Hirschmann Automation and Control GmbH





SPIDER II Giga 5T/2S EEC

Industrial Networking:Industrial Ethernet:Rail Family:Unmanaged Rail-Switches

Delivery informations	
Availability	available
Document created at	13.11.2008
Product description	
Description	Entry Level Industrial ETHERNET Rail-Switch, store and forward switching mode, 10/100/1000 Mbit/s Ethernet (available from Jan. 2009)
Port type and quantity	5 x 10/100/1000BASE-T, 2 x GE-SFP Slots, TP-cable, RJ45 sockets, auto- crossing, auto-negotiation, auto-polarity
Туре	SPIDER II Giga 5T/2S EEC
Order No.	943 963-002
More Interfaces	
Power supply/signaling contact	1 plug-in terminal block, 3-pin, no signaling contact
Network size - length of cable	
Twisted pair (TP)	0 - 100 m
Multimode fiber (MM) 50/125 µm	0 - 550 m, 0 -7,5 dB link budget at 850 nm (with M-SFP-SX/LC)
Multimode fiber (MM) 62.5/125 µm	0 - 275 m, 0 -7,5 dB link budget at 850 nm (with M-SFP-SX/LC)
Single mode fiber (SM)9/125 µm	0 - 20 km, 0 - 11 dB link budget at 1300 nm (with M-SFP-LX/LC)
Single mode fiber (LH)9/125 µm (long haul transceiver)	16 - 80 km, 6 - 22 dB link budget at 1550 nm (with M-SFP-LH/LC) 44 - 120 km, 15 - 32 dB link budget at 1550 nm (with M-SFP-LH+/LC)
Network size - cascadibility	
Network size - cascadibility Line - / star topology	
Network size - cascadibility Line - / star topology Power requirements	Any
Line - / star topology Power requirements	
Line - / star topology Power requirements Operating voltage	Any
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption	Any DC 9.6 V - 32 V
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics	Any DC 9.6 V - 32 V max. 260 mA
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate)
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate)
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +85 °C
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature Relative humidity (non-condensing)	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +70 °C -40 °C to +85 °C 10% to 95%
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature Relative humidity (non-condensing) MTBF	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +70 °C -40 °C to +85 °C 10% to 95%
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature Relative humidity (non-condensing) MTBF Mechanical construction	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +75 °C 10% to 95% n/a
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature Relative humidity (non-condensing) MTBF Mechanical construction Dimensions (W x H x D)	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +70 °C 10% to 95% n/a 35 mm x 138mm x 121 mm
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature Relative humidity (non-condensing) MTBF Mechanical construction Dimensions (W x H x D) Mounting	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +70 °C 10% to 95% n/a 35 mm x 138mm x 121 mm DIN Rail 35 mm
Line - / star topology Power requirements Operating voltage Current consumption at 24 V DC Power consumption Service Diagnostics Redundancy Redundancy functions Ambient conditions Operating temperature Storage/transport temperature Relative humidity (non-condensing) MTBF Mechanical construction Dimensions (W x H x D) Mounting Weight	Any DC 9.6 V - 32 V max. 260 mA max. 6.6 W 22.5 Btu(IT)/h LEDs (power, link status, data, data rate) n/a -40 °C to +70 °C -40 °C to +70 °C -40 °C to +85 °C 10% to 95% n/a 35 mm x 138mm x 121 mm DIN Rail 35 mm 240 g

IEC 60068-2-6 vibration	3,5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.
EMC interference immunity	
EN 61000-4-2 electrostatic discharge (ESD)	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80 - 1000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (linie/earth), 1 kV (linie/line), 1 kV data line
EN 61000-4-6 conducted immunity	10 V (150 kHz - 80 kHz)
EMC emitted immunity	
FCC CFR47 Part 15	FCC CFR47 Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	
Safety of industrial control equipment	cUL 508 (E175531) pending
EMV regulations for assembly in vehicles	n/a
Hazardous locations	n/a
Employment in vehicles	n/a
Safety of information technology equipment	n/a
Germanischer Lloyd	n/a
Scope of delivery and accessories	
Scope of delivery	Device, terminal block, operating manual
Accessories to order separately	Rail power pupply RPS 30, RPS 80 EEC or RPS 120 EEC, 19" installation frame