



M-Bus Repeater

Supports M-Bus physical layer

Supports drive up to 100 M-Bus slaves

Auto M-Bus baud rate

M-Bus distance is extended by 1200 meters (at 2400 bps)

M-Bus overloading alarm

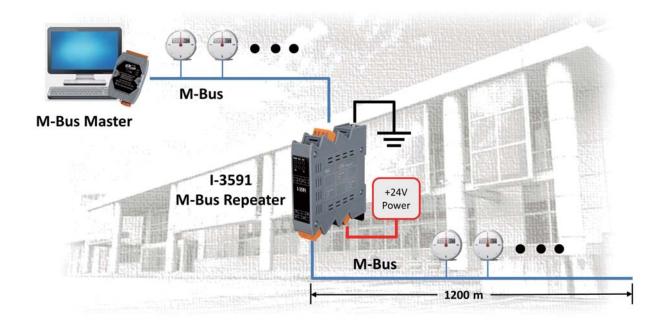
Overcurrent and short-circuit protection on the M-Bus port

Reverse polarity protection on power

#### **■** Introduction

M-Bus (Meter-Bus) is a communication interface widely used in various meters, such as electricity meters, water meters, heat meters, etc. It is easy to install (two-wire system includes power and communication function) and robustness are the most important features. I-3591 is the M-Bus repeater developed by ICP DAS, its main function is to strengthen the driving ability of M-Bus, extend the communication distance of M-Bus, reshape the signal waveform, etc. Provide the M-Bus master with better communication capabilities. I-3591 does not require any settings, it can be used directly after connecting to the line, and easy to use is also one of the main features of I-3591.

## Applications



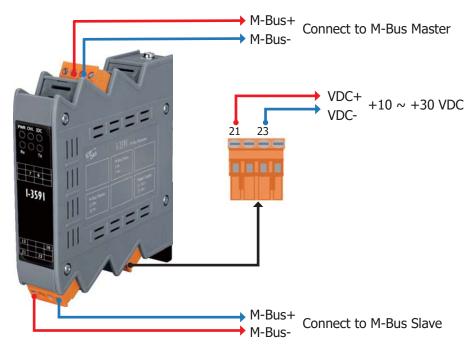
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# Specifications

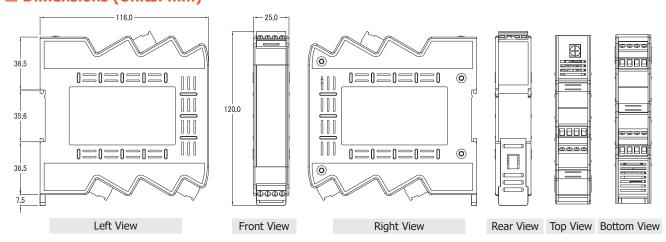
| M-Bus              |                              |
|--------------------|------------------------------|
| Ports              | 1 Master Port, 1 Slave Port  |
| Baud Rate          | Auto-adjust                  |
| Isolation          | 3750 Vrms for photo-couple   |
| Current Protection | Short-circuit protection     |
| LED Indicators     |                              |
| PWR                | Power LED, Red               |
| OVL                | M-Bus overload LED, Green    |
| IDC                | Meter ID conflict LED, Green |
| Rx                 | Received from meter, Green   |
| Tx                 | Transmitted to meter, Green  |

| Power           |   |
|-----------------|---|
| Supply Voltage  | +10 to +30 VDC  |
| Consumption     | 1.6 W @ 24 VDC (with 1 slave device)<br>9.7 W @ 24 VDC (with 100 slave devices) |
| Protection      | Reverse polarity protection   |
| Mechanism       |   |
| Dimensions      | 25 mm x 116 mm x 120 mm   |
| Installation    | DIN-Rail  |
| Environment     |   |
| Operating Temp. | -25°C ~ +75°C   |
| Storage Temp    | -30°C ~ +85°C   |
| Humidity        | 10 ~ 90% RH, non-condensing   |

# ■ Pin Assignments



# **■** Dimensions (Units: mm)



# **■** Ordering Information

| I-3591 CR M-Bus Repeater (RoHs) |
|---------------------------------|
|---------------------------------|

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