

## Interface converters - GW MODBUS TCP/RTU 1E/1DB9 - 2702764


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



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 3393 13
GTIN	4055626339313
Weight per Piece (excluding packing)	0.150 g
Custom tariff number	85176200
Country of origin	United States

### 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	115 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

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### Technical data

#### Ambient conditions

Altitude	< 2000 m
Degree of protection	IP20
Noise immunity	EN 61000-6-2:2005

#### General

Electrical isolation	IEC UL 61010-1 (VCC // Ethernet)
Test voltage data interface/data interface	1.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage data interface/power supply	1.5 kV <sub>rms</sub>
	1.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 61000-6-4
Net weight	167.3 g
Housing material	PA 6.6
Color	gray
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)
Conformance	CE-compliant
UL, USA	UL 61010-1
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D T4A

#### Power supply

Supply voltage range	10.8 V DC ... 30 V DC (via pluggable COMBICON screw terminal block)
Max. current consumption	60 mA (24 V DC)
Typical current consumption	48 mA (24 V DC)
Conductor cross section flexible max.	2.50 mm <sup>2</sup>
Conductor cross section flexible min.	0.20 mm <sup>2</sup>
Conductor cross section AWG max.	12
Conductor cross section AWG min.	24

#### Interfaces

Interface 1	Modbus/TCP
Interface	Ethernet
No. of ports	1
Connection method	RJ45 socket, shielded
Transmission length	≤ 100 m (shielded twisted pair)
Protocols supported	Modbus RTU, Modbus ASCII, Modbus TCP
Auxiliary protocols	ARP, DHCP (Client), PING

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### Technical data

#### Interfaces

Serial transmission speed	10/100 Mbps, auto negotiation
Interface 2	Modbus RTU / ASCII
Interface	RS-232
Number of connections	1
Connection method	D-SUB 9 plug
File format/coding	5/6/7/8 Data bits, 1/2 Stop bits, None/Even/Odd/Mark/Space Parity
Transmission length	15 m
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; 9.6; 19.2; 38.4; 57.6; 115.2; 230.4 Kbps
Interface 3	Modbus RTU / ASCII
Interface	RS-422
Number of connections	1
Connection method	D-SUB 9 plug
File format/coding	5/6/7/8 Data bits, 1/2 Stop bits, None/Even/Odd/Mark/Space Parity
Transmission length	≤ 1200 m
	120 Ω (configurable)
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
Interface 4	Modbus RTU / ASCII
Interface	RS-485
Number of connections	1
Connection method	D-SUB 9 plug
File format/coding	5/6/7/8 Data bits, 1/2 Stop bits, None/Even/Odd/Mark/Space Parity
Termination resistor	120 Ω (configurable)
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

#### Function

Web-based management	yes
Management	Web-based management

#### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2:2005
Standards/regulations	EN 55022, EN 55024
Conformance	CE-compliant
UL, USA	UL 61010-1

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### Technical data

#### Standards and Regulations

UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D T4A
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A
ATEX	DEMKO 18ATEX 2026X: II 3 G Ex ec IIC T4 Gc
IECEX	IECEX UL 18.0023X Ex ec IIC T4 Gc

