

# Low Cost Serial Remote Displays

## With RS-232C/RS-422/RS-485 I/O

**MODELS**  
**HI-Q111**  
**HI-Q112**

### HI-Q112



1/8 DIN standard size,  
 4 DIGIT 0.8" LED

**DESCRIPTION:** PI's new **HI-Q111** & **HI-Q112** series of serial input remote displays are compatible with any ASCII serial communications drivers. The communications protocol is a simple string containing the "s" start character, "xx" address, "d" and data to be displayed "888.8" followed by the <cr>. (example S01D123.4<cr> will display 123.4 on device with address 01).

Baud rate and address is software programmable (9600 Std). Both models have an LED on the upper left corner that can be addressed as sign, over-range or alarm. All connections are made through screw terminal connectors.

**The HI-Q111** can be powered by 5VDC±5%, isolated 8-32VDC (or 24VAC) or external 120VAC power supply.

**The HI-Q112** accepts 5VDC ±5%; 8-32VDC (24VAC) or 120/240VAC power input and its front is NEMA4 rated.

**The HI-Q111** can be ordered in explosion proof housing for hazardous environment applications.

### FEATURES:

- All ASCII Characters
- Programmable Baud Rate
- Programmable Address
- Limited Alpha Characters
- 5VDC Power Input
- 8-32VDC Power Input
- 120/240VAC Power Input
- NEMA4 Front Panel (HI-Q112)
- Screw Terminal Connector
- Explosion Proof Housing Available
- Optional GREEN LED Display
- Large 0.8" tall LED digits (HI-Q112)
- Standard 0.6" tall LED digits (HI-Q111)
- Low Cost

### HI-Q111



ACTUAL SIZE (2.55x1.45") 4 DIGITS 0.6" LED

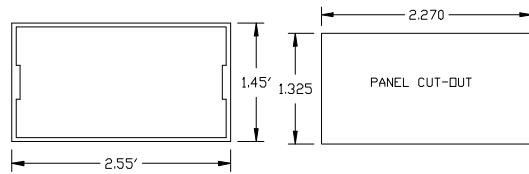
### SPECIFICATIONS @ 25°C

PARAMETER	HI-Q111	HI-Q112
Display Size .....	0.6" High .....	0.8" High
Power Consumption .....	1.0W Max. ....	1.50W Max.
Power Input (Non Isolated) .....	5VDC ±5% .....	5VDC ±5%
Power Input (Isolated) .....	8-32VDC (12-24VAC) .....	8-32VDC (12-24VAC)
Power Input (Isolated) .....	120VAC (External) .....	120/240VAC (Internal)
Baudrate (9600 Std.) .....	300-9600 Software select. ....	300-9600 Software select.
Address (00-256) .....	Software programmable .....	Software programmable
Protocol Compliance .....	RS232C/RS422/RS485 .....	RS232C/RS422/RS485
Operating & Storage Temperature .....	0-60°C & -20-80°C .....	0-60°C & -20-80°C
Environmental .....	NEMA12 .....	NEMA4 (IP65)
*Hazardous (Explosion Proof) .....	Yes .....	Consult Factory
Housing Material .....	Polycarbonate 94VO .....	Polycarbonate 94VO
Isolation to Power Input .....	500V (except 5VDC) .....	500V (except 5VDC)

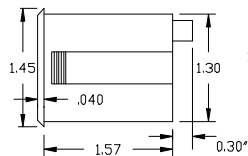
\* **Note:** Explosion Proof Option meets Class I, Div1 & 2 groups B,C,D; Class II, Div 1 & 2 groups E,F,G; Class III, Nema 3,4,7,9 & 12; FMC, CSA, Cenelec and Baseefa.

