

Interface converters - FL COMSERVER PRO 232/422/485 - 2313465

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Second generation FL COMSERVER PRO... (PROGRAMMABLE), freely programmable in BASIC programming language, for creation of custom solutions to implement a serial RS-232/422/485 interface on the Ethernet. Incl. examples, additional software, and user documentation

Why buy this product

- ✓ Configuration via web-based management
- ✓ All connections can be plugged in using a COMBICON screw terminal block
- ✓ Free programmable in BASIC programming language
- ✓ Creation of own visualization on web server
- ✓ Software for virtual COM ports supplied as standard



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 451338
GTIN	4046356451338

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	22.5 mm
Height	99 mm
Depth	116 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
	-20 °C ... 60 °C (With UL approval)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)

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Ambient conditions

Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20
Noise immunity	EN 61000-6-2:2005

General

Electrical isolation	DIN EN 50178 (VCC // Ethernet // Serial)
Test voltage data interface/data interface	1.5 kV _{rms} (50 Hz, 1 min.)
Test voltage data interface/power supply	1.5 kV _{rms}
	1.5 kV _{rms} (50 Hz, 1 min.)
Standards/regulations	EN 50121-4
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 61000-6-4
Net weight	194.4 g
Housing material	PA 6.6-FR
Color	green
MTBF	666 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	179 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X (Please follow the special installation instructions in the documentation!)
UL, USA	Class I, Zone 2, AEx nA IIC T5
UL, USA/Canada	508 Listed
	Class I, Div. 2, Groups A, B, C, D
UL, Canada	Class I, zone 2, Ex nA IIC T5 Gc X

Power supply

Nominal supply voltage	24 V AC/DC ±20 % (via pluggable COMBICON screw terminal block)
	24 V DC ±5 % (as an alternative or redundant, via backplane bus contact and system current supply)
Supply voltage range	19.2 V AC/DC ... 28.8 V AC/DC (via pluggable COMBICON screw terminal block)
	22.8 V DC ... 25.2 V DC (as an alternative or redundant, via backplane bus contact and system current supply)
Typical current consumption	100 mA (24 V DC)

Serial interface

Interface 1	Ethernet interface, 10/100Base-T(X) in acc. with IEEE 802.3u
Interface	Ethernet
No. of ports	1
Connection method	RJ45 socket, shielded
Transmission length	≤ 100 m (shielded twisted pair)

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Serial interface

Protocols supported	TCP/IP, UDP
Auxiliary protocols	ARP, DHCP, BOOTP, SNMP, RIP, RARP, HTTP, TFTP
Serial transmission speed	10/100 Mbps, auto negotiation
Interface 2	V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1
Interface	RS-232
Connection method	D-SUB 9 plug
File format/coding	UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity
Pin assignment	DTE/DCE switchover via web-based management
Data flow control/protocols	Software handshake, Xon/Xoff or hardware handshake RTS/CTS
Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 38.4; 57.6; 115.2; 187.5; 230.4 kbps
Interface 3	RS-422 interface in acc. with ITU-T V.11, EIA/TIA-422, DIN 66348-1
Interface	RS-422
Connection method	Plug-in/screw connection via COMBICON
File format/coding	UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity
Transmission length	≤ 1200 m
Termination resistor	390 Ω (configurable)
	180 Ω
	390 Ω
Data flow control/protocols	Automatic control
Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 38.4; 57.6; 115.2; 187.5; 230.4; 500; 1000 kbps
Interface 4	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
Interface	RS-485
Connection method	Plug-in/screw connection via COMBICON
File format/coding	UART/NRZ: 7/8 Bit Data, 1/2 Bit Stopp, None/Even/Odd Parity
Termination resistor	390 Ω (configurable)
	180 Ω
	390 Ω (configurable)
Data flow control/protocols	Automatic control
Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 38.4; 57.6; 115.2; 187.5; 230.4; 500; 1000 kbps

Function

Web-based management	yes
Management	Web-based management, SNMP, serial emergency access
Status and diagnostic indicators	LEDs: UL (logic voltage), TD + RD (data activity serial), FD (full duplex), 100 (100 Mbps mode), Link (Ethernet), Activity (Ethernet), ERR (error)

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m

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Standards and Regulations

Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
Test result	5g, 10...150 Hz, 2.5 h, in XYZ direction
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	15g, 11 ms period, half-sine shock pulse
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	30g, 11 ms period, half-sine shock pulse
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2:2005
Free from substances that could impair the application of coating	according to P-VW 3.10.7 57 65 0 VW-AUDI-Seat central standard
Standards/regulations	EN 50121-4
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA	Class I, Zone 2, AEx nA IIC T5
UL, USA/Canada	508 Listed
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UL, Canada	Class I, zone 2, Ex nA IIC T5 Gc X
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A