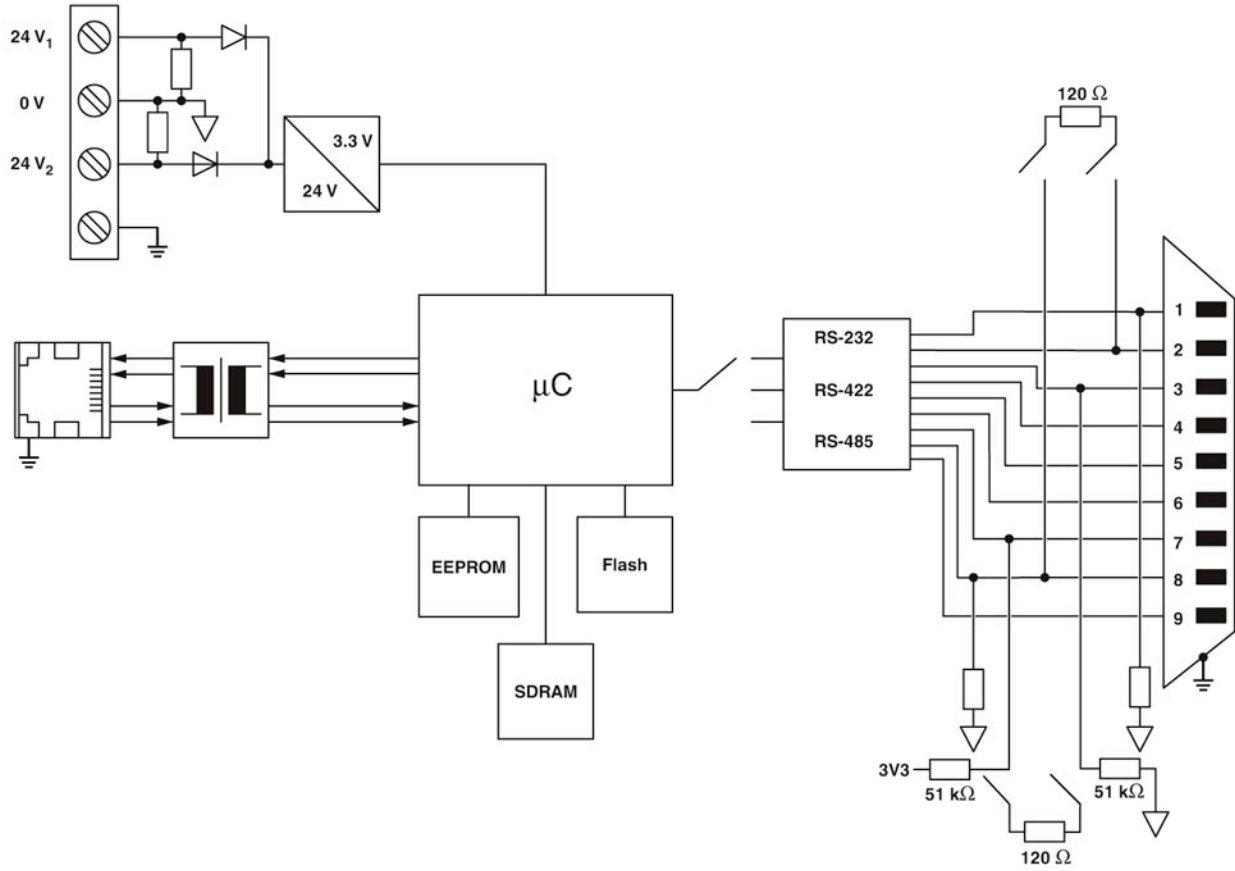
#### Environmental Product Compliance

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

### Drawings

# Interface converters - GW MODBUS TCP/RTU 1E/1DB9 - 2702764

Block diagram



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### Classifications

#### eCl@ss

eCl@ss 10.0.1	19179290
eCl@ss 4.0	27250504
eCl@ss 4.1	27250504
eCl@ss 5.0	27250504
eCl@ss 5.1	27250504
eCl@ss 6.0	19179200
eCl@ss 7.0	19179290
eCl@ss 9.0	19179290

#### ETIM

ETIM 2.0	EC000310
ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC000310
ETIM 6.0	EC000310
ETIM 7.0	EC000310

#### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	43222604
UNSPSC 18.0	43222604
UNSPSC 19.0	43222604
UNSPSC 20.0	43222604
UNSPSC 21.0	43222604

### Approvals

#### Approvals

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##### Approvals

UL Listed / cUL Listed / cULus Listed

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##### Ex Approvals

IECEx / ATEX / UL Listed / cUL Listed / cULus Listed

## Interface converters - GW MODBUS TCP/RTU 1E/1DB9 - 2702764

### Approvals

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#### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cULus Listed			
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### Accessories

#### Accessories

##### Adapter

Adapter - PSM-AD-D9-NULLMODEM - 2708753



V.24 (RS-232) zero modem connector

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##### Adapter cable

Data cable - PSM-KA9SUB9/BB/2METER - 2799474



RS-232 cable, 9-pos. D-SUB socket on 9-pos. D-SUB socket, 9-wire, 1:1

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##### Data cable preassembled

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### Accessories

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854



Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, cable outlet: straight

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 1408365



Patch cable, CAT6<sub>A</sub>, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