### HIQ111 MECHNICAL

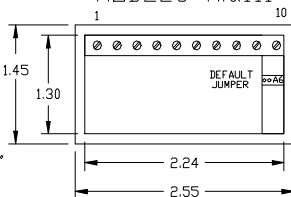
SNAP ON RING  
(SNAPS ON BACK)



SIDE VIEW  
ALL MODELS



REAR VIEW  
MODELS HIQ111



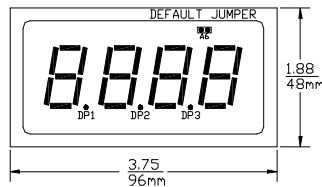
#### TERMINAL DESCRIPTION:

- 1: +VDC in; 2: -VDC In; 3: NC; 4: +5VDC I/O
- 5: NC; 6: Vcc Return(GND.); 7: RXD/DI; 8: TXD/DO
- 9: NC; 10: NC

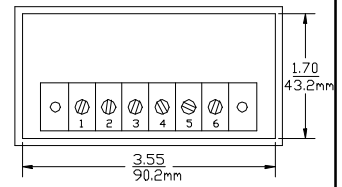
**Note:** When 8-32VDC or AC Power is included, its inputs are isolated from 5 VDC, GND, & Serial I/O lines.

### HI-Q112 MECHANICAL

FRONT VIEW

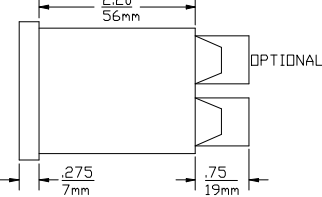


REAR VIEW

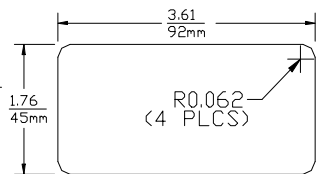


NOTE: ADDRESS SELECTION BEHIND  
BEZEL & FILTER

SIDE VIEW



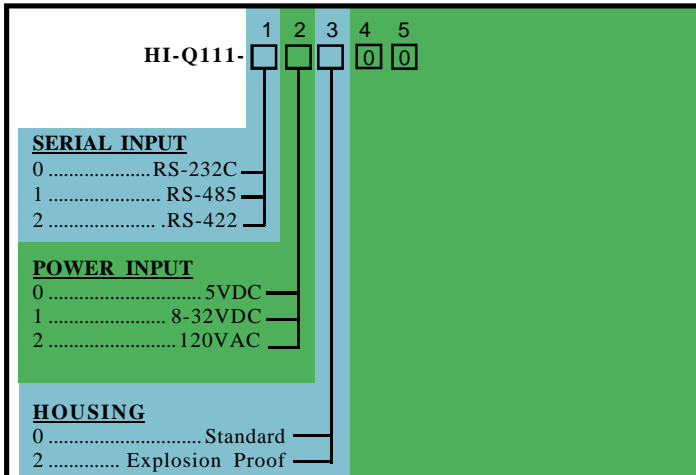
PANEL CUT-OUT



#### TERMINAL DESCRIPTION:

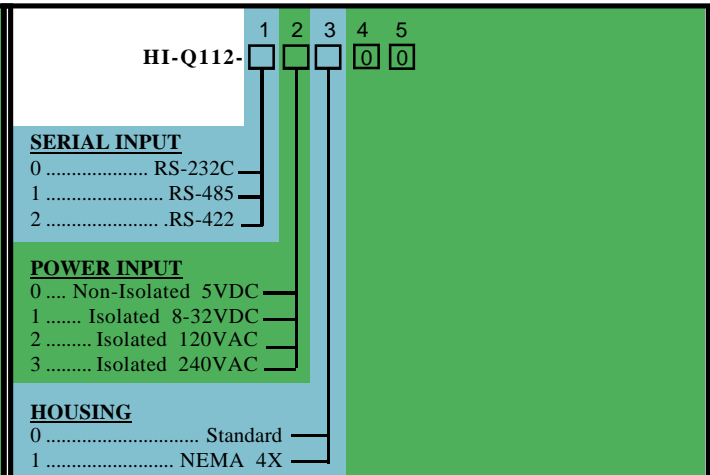
- 1: RXD/DI; 2: TXD/DO; 3: DIG. GND (+5 RETURN)
- 4: +5VDC I/O; 5: +VDC In /AC High; 6: -VDC In/AC Low

### ORDERING INFORMATION (01/2003)



Note:

- 1. 120 / 240VAC power input is externally mounted when ordered with the HI-Q111 series only. When ordered with the HI-Q112, the power supply is self contained.



Note:

- 1. All power input options are contained within the units enclosure.

\*\*\* All Pi's products are covered under a  
24 Month warranty.\*\*\*

