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Interface converters - FL COMSERVER UNI 232/422/485 - 2313452

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Second generation FL COMSERVER UNI..., serial device server for converting a serial 232/422/485 interface to Ethernet, supports TCP, UDP, Modbus gateway, and PPP applications, incl. COM port redirector software and user documentation

Why buy this product

- Modbus gateway between ModbusRTU/ASCII and ModbusTCP
- All connections can be plugged in using a COMBICON screw terminal block
- Configuration via web-based management
- Software for virtual COM ports supplied as standard



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 451321

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)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)

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Technical data

Ambient conditions

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 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016)
Noise emission	EN 61000-6-4
Net weight	180.3 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))
MTTF	2013 Years (SN 29500 standard, temperature 25°C, operating cycle 21 % (5 days a week, 8 hours a day))
	879 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))
	359 Years (SN 29500 standard, temperature 40°C, operating cycle 100 % (7 days a week, 24 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

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
Connection method	RJ45 socket, shielded
Transmission length	≤ 100 m (shielded twisted pair)

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Technical data

Serial interface

Protocols supported	TCP/IP, UDP, Modbus (TCP, RTU/ASCII), PPP
Auxiliary protocols	ARP, DHCP, BOOTP, SNMP, RIP, RARP, HTTP, TFTP
Data flow control/protocols	Modbus/TCP
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
Transmission length	15 m
Pin assignment	DTE/DCE switchover via web-based management
Data flow control/protocols	Software handshake, Xon/Xoff, or hardware handshake RTS/CTS // 3964 R compatible, Modbus RTU/ASCII
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	Serial asynchronous UART/NRZ, 7/8 data, 1/2 stop, 1 parity, 10/11-bit character length
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	Serial asynchronous UART/NRZ, 7/8 data, 1/2 stop, 1 parity, 10/11-bit character length
Termination resistor	390 Ω
	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

Management	Web-based management, SNMP, emergency exit with Telnet and serial
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

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Technical data

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016)
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m
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
	Class I, Div. 2, Groups A, B, C, D
UL, Canada	Class I, zone 2, Ex nA IIC T5 Gc X

Classifications

eCl@ss

eCl@ss 4.0	27250504
eCl@ss 4.1	27250504
eCl@ss 5.0	27250504
eCl@ss 5.1	27250504
eCl@ss 6.0	27250504
eCl@ss 7.0	27250504
eCl@ss 8.0	19179290

