



# Product: SPR20-7TX/2FS-EEC Configurator: SPR20-7TX/2FS-EEC

# **Configurator Description**

Reliably transmit large amounts of data across any distance with the SPIDER III family of industrial Ethernet switches. These unmanaged switches have plug-and-play capabilities to allow for quick installation and startup - without any tools - to maximize uptime.

## **Technical Specifications**

## Product description

Mounting

Protection class

DIN rail

IP40 metal housing

DecipionUnmaged, industrial ETHERNET Rail Switch, fances design, store and norward switching mode, USB interfacesProfer and quardy7 1010BASE-TX, TP cable, R445 sockets, auto-crossing, auto-negotation, auto-polarity, 2 x 100BASE-TX, SMI cable, ScienceWorder and Profer1 sub-interfacesProven supplying and comparison1 sub-interfacesNetwordszo-Long Comparison0 sub-interfacesNetwo	Toduct description	
Alore Interfaces           Power supplyisignaling contact         1 x bugs in terminal block, 6-pin           USB Interface         1 x USB for configuration           Network size - length of cable         1 x USB for configuration           Twisted pair (TP)         0 - 100 m           Single mode fiber (SN) 91725 µm         0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dBAm; BLP = 3.5 ps/(nm*m))           Network size - cascadibility         0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dBAm; BLP = 3.5 ps/(nm*m))           Network size - cascadibility         1 x USB for configuration           Network size - cascadibility         1 x USB for configuration           Operating Voltage         any           Operating Voltage         12/24 V DC (0 6 - 32 V DC); redundant           Power consumption at 24 V DC         Max. 280 mA           Operating Voltage         12/24 V DC (0 6 - 32 V DC); redundant           Power consumption         Max. 6 3 W           Power consumption         Max. 6 3 W           Power consumption         Max. 6 3 W           Diagnostic functions         LEDs (power, link status, data, data mato)           Softwaree         Immediate, data mato)           Software         Sol (Poerding 1731.432 h (Teicordia) 731.432 h (Teicordia)           Operating temperature         -40-45 °C	Description	Unmanaged, Industrial ETHERNET Rail Switch, fanless design, store and forward switching mode, USB interface for configuration, Fast Etherne
Power supplysignaling contad         1 x plug-in terminal block, 6-pin           USB Interface         1 x USB for configuration           Idework size - length of cal	Port type and quantity	7 x 10/100BASE-TX, TP cable, RJ45 sockets, auto-crossing, auto-negotiation, auto-polarity , 2 x 100BASE-FX, SM cable, SC sockets
USB interface         1 x USB for configuration           Letwork size - length of cable         0 - 100 m           Twisted pair (TP)         0 - 100 m           0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dB/km; BLP = 3.5 pa(nm*km))         Note that the second sec	Nore Interfaces	
Vetwork size - length of cable           Twisted pair (TF)         0 - 100 m           Single mode fiber (SM) 9/125 µm         0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dB/km; BL P = 3.5 pa/(nm*km))           Vetwork size - cascadibility         Ime - 1 data topology         any           Vetwork size - cascadibility         Ime - 1 data topology         any           Current consumption at 24 V DC         Max. 280 mA         Max. 280 mA           Operating Voltage         12/24 V DC (9.6 - 32 V DC); redundant         Max. 6.9 W           Power output in BTU (TT)/n         23.7         Any           Diagnostic functions         LEDs (power, link status, data, data rate)         Max. 6.9 W           Software         Ime - 1 data topology         Ime - 1 data topology         Ime - 1 data trate)           Software         Impressions (Not Hong)         Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802: 1D/p)         Max. 6.9 W           MTBF         85.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature         40-465 °C           Storage/transport temperature         40-465 °C         Storage/transport temperature         40-465 °C           Relative humidity (non-condensing)         10 - 95 %         10 - 95 %         Storage/transport temperature         40-465 °C           Miterian Struction         Storage	Power supply/signaling contact	1 x plug-in terminal block, 6-pin
Twisted pair (TP)         0 - 100 m           Single mode fiber (SM) 9/125 µm         0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dB/km; BLP = 3.5 ps/(nm*km))           Network size - cascadibility         any           Power requirements         any           Ouerating Voltage         Max. 280 mA           Operating Voltage         12/24 V DC (9.6 - 32 V DC), redundant           Power onsumption at 24 V DC         Max. 6.9 W           Power onsumption         Max. 6.9 W           Power output in BTU (T)/h         23.7           Diagnostic functions         LEDs (power, link status, data data rate)           Software         LEDs (power, link status, data, data rate)           Software         Sole (Telcordia) 731.432 h (Telcordia)           Operating temperature         40-465 °C           Storage Itemperature         40-465 °C           Storage Itemperature         40-465 °C           Relative humidity (non-condensing)         10 -95 %           Wechanical construction         10 -95 %	USB interface	1 x USB for configuration
