SmartMod
RS485 Isolator / Repeater
HE359ISO100
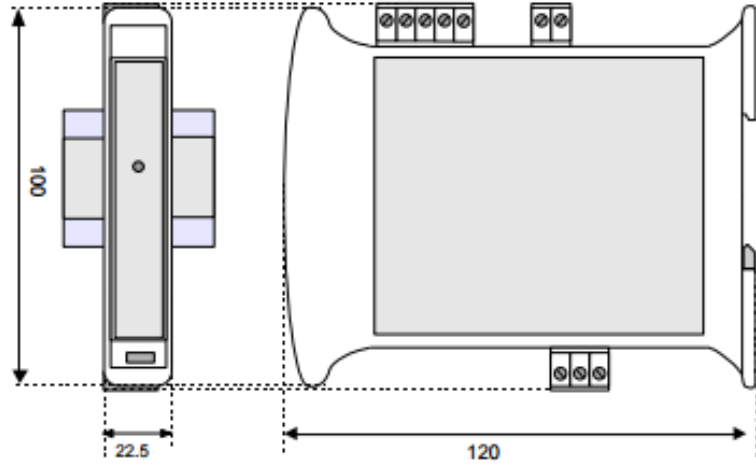## Repeater/ Isolator
RS485 / 422

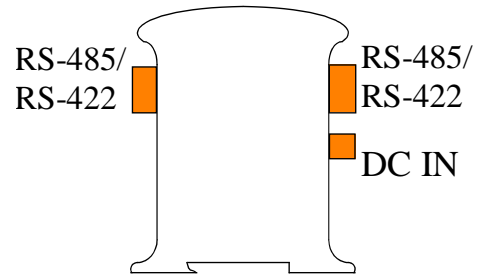## 1   Specifications

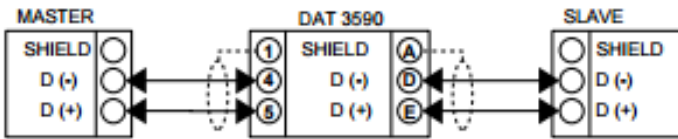|	ISO100			ISO100
Baud Rate	Up to 115.2 Kbps		Sample Time (PLC Update Rate)	Min. 20mS - Determined by Communications w/OCS
Number of Modules in Multi-point	Up to 32		Terminal Type	Screw Type, Removable
Switching time TX/RX (RS485)	150us		Storage Temp.	-40° to 85° Celsius
Maximum Voltage	250VAC, 110 VDC		Operating Temp.	-20° to 60° Celsius
Required Power (Steady State)	35mA @ 24Vdc, typical		Relative Humidity	0 to 90% Non-condensing
Required Power (Inrush)	Negligible		Dimensions WxHxD	22.5mm x 100mm x 120mm 0.89" x 3.94" x 4.72"
Isolation	2000 Vac, 50Hz for 60 seconds (Input/Power & Input/Comms)		Weight	Approx. 160g (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	See Compliance Table at http://www.heapg.com/Pages/TechSupport/ProductCert.html			

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

RS-485/ RS-422
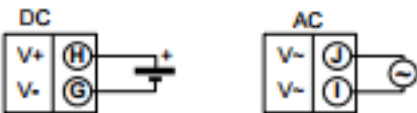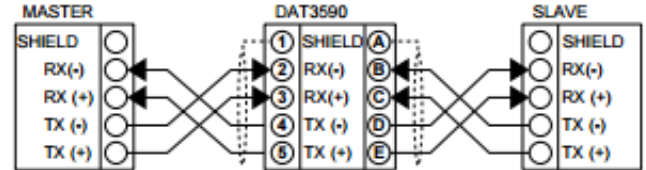RS-485/ RS-422
DC IN

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 100ohm, 1/4W, 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	COLOUR	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.

5   Technical support

Technical Support at the following locations:

North America:
Tel: 317 916-4274
Fax: 317 639-4279
Web: http://www.heapg.com
Email: techsppt@heapg.com

Europe:
Tel: +353-21-4321266
Fax: +353-21-4321826
Web: http://www.horner-apg.com
Email: tech.support@horner-apg.com