



SmartMod

RS485 Isolator / Repeater

HE359ISO100

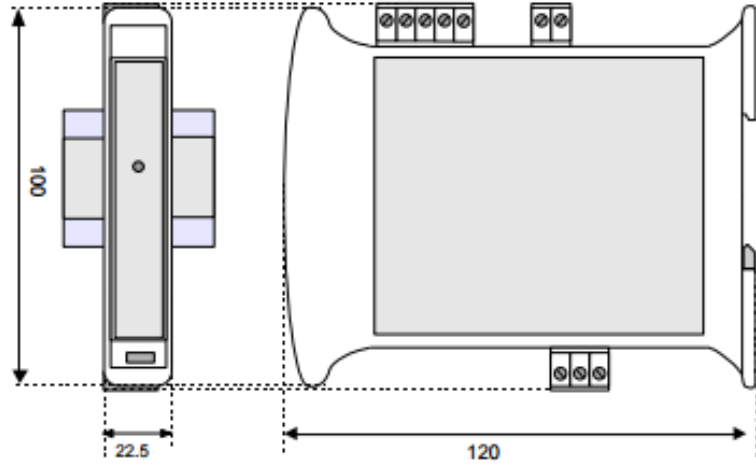
Repeater/ Isolator

RS485 / 422

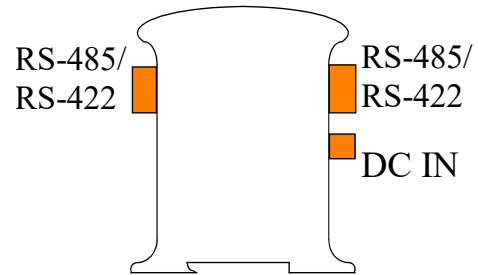


1 Specifications

ISO100		ISO100	
Baud Rate	Up to 115.2 Kbps	Sample Time (PLC Update Rate)	Min. 20 ms - Determined by Communications w/OCS
Number of Modules in Multi-point	Up to 32	Terminal Type	Screw Type, Removable
Switching time TX/RX (RS485)	150 μ s	Storage Temp.	-40° to 85°C
Maximum Voltage	250 VAC, 110 VDC	Operating Temp.	-20° to 60°C
Required Power (Steady State)	35 mA @ 24 VDC, typical	Relative Humidity	0 to 90% Non-condensing
Required Power (Inrush)	Negligible	Dimensions W x H x D	22.5 mm x 100 mm x 120 mm 0.89" x 3.94" x 4.72"
Isolation	2000 VAC, 50 Hz for 60 seconds (Input/Power & Input/Comms)	Weight	Approx. 160 g (5.64 oz.)
Max. distance / baud-rate ratio (1)	1,2 km @ 38400 bps 2 km @ 19200 bps 3 km @ 9600 bps 4 km @ 4800 bps 5 km @ 2400 bps 7 km @ 1200 bps		
CE & UL Compliance	https://hornerautomation.com/certifications/ http://horner-apg.com/en/support/certification.aspx		

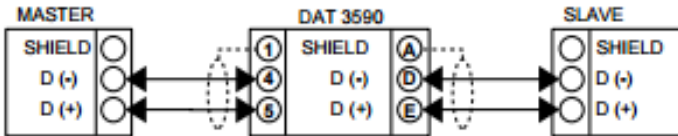


Dimensions in inches are 0.89" W x 3.94" H x 4.72" D
 Note: Number of I/O terminal connections varies from model to model.

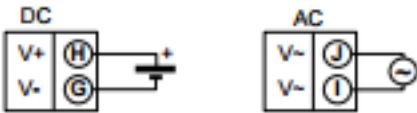
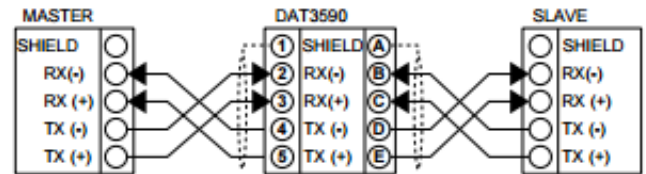


2 Wiring – I/O

Wiring RS-485



Wiring RS-422



Wiring Supply Voltage

Notes:

Both ends of the RS-485 network should be terminated with a 100 Ω , 1/4 W, 1% resistor. Many OCS controllers feature dip switches or jumpers which enable appropriate termination if the OCS is located on a network end.

(1) – The maximum distance depends of: number of devices connected, type of cabling, noises, etc...

3. LED Indicator

LED	COLOR	STATE	DESCRIPTION
POWER	Green	ON	Device Powered
		OFF	Device Not Powered / Incorrect RS485 Cabling
		Fast Blink	Communication in progress/ (blink frequency depends on baud rate)

The LED is located on the front of the model.

4. Installation / safety

Warning: Remove power from the OCS controller, CAN port, and any peripheral equipment connected to this local system before adding or replacing this or any module.

- All applicable codes and standards should be followed in the installation of this product.
- Shielded, twisted-pair wiring should be used for best performance.
- Shields may be terminated at the module terminal strip.
- In severe applications, shields should be tied directly to the ground block within the panel.
- Use the following wire type or equivalent: Belden 8441.

For detailed installation and a handy checklist that covers panel box layout requirements and minimum clearances, refer to the hardware manual of the controller you are using.

When found on the product, the following symbols specify:



Warning: Electrical Shock Hazard.



Warning: Consult user documentation.

For UL installation, the device must be powered using a power supply unit classified NEC class 2 SELV.

WARNING – EXPLOSION HAZARD – Do not disconnect equipment unless power has been switched off.

AVERTISSEMENT - RISQUE D'EXPLOSION - AVANT DE DECONNECTOR L'EQUIPMENT, COUPER LE COURANT.

WARNING: To avoid the risk of electric shock or burns, always connect the safety (or earth) ground before making any other connections.

WARNING: To reduce the risk of fire, electrical shock, or physical injury it is strongly recommended to fuse the voltage measurement inputs. Be sure to locate fuses as close to the source as possible.

WARNING: Replace fuse with the same type and rating to provide protection against risk of fire and shock hazards.

WARNING: In the event of repeated failure, do not replace the fuse again as a repeated failure indicates a defective condition that will not clear by replacing the fuse.

WARNING: Only qualified electrical personnel familiar with the construction and operation of this equipment and the hazards involved should install, adjust, operate, or service this equipment. Read and understand this manual and other applicable manuals in their entirety before proceeding. Failure to observe this precaution could result in severe bodily injury or loss of life.

5. Technical support

Technical Support at the following locations:

North America:

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<http://www.hornerautomation.com>

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Web: <http://www.horner-apg.com>

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