GW MODBUS TCP/RTU 1E/2DB9 - Interface converters

2702765

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The GW MODBUS TCP/RTU... gateway converts serial based Modbus RTU (or ASCII) to Modbus TCP. Supports serial client or server devices. Includes one RJ45 port and two D-SUB 9 ports.

Commercial data

Item number	2702765
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN09
Product key	DNC323
Catalog page	Page 355 (C-6-2019)
GTIN	4055626339320
Weight per piece (including packing)	180 g
Weight per piece (excluding packing)	179.4 g
Customs tariff number	85176200
Country of origin	US

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Technical data

Notes

Note on application

Note on application	Only for industrial use

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area

Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.

Product properties

Product type	Interface converter
MTBF	69.4 Years (Telcordia standard, 25°C temperature, 50% stress, Environmental Factor = 1.0)
	46.3 Years (Telcordia standard, 40°C temperature, 50% stress, environmental factor = 1.0)

Data management status

Article revision	05

System properties

Modbus/TCP-Client

Number of Modbus/TCP clients	96

Electrical properties

Electrical isolation	IEC UL 61010-1 (VCC // Ethernet)
Test voltage data interface/data interface	1.5 kV_{rms} (50 Hz, 1 min.)
Test voltage data interface/power supply	1.5 kV_{rms} (50 Hz, 1 min.)
	1.5 kV_{rms}

Supply

Supply voltage range	10.8 V DC ... 30 V DC (via pluggable COMBICON screw terminal block)
Typical current consumption	76 mA (24 V DC)
Max. current consumption	85 mA (24 V DC)

Function

Management	Web-based management
Status and diagnostic indicators	LEDs: Status, ACT/LNK (Ethernet data traffic)

Connection data

Supply

Conductor cross section, flexible	0.20 mm² ... 2.50 mm²

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Conductor cross section AWG	24 ... 12
Tightening torque	0.5 Nm ... 0.6 Nm

Interfaces

Signal	Ethernet
	Modbus
Web server	yes

Data: Modbus/TCP

Serial transmission speed	10/100 Mbps, auto negotiation
Connection method	RJ45 jack, shielded
No. of channels	1
Transmission length	≤ 100 m (shielded twisted pair)
Protocols supported	Modbus/RTU, Modbus ASCII, Modbus/TCP
Auxiliary protocols	ARP, DHCP (Client), PING

Data: Modbus RTU / ASCII

Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6; 115.2; 230.4 Kbps
Number of connections	2
Connection method	D-SUB 9 plug
Pin assignment	DTE
Transmission length	15 m
File format/coding	5/6/7/8 Data bits, 1/2 Stop bits, None/Even/Odd/Mark/Space Parity
Data flow control/protocols	Software handshake, Xon/Xoff or hardware handshake RTS/CTS

Data: Modbus RTU / ASCII

Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6; 115.2; 230.4 Kbps
Number of connections	2
Connection method	D-SUB 9 plug
Pin assignment	2, 3, 5, 7, 8
Transmission length	≤ 1200 m
Termination resistor	120 Ω (configurable)
File format/coding	5/6/7/8 Data bits, 1/2 Stop bits, None/Even/Odd/Mark/Space Parity

Data: Modbus RTU / ASCII

Serial transmission speed	0.3; 0.6; 1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6; 115.2; 230.4 Kbps
Number of connections	2
Connection method	D-SUB 9 plug
Pin assignment	3, 5, 7
Termination resistor	120 Ω (configurable)
File format/coding	5/6/7/8 Data bits, 1/2 Stop bits, None/Even/Odd/Mark/Space Parity

Dimensions

Width	22.5 mm

Height	99 mm
Depth	115 mm

Material specifications

Color	gray
Housing material	PA 6.6

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	< 2000 m
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

Approvals

Conformity/Approvals

Conformance	CE-compliant
UL, USA	UL 61010-1
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D T4A
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A

Ex data

ATEX	DEMKO 18ATEX 2026X: II 3 G Ex ec IIC T4 Gc
IECEx	IECEx UL 18.0023X Ex ec IIC T4 Gc

EMC data

Noise immunity	EN 61000-6-2:2005
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 61000-6-4

Standards and regulations

Standards/regulations	EN 55022, EN 55024

Mounting

Mounting type	DIN rail mounting

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Drawings

Block diagram
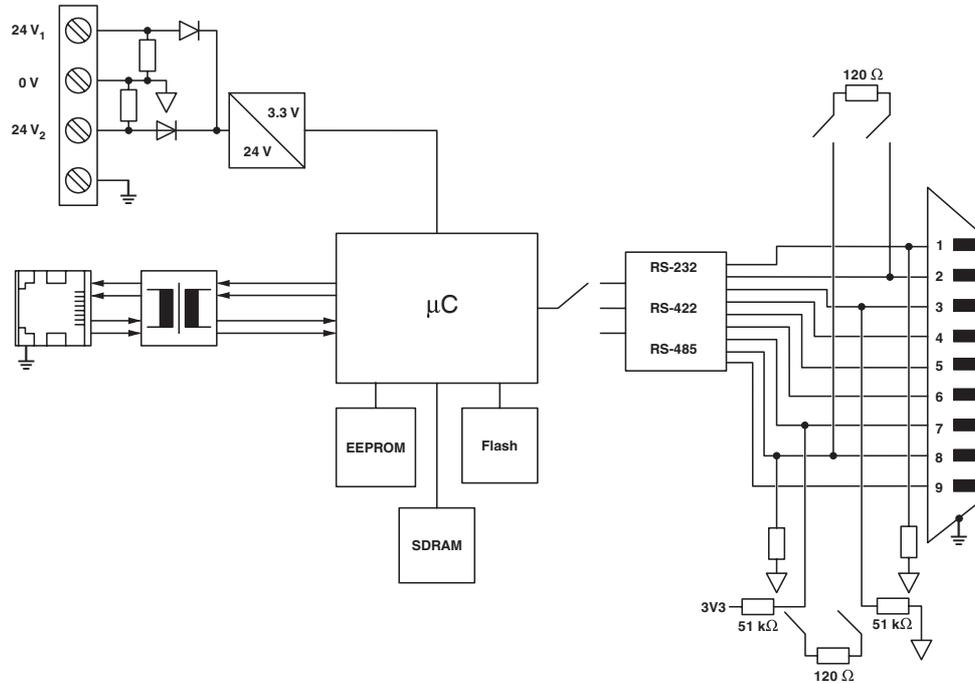
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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2702765

UL Listed
Approval ID: E238705

cUL Listed
Approval ID: E238705

IECEx
Approval ID: IECEx UL 18.0023X

cUL Listed
Approval ID: E196811

UL Listed
Approval ID: E196811

ATEX
Approval ID: DEMKO 18 ATEX 2026X

cULus Listed

cULus Listed

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Classifications

ECLASS

ECLASS-11.0	27242208
ECLASS-12.0	27242208
ECLASS-13.0	27242208

ETIM

ETIM 9.0	EC001423

UNSPSC

UNSPSC 21.0	43222600

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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