



OZD Genius G12-1300

Industrial Networking:FiberINTERFACES:Field Bus:Genius Bus Repeaters

Product description	
Description	interface converter electrical/optical for Genius field bus networks; repeater function;
Port type and quantity	for quartz glass FO; approval for Ex-zone 2 (Class 1, Div. 2); long-haul version 2 x optical: 4 sockets BFOC 2.5 (STR) 1 x electrical: 4-pin connector with self-locking mechanism
Type	OZD Genius G12-1300
Order No.	934 233-021
Electrical interface	
Signal type	Geniusbus
Bit rate	38.4; 76.8; 153.6 kbit/s
Signal delay time (optional input/output)	800 ns
Input/output signal	Geniusbus
Genius cable	length: >250 m attenuation at 1 MHz: <8 dB for 150 Ohm cable <5 dB for 100 Ohm cable
Connection capability	max. 32 terminal devices
Terminator	external
Galvanic isolation	shielding in/shielding out: yes; data lines/housing: yes
Optical interface	
Wavelength	1310 nm
Cascadability	not limited
More Interfaces	
Power supply	5-pin terminal block, screw mounting
Signaling contact	5-pin terminal block, screw mounting
Network size - length of cable	
Single mode fiber (SM) 9/125 µm	10000 m 8 dB link budget at 1310 nm; A = 0.5 dB/km, 2 dB reserve
Multimode fiber (MM) 50/125 µm	7000 m 10 dB link budget at 1310 nm; A = 1 dB/km, 3 dB reserve
Multimode fiber (MM) 62.5/125 µm	7000 m 10 dB link budget at 1310 nm; A = 1 dB/km, 3 dB reserve
Multimode fiber HCS (MM) 200/230 µm	-
Power requirements	
Operating voltage	24 VDC (19 ... 35 VDC), non-interchangeable, safety extra-low voltage
Current consumption	130 mA
Power consumption	3.1 W
Redundancy	
Redundancy functions	HIPER-Ring (ring structure), redundant 24 V infeed
Ambient conditions	
Operating temperature	0 °C to +55 °C
Storage/transport temperature	-40 °C to +80 °C
Relative humidity	<95% (non-condensing)
Mechanical construction	
Dimensions (W x H x D)	40 x 111 x 73.5 mm
Mounting	DIN rail or mounting plate
Weight	500 g

Protection class	IP 40
Housing material	die-cast zink
Approvals	
Issued or requested approvals	cUL508, cUL1604 Class1, Div. 2, Groups A,B,C and D; according to directive 94/9/EG (ATEX 95): Ex II 3 G (Zone 2)
Scope of delivery and accessories	
Scope of delivery	device, start-up instructions
Accessories to order separately	manual, order no. 933 989-901