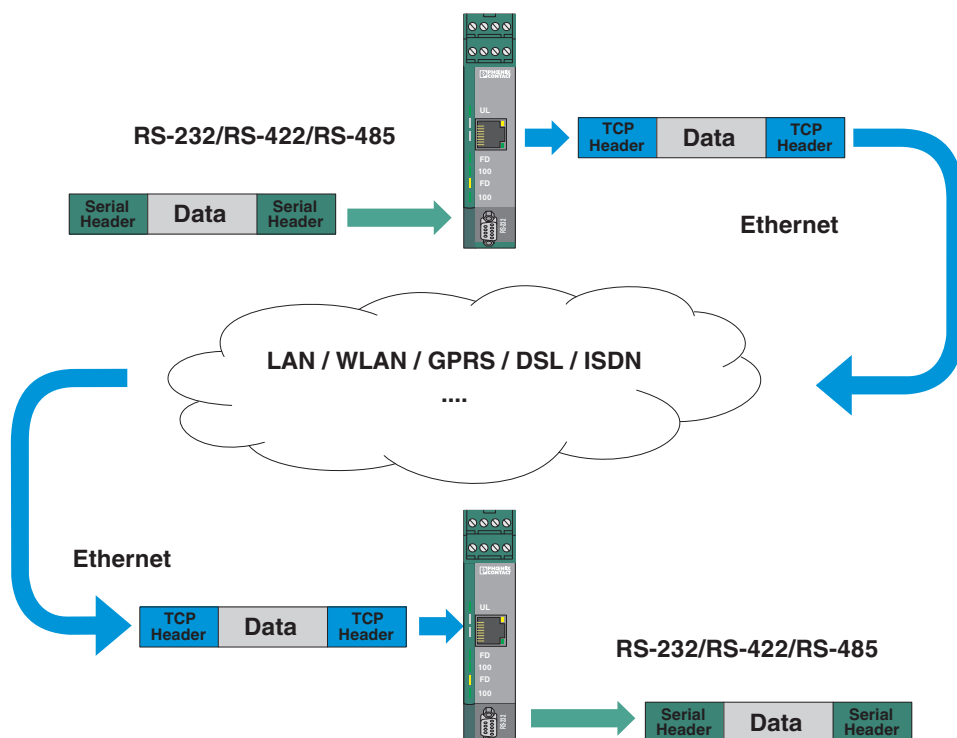
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

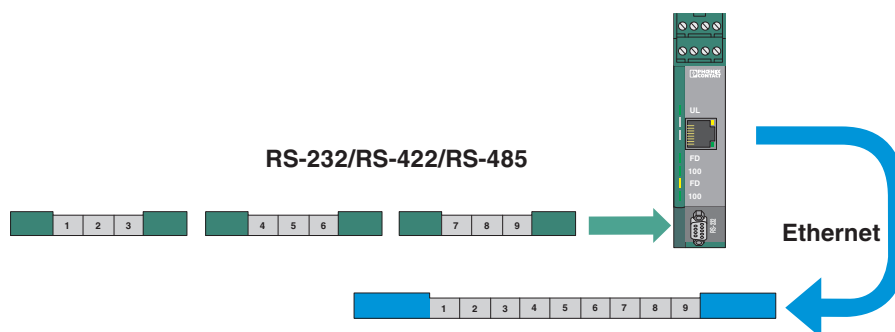
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Application drawing



Serial data transmission via Ethernet

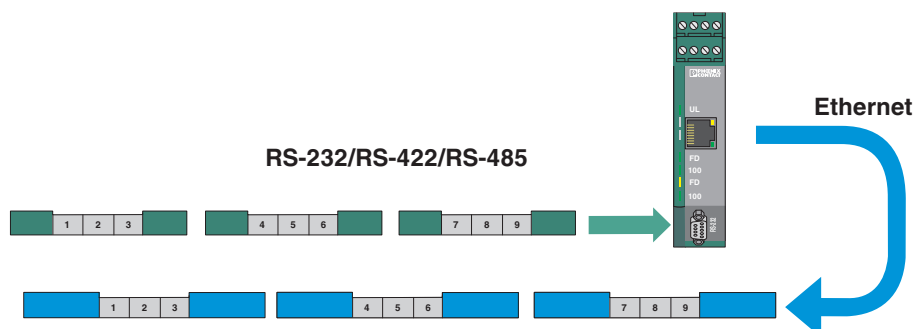
Application drawing



Large value: "Idle Force Timeout Characters"

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Application drawing



Small value: "Idle Force Timeout Characters"

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

UL Listed / cUL Listed / ATEX / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
EAC			EAC-Zulassung
cULus Listed			

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