

# SFP Fiber Optic Transceivers

TMG0850-WM01  
1 Gbps Optical Transceiver Module  
(Transmits at 850 nm)

## FEATURES

- 1 Gbps data throughput
- Transmits at 850 nm over multimode fiber
- Pluggable SFP MSA footprint
- Duplex LC/UPC connectors
- Very low jitter
- Metal enclosure for lower EMI
- 3.3 V power supply with low power dissipation



## PRODUCT OVERVIEW

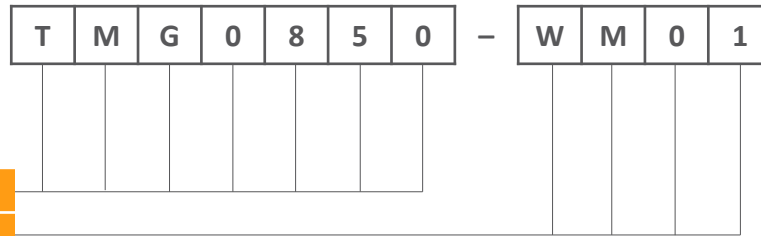
The TMG0850-WM01 Optical Transceiver Modules is intended for indoor use in products such as ARRIS's MC2710B Media Converter to support interconnect applications up to 1 km. Conforming to the Small Form Factor Pluggable (SFP) Multisource Agreement, these state-of-the-art plug-in components are designed for applications that require rates of up to 1.25 Gbps, with the laser transmission portion of the device operating at 850 nm. The modules are supplied with a duplex LC connector.

The TMG0850-WM01 module features a very low jitter contribution, resulting in extremely clean, high-quality eye patterns. And the module's metal enclosure not only makes it sturdier, but also improves its FCC test margins. This emission and ESD control is particularly important in applications with sensitive multiport hubs and switches. The module dissipates less than 0.7 W and the Class 1 laser transmitter complies with applicable safety standards (IEC 60825-1 and 21 CFR 1040.10 and 1040.11).

## SPECIFICATIONS

Characteristics	Specification
<b>Physical</b>	
Dimensions	2.24" L x 0.34" H x 0.56" W (5.7 cm x 0.9 cm x 1.4 cm)
Weight	0.1 lbs (0.05 kg)
<b>Environmental</b>	
Application temperature range	0° to +70°C (32° to +158°F)
Storage temperature range	-40° to +85°C (-40° to +185°F)
Humidity	5% to 95% non-condensing
<b>Optical Interface</b>	
Optical connectors	Duplex LC/UPC
<b>Power requirements</b>	
Input voltage	3.3 V <sub>DC</sub>
Power consumption	< 700 mW
<b>General</b>	
Link loss budget (SFP to SFP)	7.5 dB min
Data rate	1.25 Gbps max
Hot plug-in/out	
<b>Optical</b>	
<b>Transmitter:</b>	
Optical wavelength	850 nm
Output power	-9.5 dBm to -4.0 dBm
Extinction ratio (ER)	9.0 dB min
<b>Receiver:</b>	
Optical wavelength	770 nm to 860 nm
Sensitivity (input power, min)	-17 dBm
Input power, max	-3 dBm
	Warning: Exceeding the specified maximum input power will cause permanent damage to the device
<b>Regulatory</b>	
Class 1 devices per FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1 laser safety regulations	

ORDERING INFORMATION



- 1 Gbps Optical Transceiver Module, 850 nm Tx
- Duplex LC/UPC Connector

RELATED PRODUCTS

Media Converter access products

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## Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

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