

### REGULATORY COMPLIANCE

ESD to electrical pins	Compatible with MIL-STD-883E Method 3015.4
ESD to LC receptacle	Compatible with IEC 61000-4-3
EMI/EMC	Compatible with FCC Part 15 Subpart B EN55022:2210
Laser Eye Safety	Compatible with FDA21CFR, EN60950-1, EN (IEC) 60825-1,2
RoHS	Compliant with EU RoHS 2.0 directive 2015/863/EU

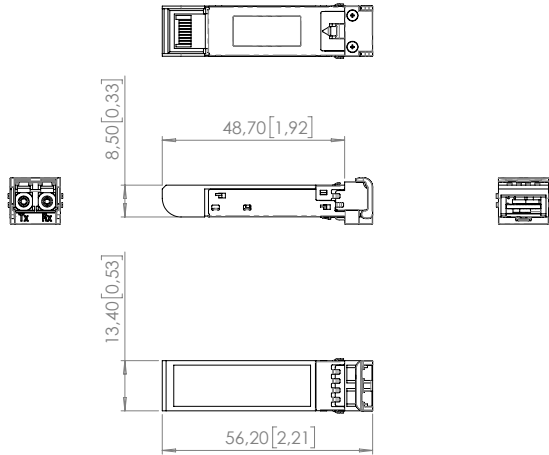
### OPTICAL CHARACTERISTICS

Transmit	Symbol	Min.	Typ.	Max.	Units	Comments
Optical power (avg.)	$P_{AVE}$	-9,5		-3	dBm	Coupled in single mode fiber
Optical wavelength	$T\lambda$	1270	1310	1355	nm	
Receive						
Sensitivity (avg.)	$R_{AVE}$			-24	dBm	Avg power back to back, @1,25Gbps, BER 1E-12, PRBS 2 <sup>31</sup> -1
Receiver wavelength	$R\lambda$	1260		1565	nm	
Receiver overload	$P_{MAX}$	0			dBm	Exceeding receiver overload can damage the module Adequate attenuation is needed

## 2. TECHNICAL SPECIFICATIONS

### MECHANICAL

Compatible with MSA (SFP Multi Sourcing Agreement)



Units: mm [inch]

Dimensions (mm)	56,2 x 13,4 x 8,5
weight (g)	18
Housing material	Metal
Packaged weight (g)	32
Packaged Dimensions(mm)	115x20x45