### Data plug

D-SUB bus connector - SUBCON 9/F-SH - 2761499



D-SUB plug, 9-pos. female connector, one cable entry < 35°, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 to screw connection terminal block

D-SUB bus connector - SUBCON-PLUS-F/AX 9 - 2311797



D-SUB connector, 9-pos. female connector, axial version with two cable entries, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 to screw connection terminal block

D-SUB bus connector - SUBCON-PLUS 9/F - 2744241



D-SUB connector, 9-pos. female connector, two cable entries < 35°, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 to one screw connection terminal block



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### Accessories

#### D-SUB bus connector - SUBCON-PLUS F2 - 2799490



D-SUB connector, 9-pos. female connector, two cable entries < 35°, bus system: CAN, SUCONET K1, K2 (MOELLER), S-BUS (Saia), J-BUS (Merlin Gerin), pin assignment: 2, 3, 4, 5, 7, 9 to two screw connection terminal blocks

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#### RJ45 connector - VS-08-RJ45-5-Q/IP20 - 1656725



RJ45 connector, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: PA, connection method: IDC fast connection, connection cross section: AWG 26- 23, cable outlet: straight, color: traffic grey A RAL 7042

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#### RJ45 connector - VS-08-RJ45-10G/Q - 1419001



RJ45 connector, IP20, CAT6<sub>A</sub>, 8-pos., with QUICKON fast connection technology, for 26 ... 24 AWG 1-wire and 7-wire conductors, color: black

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### Female insert

#### Contact insert - VS-09-BU-DSUB-EG - 1688803



D-SUB contact insert, shell size 1, with nine signal contacts, type of contact socket, with solder cup, straight, fixing with a 3 mm hole, for panel mounting frame and sleeve housing VS-09-...

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### Interface converter

#### Interface converter - PSM-ME-RS232/RS232-P - 2744461



Interface converter, for the isolation of RS-232 (V.24) interfaces, 4 channels, rail-mountable

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### Accessories

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Repeater - PSM-ME-RS485/RS485-P - 2744429



Repeater, for potential separation and range increase in RS-485 2-wire bus systems, 3-way isolation, rail-mountable

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### Male insert

Contact insert - VS-09-ST-DSUB-EG - 1688793



D-SUB contact insert, shell size 1, with nine signal contacts, type of contact pin, with solder cup, straight, fixing with a 3 mm hole, for panel mounting frame and sleeve housing VS-09-...

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### Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263



Patch cable, CAT5, assembled, 0.5 m

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Patch cable - FL CAT5 PATCH 5,0 - 2832580



Patch cable, CAT5, assembled, 5 m

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### Sleeve housings

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### Accessories

D-SUB sleeve housings - CUC-DST-GZNI-S/DSSC9 - 1419722



D-SUB sleeve housings, degree of protection: IP20, material: Zinc die-cast, cable outlet: straight, size of housing: 1, color: Bare metallic

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D-SUB sleeve housings - CUC-DST-GPME-S/DSSC9 - 1419705



D-SUB sleeve housings, degree of protection: IP20, material: ABS, metal-plated, cable outlet: straight, size of housing: 1, color: Bare metallic

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### Surge protection for information technology

Surge protection device - DT-LAN-CAT.6+ - 2881007



Surge protection in accordance with Class E<sub>A</sub> (CAT6<sub>A</sub>), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE+) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

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Surge protection device - TTC-6P-3-HF-F-M-24DC-PT-I - 2906797



Surge protection, consisting of protective plug and base element, with integrated status indicator and knife disconnection for three signal wires with common reference potential. For HF applications and telecommunications interfaces without supply voltage. Indirect grounding via gas-filled surge arrester.

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Surge protection device - TTC-6P-3-HF-F-M-12DC-UT-I - 2906786



Surge protection, consisting of protective plug and base element, with integrated status indicator and knife disconnection for three signal wires with common reference potential. For HF applications and telecommunications interfaces without supply voltage. Indirect grounding via gas-filled surge arrester.

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## Interface converters - GW MODBUS TCP/RTU 1E/1DB9 - 2702764

### Accessories

#### Switch

Industrial Ethernet Switch - FL SWITCH SFN 5TX - 2891152



Ethernet switch, 5 TP RJ45 ports, automatic detection of data transmission speed of 10 or 100 Mbps (RJ45), autocrossing function