

GENERAL SPECIFICATIONS

- Communications Mode: 2 wire Half Duplex , 4 wire Full Duplex, point to point or multidrop
- Baud Rates: 9600 , 19200 , 38400 , 57600 , 115200 baud selectable
- Flow Control : Automatic or RTS line
- Indication : 4 LEDs, Power On, Rx, Tx and RTS active
- Power Supply : 1940 Vdc, 1928 Vac 50-60Hz , max 2.5W
- Transmission Distance : up to 1200m.
- Isolation : 1000Vac between RS232 & RS485, 1000Vac between supply & RS485
- RS232 Connection : screw terminal block or RJ connector

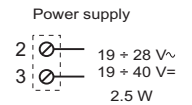
TECHNICAL SPECIFICATIONS

Power Supply:	19-40 Vdc, 19-28 Vac, 50-60 Hz, max 2.5 W
Communications Ports:	Serial RS232, serial RS485/422
Operating Conditions:	0..55°C, 30% to 90% RH @ 40°C (non condensing)
Protection:	IP20
Weight & Dimensions:	140g , 100 x 17,5 x 112 mm
Standards:	The instrument conforms to the following standards: EN50081-2 (electromagnetic emissions, industrial) EN50082-2 (electromagnetic immunity, industrial) EN61010-1 (safety)

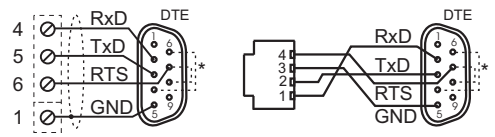


ELECTRICAL CONNECTIONS

POWER SUPPLY

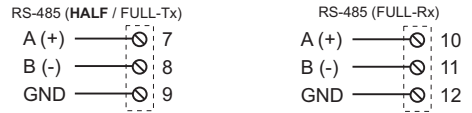


RS232



* Verify the need of connections basing on the kind of application on DTE (PC or other device).

RS485



Clamp	Function
7	A(+) RS485 (HALF o Tx in FULL D.)
8	B(-) RS485 (HALF o Tx in FULL D.)
9	GROUND
10	A(+) RS485 (Rx in FULL D.)
11	B(-) RS485 (Rx in FULL D.)
12	GROUND

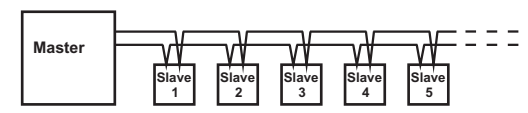
SERIAL INTERFACE

The RS485 serial interface is based on balanced line differential with a typical impedance of 120 Ohms. The maximum distance is not actually defined as it depends on the speed of communication, the signal to noise ration and the quality of cable used.

Generally, 1200m is taken to be the maximum distance that reliable communication can be guaranteed. For distances of up to a few meters in a low noise environment, almost any cable can be used. For cable lengths up to about 100m almost any screened twisted pair cable will suffice. Above this, the use cables that meet the RS485 standard such as CEAM CPR 6003 or BELDEN 9841.

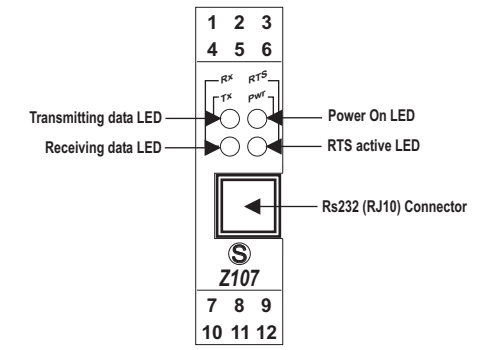
The recommended cabling is layout is "daisy chain" although short "spurs" up to about 2m can be tolerated. The "star" topology is not recommended and should be avoided. The communications line should be terminated by switching the line termination dip switch ON (if using the Seneca Z-PC line modules) on the last module, or by putting a 120Ohm resistor across the two lines at the end of the cable.

The screen should be connected to the GND terminals where they are available and the screen should also be connected to Earth in at least 1 place, via a 10 nF capacitor if necessary.



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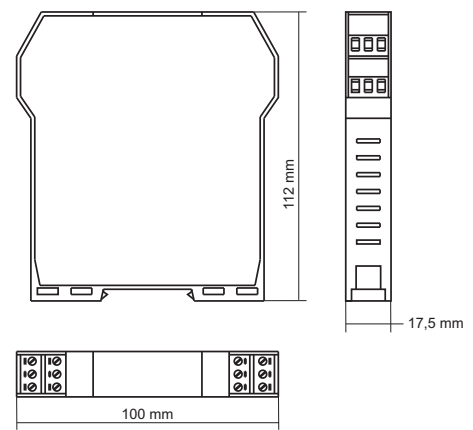
FRONT PANEL INDICATIONS



TROUBLESHOTING

Symptom	Solution
The green "POWER" LED is not lit	Check that the polarity of the DC supply and that 230V mains is available to the adapter.
The red "Rx" LED always lit	Try reversing the RS485 "A" and "B" connections.
Data is corrupt	Check that the converter is set at the same Baud rate as the Computer and for the same flow control (RTS or Auto).

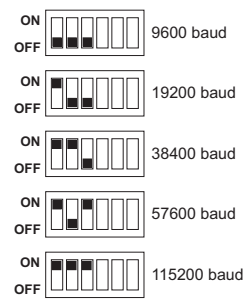
DIMENSIONS



DIP-SWITCH SETTING

The dip-switches on the side of the module are useful to set some functions:

Baud rate setting:



NOTE : It is only necessary to set the Baud Rate if you are using the AUTO setting.

Half duplex setting:

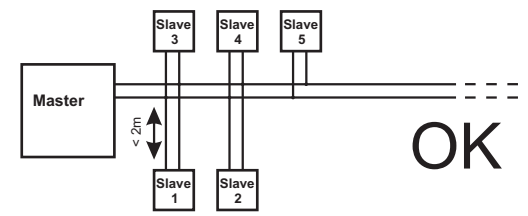


Transmit / Receive Switching:



INSTALLATION

The Z107 module is designed to be fitted on DIN 46277 guide, in a vertical position. For optimal operation and long-life, adequate ventilation must be provided for the module(s), avoiding positioning channel or other devices that obstruct the ventilation louvers. Avoid fitting modules above equipment that generates heat; you are advised to fit them at the bottom of the panel.



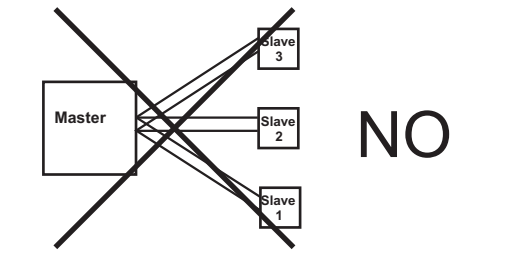
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HARSH OPERATING CONDITIONS:

When modules are fitted side by side it may be necessary to separate them at least 5 mm in the case that panel temperature is above 45°C and voltage power supply is above 30 Vdc or 26 Vac.

NOTE: Use of the DIN guide connectors ensures practical fitting and correct ventilation of the modules.

- Always use screened, twisted pair cable particularly in electrically noisy environments or when using long cable runs. (See the SERIAL INTERFACE section)
- Set the Dip Switches and make all serial connections BEFORE applying power to the converter
- The converter may be used at Baud rates lower than 9,600 but the RTS line MUST be used



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CSQ **IQNet**
 ISO9001-2000

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