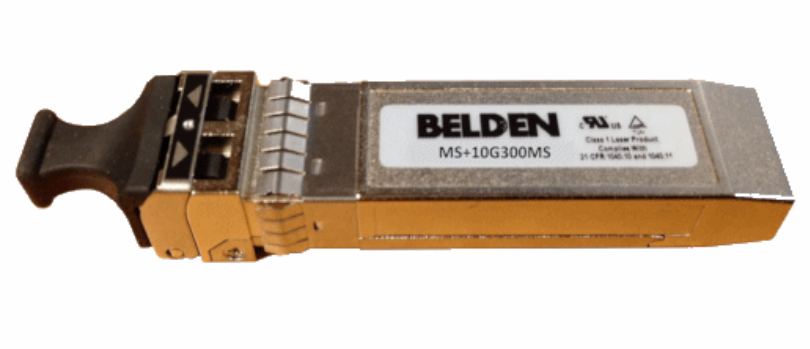
Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

MS+10G300MS Cable Assemblies - 10G SFP+ SR OPTICAL TRANSCEIVER



For more Information
please call

1-800-Belden1

Description

10G SFP+ SR OPTICAL TRANSCEIVER 850nm, LC Duplex Multimode, REACH 300M (OM3), 400M (OM4)

Usage (Overall):

Suitable Applications	Data Centers, Main Equipment Rooms,Telecommunications Rooms, Work Area, 1-10G Ethernet, 1/2/4/8G Fiber Channel, 10G Fiber Channel over Ethernet, SDR, DDR, QDR, FDR-10 Infiniband, Storage Area Networks (SAN), Network Attached Storage (NAS) and High Performance Computing.
Related Parts	Fiber Patch Cord LC Duplex

Physical Characteristics (Connectivity):

Fiber Type:

Fiber Type	MM

Wiring Scheme:

Wiring Scheme	IEEE 802.3ae 10GBASE-SR SFF-8431 and SFF-8472.

Weight:

Weight:	0.037 lbs.

Packaging:

Packaging	Packaged in a clear plastic tray (available in 1 unit tray and 20 units tray).

Mechanical Characteristics (Connectivity):

Storage Temperature Range	-40°C To +85°C
Installation Temperature Range	0°C To +70°C
Operating Temperature Range	0°C To +70°C

Applicable Specifications and Agency Compliance (Overall):

Applicable Standards & Environmental Programs:

EU Directive 2002/95/EC (RoHS)	Yes
EU RoHS Compliance Date (mm/dd/yyyy)	01/01/2006
MII Order #39 (China RoHS)	EUP 50
Safety Listing	Bi-national Standard Listed

Suitability:

Suitability - Indoor	Yes

Transmission Characteristics (Connectivity):

Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
TRANSMETER	-	-	-	-	-	-
OMA output power	OMAtx	-4.300	-	-	dBm	-
Output optical power	-	-7	-3	-1	dBm	-
Laser off power	-	-	-	-30	dBm	-
Extinction ratio	-	3	-	-	dB	-
Transmitter dispersion penalty	TDP	-	-	3.900	dB	-
Center Wavelength	-	840	-	860	nm	-
RMS spectral width	-	-	0.400	0.450	nm	-
Relative intensity noise	RIN	-	-	-128	dB/Hz	-
Optical Return Loss Tolerance	-	-	-	12	dB	-
Encircled Flux	-	-	-	-	-	Compliant with TIA 492AAAC
Transmitter output Eye Mask	-	-	-	-	-	Compliant with SFF-8431
RECEIVER	-	-	-	-	-	-
Receiver sensitivity (OMA)	-	-	-	-11.200	dBm	-
Stressed sensitivity (OMA)	-	-	-	-7.500	dBm	-
Receiver power overload	-	-1	-	-	dBm	-
TX-Fault output voltage-high	-	2.000	-	Vcc	V	-
Reflectance	-	-	-	-12	dB	-
Center Wavelength	-	840	-	860	nm	-
LOS De-Assert Power	LOS_PA	-	-	-12	dBm	-
LOS Assert Power	LOS_PD	-30	-	-	dBm	-
LOS Hysterisis	HYS_LOS	0.500	-	-	dB	-
Vertical eye closure penalty	VECP	3.500	-	-	dB	-

Electrical Characteristics (Overall):

Electrial Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Data rate	-	1.000	10.313	10.520	Gb/s	-
Power supply voltage	Vcc	3.140	3.300	3.460	V	-
Power supply current	Icc	-	75	120	mA	TX+RX
Power consumption	-	-	250	400	mW	TX+RX
Output rise time (20%-80%)	-	28	-	-	ps	-
Output fall time (20%-80%)	-	28	-	-	ps	-
Bit error rate	BER	-	-	1E-15	-	-
Differential data input voltage	-	200	-	800	mVpp	Internal AC coupled
Differential input impedance	-	-	100	-	Ohm	-
TX-Disable input voltage-low	-	0	-	0.800	V	-
TX-Disable input voltage-high	-	2.000	-	Vcc	V	-
TX-Fault output voltage-low	-	0	-	0.800	V	-
TX-Fault output voltage-high	-	2.000	-	Vcc	V	-
Differential data output voltage	-	300	-	800	mV	Internal AC coupled
Differential output impedance	-	-	100	-	Ohm	-
LOS-asserted output voltage-low	-	0	-	0.800	V	-
LOS-deasserted output voltage-high	-	2.000	-	Vcc	V	-
TX Input differential S-parameter	SDD11	-	-	-	-	Compliant SFF-8431
RX Output differential S-parameter	SDD22	-	-	-	-	Compliant SFF-8431

Notes (Overall):

Notes

- All of the above data has been measured at 10.3125Gbps, PRBS 2^31 - 1, NRZ.
- Conformance: IEEE 802.3ae 10GBASE-SR, SFF-8431, SFF-8432, SFF-8461, SFF-8472, EIA-364, EIA-364-1000, Telcordia GR-468, Telcordia GR-63.

Notes (Cont'd.) Class 1 eye safety per requirments of IEC 60825-1 / CDRH

Product Family:

Product List

Belden P/N	Description
MS+10G300MS-S1	SFP+ SR Optical Transceiver (1 unit per tray)
MS+10G300MS-B20	SFP+ SR Optical Transceiver (20 units per tray)

Revision Number: 0 Revision Date: 11-13-2015

MS+10G300MS Cable Assemblies - 10G SFP+ SR OPTICAL TRANSCEIVER

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.
Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.
All sales of Belden products are subject to Belden's standard terms and conditions of sale.
Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.