

Data sheet:

# RS422/RS485-Isolator Industry with overvoltage protection



## 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 for industrial environments
  - · Low noise emission for residential and business areas
- 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 ±9V using fast protection diodes.

# **Technical data**

# Connections and displays:

RS422/RS485 interfaces, selectable Serial ports:

9-pin SUB-D adapter

RS422 Operating modes:

RS485 4-wire with automatic control RS485 2-wire with automatic control

Switching time: Settable  $10\mu s$  /  $50\mu s$  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 (±10%)

Current consumption: typ. 70mA @12V DC, 35mA @24V DC Plug-in screw terminal, 5.08mm spacing Supply connection:

Labeled "L+" and "M"

1 LED Power Displays:

1 LED Data

## Housing and other data:

Plastic housing for top hat rail installation Housing:

105 x 22 x 75mm (L x W x H)

approx. 100g Weight:

Storage: -40..+70°C Ambient temperature:

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		let unit price for mmercial 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€ 📜

<sup>\*</sup> 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:

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