Single mode fiber (SM) 9/125 µm         0.30 km (Link Budget at 1300 nm = 0.16 db; A = 0.4 dB/km; BLP = 3.5 ps/(nm*km))           Vetwork size - cascadibility         any           Power requirements         any           Current consumption at 24 VDC         Max. 280 mA           Operating Voltage         12/24 VD C(9.6-32 VDC), redundant           Power output in BTU (TT)h         23.7           Diagnostic features         V           Software         Ebs (power, link status, data, data rate)           Software         Vether (Interstation (B02.1D/p)           MTBF         82.056 h (Telordia) 731.432 h (Telordia)           Operating temperature         40-465 °C           Softage temperature         40-465 °C           Relative hundidit (non-condensing)         10 = 55 %           Vetchanical construction         56 % 135 x 117 mm (w/o terminal block)	Network size - length of ca	ble
Vetwork size - cascadibility           Line - / star topology         ary           Power requirements         Image: Comparis (Comparis (Compa	Twisted pair (TP)	0 - 100 m
Line - / star topology         any           Power requirements         Amx. 280 mA           Current consumption at 24 V DC         Max. 280 mA           Operating Voltage         12/24 V DC (9.6 - 32 V DC), redundant           Power consumption         Max. 6.9 W           Power output in BTU (TT)/h         23.7           Diagnostics features         EDS (power, link status, data, data rate)           Software         LEDs (power, link status, data, data rate)           Software         Software           Stricting         Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)           Ambient conditions         852.056 h (Telcordia) 731.432 h (Telcordia)           Operating temperature         -40-465 °C           Storage/transport temperature         40-465 °C           Vechanical construction         56 % 32.55 h (Telcordia) 731.432 h (Telcordia)	Single mode fiber (SM) 9/125 µm	0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dB/km; BLP = 3.5 ps/(nm*km))
Power requirements           Current consumption at 24 VDC         Max. 280 mA           Operating Voltage         12/24 VDC (9.6 - 32 VDC), redundant           Power consumption         Max. 6.9 W           Power output in BTU (IT)/h         23.7           Diagnostics features         EDs (power, link status, data, data rate)           Software         LEDs (power, link status, data, data rate)           Software         status Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)           Ambient conditions         status Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)           MTBF         852.056 h (Telcordia) 731.432 h (Telcordia)           Operating temperature         -40-465 °C           Storage/transport temperature         40-455 °C           Relative humidity (non-condensing)         10.95 %           Dimensions (WxHxD)         56 x 135 x 117 mm (w/o terminal block)	Network size - cascadibility	y
Current consumption at 24 V DC     Max. 280 mA       Operating Voltage     12/24 V DC (9.6 - 32 V DC), redundant       Power consumption     Max. 6.9 W       Power output in BTU (17)/h     23.7       Diagnostics features     Diagnostic functions       LEDs (power, link status, data, data rate)     EEDs (power, link status, data, data rate)       Software     switching       MTBF     852.056 h (Telcordia) 731.432 h (Telcordia)       Operating temperature     -40-465 °C       Storage/transport temperature     -40-485 °C       Relative humidity (non-condensing)     10 - 95 %       Mtechanical construction     56x 135 x 117 mm (w/o terminal block)	Line - / star topology	any
Operating Voltage       12/24 V DC (9.6 - 32 V DC), redundant         Power consumption       Max. 6.9 W         Power output in BTU (IT/h)       3.7         Diagnostics features       E         Diagnostic features       LEDs (power, link status, data, data rate)         Software       Ingress Storm Protection Jumbo Frames Qos / Port Prioritization (802.1D/p)         Ambient conditions       85.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature       40-465 °C         Rotage/transport temperature       10.95 %         Relative humidity (non-condensing)       0.95 %         Dumensions (WxHAD)       Sat 117 mm (w/o terminal block)	Power requirements	
Power consumption         Max. 6.9 W           Power output in BTU (IT)/h         3.7           Diagnostics features         Diagnostics features           Diagnostic functions         LEDs (power, link status, data, data rate)           Software         Software           Switching         Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)           Ambient conditions         \$2.056 h (Telcordia) 731.432 h (Telcordia)           Operating temperature         40-465 °C           Rotage/transport temperature         40-465 °C           Relative humidity (non-condensing)         10-95 %           Mechanical construction         56 x 135 x 117 mm (w/o terminal block)	Current consumption at 24 V DC	Max. 280 mA
