

GW PN/MODBUS 1E/1DB9 - Interface converters



1105707

<https://www.phoenixcontact.com/us/products/1105707>

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The GW PN/MODBUS... enables two-way communication between PROFINET and Modbus protocols. Includes one RJ45 port and one D-SUB 9 port.

Commercial data

Item number	1105707
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN09
Product key	DNC323
GTIN	4055626989839
Weight per piece (including packing)	167 g
Weight per piece (excluding packing)	111 g
Customs tariff number	85176200
Country of origin	US

Technical data

Notes

Note on application

Note on application	Only for industrial use
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Utilization restriction

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

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

Product type	Interface converter
MTBF	92.1 Years (Telcordia standard, 25°C temperature, 50% stress, Environmental Factor = 1.0) 61.4 Years (Telcordia standard, 40°C temperature, 50% stress, Environmental Factor = 1.5)

System properties

Modbus/TCP-Client

Number of Modbus/TCP clients	96
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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	48 mA (24 V DC)
Max. current consumption	60 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
Conductor cross-section AWG	24 ... 12
Tightening torque	0.5 Nm ... 0.6 Nm

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Interfaces

Signal	Ethernet
	PROFINET
	Modbus
Web server	yes

Data: PROFINET, MODBUS TCP

Serial transmission speed	10/100 Mbps, auto negotiation
Connection method	RJ45 jack, shielded
Transmission length	≤ 100 m (shielded twisted pair)
Protocols supported	PROFINET, Modbus ASCII/RTU/TCP
Auxiliary protocols	ARP, DHCP (Client), PING

Data: RS-232

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	1
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: RS-422

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	1
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: RS-485

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	1
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

Mechanical tests

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	:
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	:

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

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

Noise emission

Standards/regulations	EN 61000-6-4
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Standards and regulations

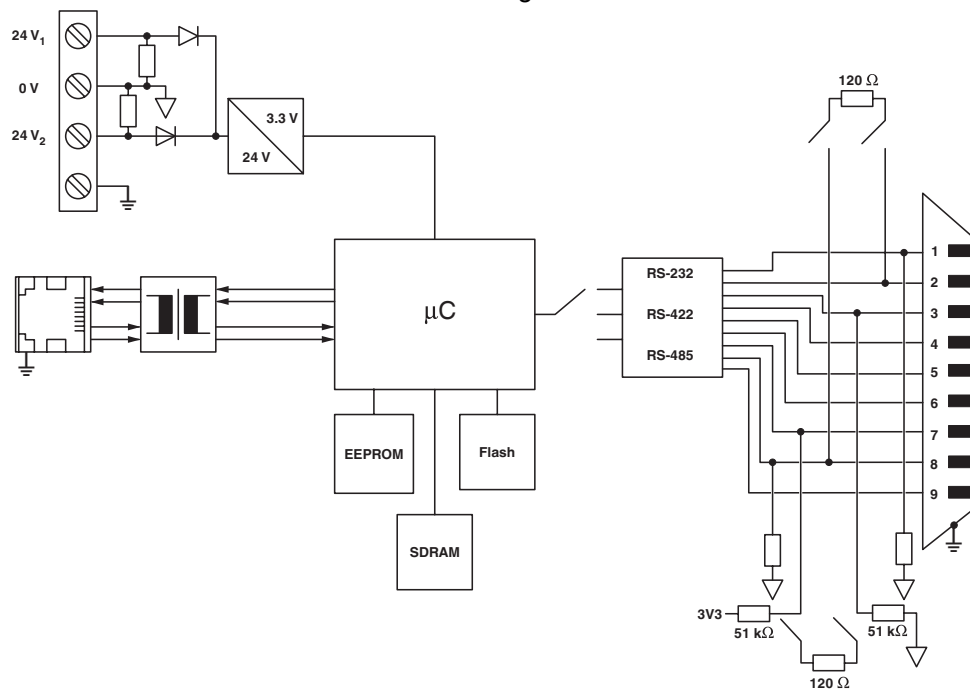
Standards/regulations	EN 55022, EN 55024
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Mounting

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/1105707>

 **UL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E238705

 **UL 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

 **UL Listed**
Approval ID: E196811

 **cUL Listed**
Approval ID: E196811

 **IECEx**
Approval ID: IECEx UL 18.0023X

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ATEX

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Classifications

ECLASS

ECLASS-13.0	27242208
ECLASS-15.0	27242208

ETIM

ETIM 9.0	EC001423
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UNSPSC

UNSPSC 21.0	43222600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

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.)	Lead(CAS: 7439-92-1)
SCIP	35ac8b7c-40b2-4c96-b051-1225006d5723