ETIM

ETIM 2.0	EC000310
ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC000310

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008

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Classifications

UNSPSC

UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

Approvals

Approvals

Approvals


UL Listed / cUL Listed / EAC / EAC / KC / cULus Listed


Ex Approvals

ATEX / UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details


UL Listed 

cUL Listed 

EAC

EAC

KC

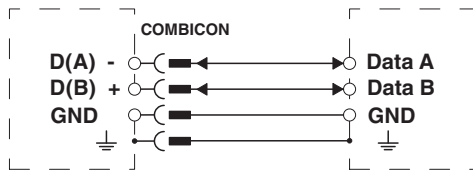
cULus Listed 

Drawings

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Connection diagram

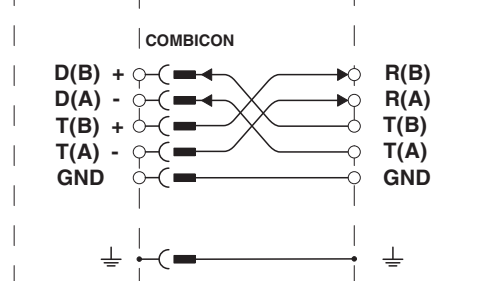
FL COMSERVER RS-485



RS-485 connection

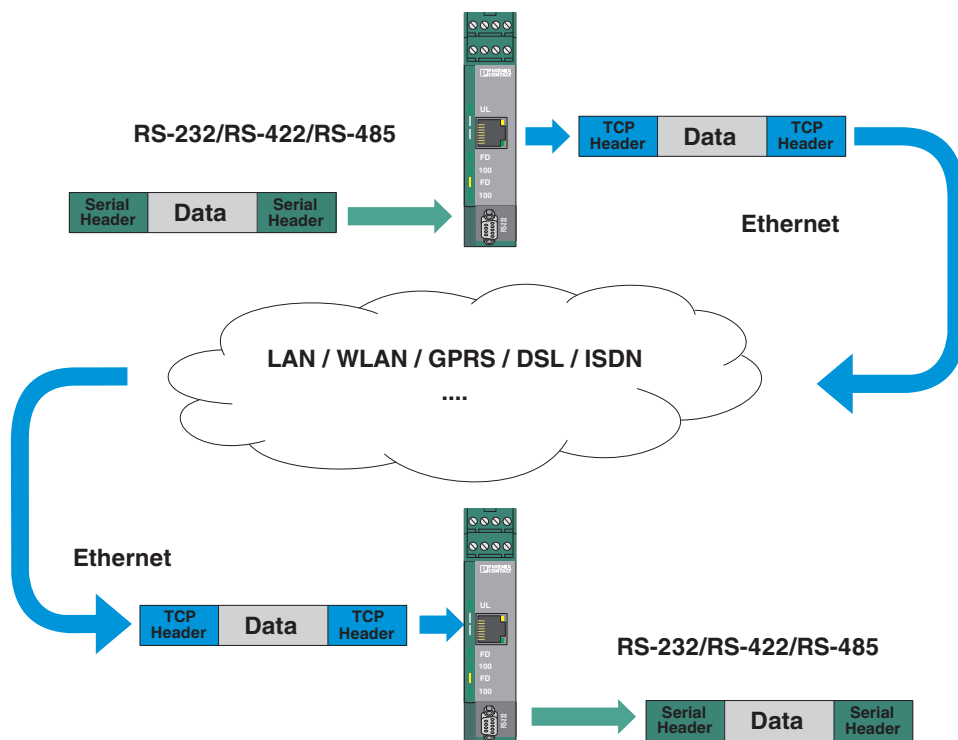
Connection diagram

FL COMSERVER RS-422



RS-422 connection

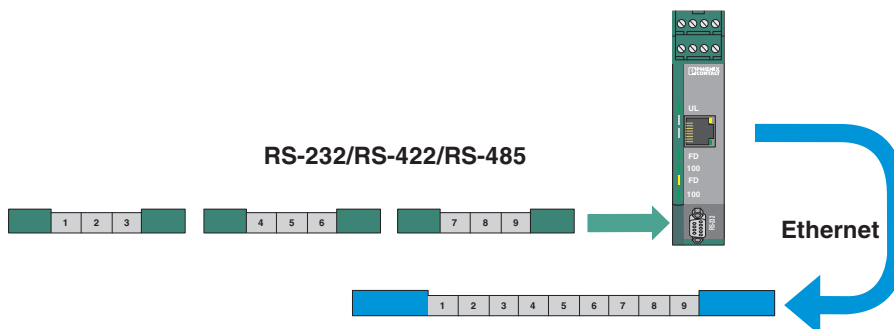
Application drawing



Serial data transmission via Ethernet

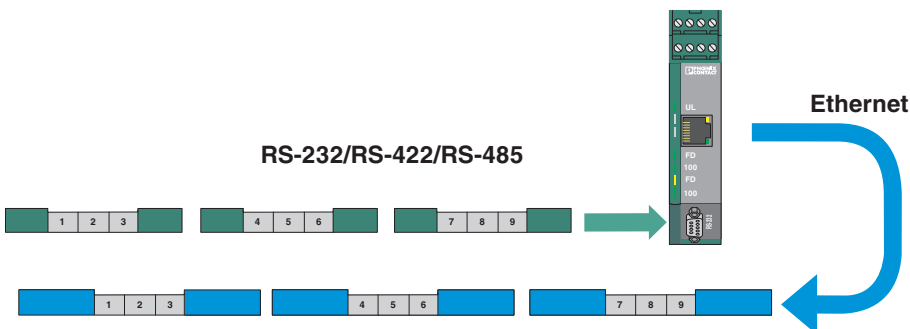
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Application drawing



Large value: "Idle Force Timeout Characters"

Application drawing



Small value: "Idle Force Timeout Characters"

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Product	Code	Reference	Product link
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