Power output in BTU (ITy)h       23.7         Diagnostics features       EDs (power, link status, data, data rate)         Diagnostic functions       LEDs (power, link status, data, data rate)         Software       Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)         Ambient conditions       Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)         MTBF       852.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature       40-465 °C         Storage/transport temperature       40-465 °C         Intersection       10-95 %         Acchanical construction       56 x 135 x 117 mm (w/o terminal block)	Operating Voltage	12/24 V DC (9.6 - 32 V DC), redundant
Diagnostics features           Diagnostic functions         LEDs (power, link status, data, data rate)           Software         Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)           Ambient conditions         Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)           MTBF         852.056 h (Telcordia) 731.432 h (Telcordia)           Operating temperature         40-465 °C           Storage/transport temperature         40-455 °C           Relative humidity (non-condensing)         10 - 95 %           Mtechanical construction         56 x 135 x 117 mm (w/o terminal block)	Power consumption	Max. 6.9 W
Diagnostic functions       LEDs (power, link status, data, rate)         Software       Improve Status         Switching       Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)         Ambient conditions       Improve Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)         MTBF       852.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature       40-465 °C         Storage/transport temperature       40-485 °C         Relative humidity (non-condensing)       10 - 95 %         Mtechanical construction       56 x 135 x 117 mm (w/o terminal block)	Power output in BTU (IT)/h	23.7
Software       Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)         Ambient conditions       Sec.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature       40-+65 °C         Storage/transport temperature       -40-+85 °C         Relative humidity (non-condensing)       10 - 95 %         Mechanical construction       56 x 135 x 117 mm (w/o terminal block)	Diagnostics features	
Switching       Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)         Ambient conditions       Ambient Conditions         MTBF       852.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature       -40-+65 °C         Storage/transport temperature       -40-+85 °C         Relative humidity (non-condensing)       10 - 95 %         Mtechanical construction       Storage 117 mm (w/o terminal block)	Diagnostic functions	LEDs (power, link status, data, data rate)
Ambient conditions         MTBF       852.056 h (Telcordia) 731.432 h (Telcordia)         Operating temperature       -40+65 °C         Storage/transport temperature       -40+85 °C         Relative humidity (non-condensing)       10 - 95 %         Mechanical construction       56 x 135 x 117 mm (w/o terminal block)	Software	
MTBF     852.056 h (Telcordia) 731.432 h (Telcordia)       Operating temperature     -40-+65 °C       Storage/transport temperature     -40-+85 °C       Relative humidity (non-condensing)     10 - 95 %       Vechanical construction       Dimensions (WXHxD)     56 x 135 x 117 mm (w/o terminal block)	Switching	Ingress Storm Protection Jumbo Frames QoS / Port Prioritization (802.1D/p)
Operating temperature     -40-+65 °C       Storage/transport temperature     -40-+85 °C       Relative humidity (non-condensing)     10 - 95 %       Mechanical construction       Dimensions (WxHxD)     56 x 135 x 117 mm (w/o terminal block)	Ambient conditions	
Storage/transport temperature     -40-+85 °C       Relative humidity (non-condensing)     10 - 95 %       Acchanical construction     Joint Struction       Dimensions (WxHxD)     56 x 135 x 117 mm (w/o terminal block)	MTBF	852.056 h (Telcordia) 731.432 h (Telcordia)
Relative humidity (non-condensing)       10 - 95 %         Aechanical construction         Dimensions (WxHxD)       56 x 135 x 117 mm (w/o terminal block)	Operating temperature	-40-+65 °C
Mechanical construction         Dimensions (WxHxD)       56 x 135 x 117 mm (w/o terminal block)	Storage/transport temperature	-40-+85 °C
Dimensions (WxHxD) 56 x 135 x 117 mm (w/o terminal block)	Relative humidity (non-condensing)	10 - 95 %
	Mechanical construction	
Weight 510 g	Dimensions (WxHxD)	56 x 135 x 117 mm (w/o terminal block)
	Weight	510 g

#### **Mechanical stability**

IEC 60068-2-6 vibration	3.5 mm, 5–8.4 Hz, 10 cycles, 1 octave/min 1 g, 8.4–150 Hz, 10 cycles, 1 octave/min
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks

### **EMC emitted immunity**

EN 55022	EN 55032 Class A
FCC CFR47 Part 15	FCC 47CFR Part 15, Class A
Approvals	

# Basis Standard CE, FCC, EN61131 Safety of industrial control equipment cUL 61010-1/61010-2-201

### Reliability

### Scope of delivery and accessories

Accessories	Rail Power Supply RPS 30/80 EEC/120 EEC (CC), Wall mounting plate for DIN rail mounting (width 40/70 mm)
Scope of delivery	Device, terminal block, safety instruction

### **Further Instructions**

Product Documentation	https://www.doc.hirschmann.com/index.html
Certificates	https://www.doc.hirschmann.com/certificates.html

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