

Data sheet:

RS422/RS485-Isolator Industry with overvoltage protection



Article no.: 66203

EUR 218.00

*Net price for commercial users

Serial Isolator with overvoltage protection

The model 66203 Isolator with integrated overvoltage protection enables galvanically isolated connection between RS422 devices and RS485 bus systems.

Properties

Interfaces:

- **2x RS422/RS485**
 - 9-pin Sub-D connector
- **Galvanic isolation between the ports**
 - Isolation voltage 1kV DC

Management and Connectivity:

- **Automatic control in RS485 operation**
- **No re-configuration of transmission parameters required**
- **High transmission speeds of up to 3 Mbaud**

Power supply:

- **External**
 - 12V-24V AC/DC via plug-in screw terminal
 - Galvanically isolated power connection
- **Integrated overvoltage protection**

Standards & more

- **Conforms to standards both in office and industrial environments:**
 - High noise resistance per EN 61000-6-2
 - Low noise emission per EN 55032:2015 + A1 Cl. B, EN 61000-3-2 & EN 61000-3-3
- **5 year guarantee**



Wish for something!

[Your suggestions for improvement and additions](#)

Worth knowing

Overvoltage protection for RS485 ports:

The maximum permissible differential voltage that can affect RS485 transceiver components from the outside is generally limited to values of around $\pm 12..14V$. Voltages that exceed these values will always result in destruction of the interface components.

When using shielded cable, it is unlikely that such high differential voltages will occur, since extreme coupling onto the

transmission line expresses itself as a rise in potential on all cable conductors.

When using the isolator on transmission lines outside of buildings or when the cabling conditions are unclear, use of the 66203 Isolator is recommended. This isolator model has built-in overvoltage protection, which limits the maximum occurring differential voltages to a harmless $\pm 9V$ using fast protection diodes.

Technical data

Connections and displays:

| | |
|-------------------------|--|
| Serial ports: | RS422/RS485 interfaces, selectable 9-pin SUB-D adapter |
| Operating modes: | RS422 RS485 4-wire with automatic control RS485 2-wire with automatic control |
| Switching time: | Settable 10 μ s / 50 μ s for switching from data sending to receiving for RS485 automatic control (can be changed on request) |
| Termination: | Connectable termination network for RS485 operation |
| Overvoltage protection: | Differential voltage limited by Transil diodes |
| Baud rate: | 0..3 Mbaud |
| Data format: | any format |
| Galvanic isolation: | min. 1kV DC between all terminals |
| Supported signals: | RxD, TxD, CTS, DTR |
| Supply voltage: | 12..24V AC/DC ($\pm 10\%$) |
| Current consumption: | typ. 70mA @12V DC, 35mA @24V DC |
| Supply connection: | Plug-in screw terminal, 5.08mm spacing Labeled "L+" and "M" |
| Displays: | 1 LED Power 1 LED Data |




Housing and other data:

| | |
|--------------------------------|--|
| Housing: | Plastic housing for top hat rail installation 105 x 22 x 75mm (L x W x H) |
| Weight: | approx. 100g |
| Ambient temperature: | Storage: -40..+70°C Operating in non-rowed installation: 0..+60°C Operating in rowed installation 0..+50°C |
| Permissible relative humidity: | 5..95% RH (non-condensing) |
| MTBF: | 482,916h @25°C per MIL-HDBK-217 |
| Life expectancy: | > 25 years at 25°C ambient temperature |
| Scope of delivery: | RS422/RS485 isolator, Industry Please order power supplies separately as accessories |




Accessories

*Net unit price for
commercial users

Power supplies

| | | | |
|---|-------|--------|---|
| Plug-in power supply, 24V / 500mA DC with Euro plug | 11021 | 21.00€ |  |
| Plug-in Power Supply, 24V / 750mA DC with Euro, US and UK plug | 11026 | 38.00€ |  |
| Power supply for DIN rail, 24V / 630mA DC (merchandise, 2-year manufacturer's guarantee) | 11080 | 33.00€ |  |

Cable and Connector Accessories

| | | | |
|---|-------|--------|---|
| DB9F connection cable with open cable ends, left angled, 1.5m | 11902 | 17.50€ |  |
| DB9F connection cable with open cable ends, right angled, 1.5m | 11903 | 17.50€ |  |
| 9-pol. SUB D socket with screwing terminal and shielded housing | 11905 | 21.00€ |  |

Mechanical Accessories

| | | | |
|--|-------|--------|---|
| Wall mount housing, enclosure rating IP66 / IP67 | 11120 | 54.00€ |  |
| Mounting bracket for wall mounting | 58812 | 11.20€ |  |
| 19" DIN rail | 58813 | 21.00€ |  |

* Our offering is intended only for commercial users. We will be happy to refer private end customers to trading partners through whom our products can be purchased.



We are available to you in person:

Wiesemann & Theis GmbH
Porschestra. 12
42279 Wuppertal
Phone: +49 202/2680-110 (Mon.-Fri. 8 a.m. to 5 p.m.)
Fax: +49 202/2680-265
info@wut.de

© Wiesemann & Theis GmbH, subject to mistakes and changes: Since we can make mistakes, none of our statements should be applied without verification. Please let us know of any errors or misunderstandings you find so that we can become aware of and eliminate them.

[Data Privacy](#)