

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



2702765  
<https://www.phoenixcontact.com/us/products/2702765>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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        |
| 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            |

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



2702765

<https://www.phoenixcontact.com/us/products/2702765>

## 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) |

### 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 <sub>rms</sub> (50 Hz, 1 min.) |
| Test voltage data interface/power supply   | 1.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
|                                            | 1.5 kV <sub>rms</sub>                 |

#### 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 mm <sup>2</sup> ... 2.50 mm <sup>2</sup> |
| Conductor cross-section AWG       | 24 ... 12                                     |
| Tightening torque                 | 0.5 Nm ... 0.6 Nm                             |

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



2702765

<https://www.phoenixcontact.com/us/products/2702765>

## 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  |

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



2702765

<https://www.phoenixcontact.com/us/products/2702765>

## 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<br>Ex ec IIC T4 Gc |
| IECEx | IECEx UL 18.0023X<br>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 |
|-----------------------|--------------|

## Standards and regulations

|                       |                    |
|-----------------------|--------------------|
| Standards/regulations | EN 55022, EN 55024 |
|-----------------------|--------------------|

## Mounting

|               |                   |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

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

2702765

<https://www.phoenixcontact.com/us/products/2702765>

## Drawings

Block diagram



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



2702765

<https://www.phoenixcontact.com/us/products/2702765>

## 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

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



2702765  
<https://www.phoenixcontact.com/us/products/2702765>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27242208 |
| ECLASS-15.0 | 27242208 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001423 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 43222600 |
|-------------|----------|

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



2702765

<https://www.phoenixcontact.com/us/products/2702765>

## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

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

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)