Industrial Device Server RS-422/485 to 100BASE-FX

SDSFE321x-110



Input

Enviro

Shipp

Comp

Warra

Transition Networks's Industrial Device Servers provide a serial-to-Ethernet conversion to enable customers to integrate any legacy serial-based device into their Ethernet networks located in either the office environment or on the factory floor.

These hardened devices are designed to reliably operate in harsh environments and/or extreme temperatures such as those found on factory floors, outdoor enclosures or other hazardous environments.

Network-enable serial based devices quickly and cost-effectively with these hardened industrial serial-to-Ethernet device servers. The device server can connect to RS-422 or RS-485 serial ports and provides a 100Base-FX Fast Ethernet fiber optic connection for links up to 80km.

Device servers can also help eliminate EMI and RFI issues or overcome distance limitations with copper based serial cabling by converting your copper-based serial equipment over to fiber optics.

Features

Remote Management

Supports asynchronous serial data rates up to 115kb/s

Supports 4-wire RS-422 or 2/4-wire **RS485** operation

Control up to 4,096 virtual COM ports from one PC

Extended (0°C to 70°C) operating temperature

Redundant DC Power Inputs

Dry Contact Relay output for power failure and link down

DIN rail mounting brackets included

Up to 2 km multimode Fast Ethernet Switch or 20 km single mode stria ledia Converter Industrial Device Server Robot PLC with RS-485 serial interface Industrial Motors / Drives Robot I/O Devices

5

Standards		A RS-422, Std. 802.3™		RS-485,		Sta
Data Rate		: 115 kb/s 100Mb/s	;			
Fiber Optic Conne	ctor Spece	S				1
SKU	Min TX PWR (dBm)	Max TX PWR (dBm)	RX Sens (dBm)	Max In PWR (dBm)	Link Budget (dB)	
SDSFE3211-110	-19.0	-14.0	-31.0	-14.0	12.0	
	40.0	110	-31.0	-14.0	12.0	
SDSFE3213-110	-19.0	-14.0	-31.0	-14.0	12.0	
SDSFE3213-110 SDSFE3214-110	-19.0	-14.0	-30.0	-14.0	15.0	
						Dii

)rivers	Windows 95, 98, ME, 2000, 2003, XP, NT 4.0 Microsoft NT/2000/2003 Terminal Server
witches	Switch 1: Primary power alarm on/off Switch 2: Redundant power alarm on/off Switch 3: Fiber port alarm on/off Switch 7: 2-wire 485 or 4-wire 422/485 Switch 8: Termination resistor on/off

s LEDs	PWR (Power): ON = primary power connected RPS (Power): ON = backup power connected ALM: ON = fault on port link or loss of PWR or RPS 100 (fiber): ON = link on fiber 100Mb/s LNK/ACT (fiber): ON = fiber link / activity POST: ON = Power On Self Test successful; FLASHING = performing POST ACT (copper): ON = Serial link / activity
nsions	Width: 2.0" [50 mm] Depth: 3.9" [100 mm] Height: 4.7" [120 mm]
ss Protection	IP 30
Power	9 to 48 VDC; 1.0A; redundant inputs
onment	0 to +70°C standard operating temperature; 5% - 90% humidity non-condensing; 0 - 10,000 ft. altitude
ing Weight	2 lbs. [0.90 kg]
liance	CISPR22/EN55022 Class A + EN55024; EN60950 Class A; FCC Class A; CE Mark
inty	Lifetime

Ordering Info

to 1300nm multimode (ST)

to 1300nm multimode (SC)

to 1310nm single mode (SC)

to 1550nm single mode (SC)

Terminal Block [1.2 km / 0.7 miles]

[2 km/1.2 mi.] Link Budget: 12.0 dB

Terminal Block [1.2 km / 0.7 miles]

[2 km/1.2 mi.] Link Budget: 12.0 dB

Terminal Block [1.2 km / 0.7 miles]

Terminal Block [1.2 km / 0.7 miles] 1310nm single mode (SC)

Terminal Block [1.2 km / 0.7 miles]

[80 km/49.7 mi.] Link Budget: 34.0 dB

[40 km/24.9 mi.] Link Budget: 19.0 dB

[20 km/12.4 mi.] Link Budget: 15.0 dB

SDSFE3211-110

SDSFE3213-110

SDSFE3214-110

SDSFE3215-110

SDSFE3217-110

to

See next page for EMS and Environmental test ratings.



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Network Enable Serial Devices in Industrial Applications

Test	Description		Test Levels	Severity Leve
IEC61000-4-2	ESD	Air Discharge	+/- 8KV	3
		Contact Discharge	+/- 6KV	3
		ESD Contact Indirect	+/- 6KV	3
IEC61000-4-3	Radiated RFI	Housing	10V/m, 80 MHz – 1 GHz	3
			AM 1 KHz, 80% modulation	
			10V/m, 0.9 – 1.8 GHz	
			FM 200 Hz, 50% modulation	
IEC61000-4-4	Burst	PWR Supply Lines	+/- 2KV	3
	(Fast Transient)	Communication Lines	+/- 1KV	3
		Relay	+/- 1KV	3
IEC61000-4-5	Surge	PWR Supply Lines	+/- 2KV, 12 ohm, CM +/- 1KV, 2 ohm, DM	3
		Relay	+/- 2KV, 12 ohm, CM +/- 1KV, 2 ohm, DM	3
IEC61000-4-6	Induced	PWR Supply Lines	10 Vrms, 150 KHz – 80 MHz	3
	(Conducted RFI)		AM 1 KHz, 80% modulation	
		Communication Lines	10 Vrms, 150 KHz – 80 MHz	3
			AM 1 KHz, 80% modulation	
		Relay	10 Vrms, 150 KHz – 80 MHz	3
			AM 1 KHz, 80% modulation	

Environmental Type Tests

Test	Description	Test Levels
IEC60068-2-6	Vibration	10 – 500 – 10 HZ, 0.5 oct./min, 4g, X, Y, Z (3 axes)
IEC60068-2-27	Shock	50 g, 11ms, 4g, +/- X, +/- Y, +/- Z (6 direction)
IEC60068-2-32	Free Fall	75 cm, 1 corner, 3 edges, 6 faces (total 10 drops)



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