

SERIAL INPUT (RS232/485/USB) REMOTE DISPLAY FOR HI-REL, MIL-SPEC, NUCLEAR & INDUSTRIAL

MODEL HI-QREM



5 Digit Red



Intensity Control

Standard 8N1, ASCII

FEATURES:

- Aluminum Machined Nickel Plated Case

• 5, 12, 24, 48 or 7-32 VDC Powered

• Captive Plug-In Screw Terminal Connector

ZERO

Lifetime Warranty (LTD)



5 Digit Green

REAR VIEW



SPAN

2.80" X 1.310" PANEL CUTOUT BEZEL: 2.91 X 1.52"



SIDE VIEW

DESCRIPTION

OTEK's **HI-QREM** was designed under **D.O.D.** specifications to bring the latest technology to our Armed Forces replacing old obsoleted technology.

The **HI-OREM** (Remote Panel Meter) accepts RS232, RS485 and the new standard **USB** V2 and can even be powered by it with a maximum of "2 Loads" (200mA @ 5VDC). The HI-QREM accepts and displays modified alpha characters for messages such as TEST.

DISPLAY INTENSITY can be externally adjusted via a short potentiometer or via serial commands.

LAMP TEST: Just send 6 DP and 8s.

ADDRESSING of the **HI-OREM** is up to 255 units. The **HOUSING** is made out of machined aluminum nickel plated (or Mil-Spec painted) and the connector is screw type "Captive" for high shock and vibration environments. A gasket is supplied for NEMA 4X compatibility. An optional EMI/RFI filter is available. Sanitary & Explosion Proof cases can be pipe, panel, wall or conduit mounted.

Mil-Std. 461, 901, 810, 167 and others are available upon request.

POWER INPUT can be 5, 7-32 or 48 VDC or **USB** powered consuming a maximum of 1 Watt (less with lower intensity for dark environments).

Simple industry standard ASCII characters are accepted as well as mnemonic commands (ie. SNNNMMMMM. Settings are "8N1" with baud rates from 300 to 19,200.

SPECIFICATIONS (Industrial) (at 25°C & 5VDC)

- •Digits: 5 ea. 0.6" High with 5 D.P.
- •Power Consumption: 1 Watt @ 5 VDC
- •Isolation For Power Input: 500VDC
- •Baud Rate: 300 to 19,200 (9600 Default)
- •Characters: ASCII Codes 0-9 & Modified Alpha & DP
- •Hardware Handshake: None Required
- •Operating Temp: 0-60°C, NEMA 4X
- •Storage Temp: $-20 + 80^{\circ}$ C
- •Humidity: 5-95% RH, Non-Condensing
- •Sanitary Case: To 250°F Steam Cleaning
- •Explosion Proof For CLASS I, Div. 1 & 2 Certified
- •Calculated MTBF: >100,000 Hours (12+ Years)
- •Warranty: Lifetime (LTD)

Note 1: Above specifications are for Industrial Grade. Contact OTEK for other grades.

520-748-7900

FAX: 520-790-2808 E-MAIL:sales@otekcorp.com http://www.otekcorp.com



4016 E. TENNESSEE ST. TUCSON, AZ. 85714 U.S.A.

> MADE IN USA



HI-QREM MECHANICAL INFORMATION

1.385 1.250

1.075

0.625

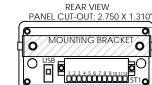
0.579

0.067

TERMINAL DESCRIPTION:

- 1. +Power supply input for isolated 5, 12, 24, 7-32 or 48VDC options.
- 2. Return for isolated power supply inputs.
- 3. +5VDC power input for non-isolated options or +5VDC output for isolated power conditions.
- 4. Intensity Control, connect to terminal 3 for normal operation.
- 5. Default Pin, connect to terminal 8 to force default mode.
- 6. RS485 "B"/RS232 TXD
- 7. RS485 "A"/RS232 RXD
- 8. RS485/RS232 Ground
- 9. USB +5V 10. USB GND

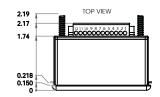
USB Is **Optional** 11. USB Data -12. USB Data +



CONNECTOR: PLUG-IN SCREW TERMINA 26-18 GA

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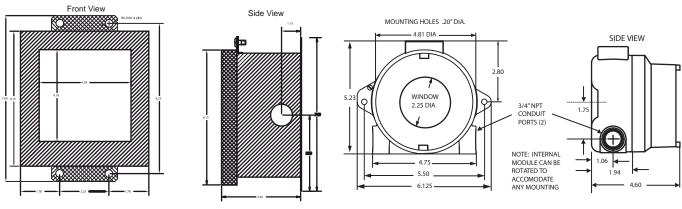
SIDE VIEW



FRONT VIEW

SANITARY CASE

EXPLOSION PROOF

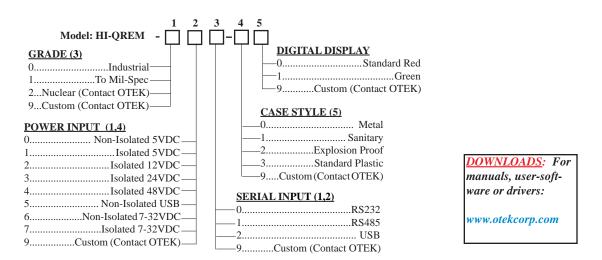


NOTE: For RS485 Install 120Ω Across Pins 6 & 7.

HI-OREM ORDERING INFORMATION 2-28-13

NOTE: Please READ BEFORE building part number:

- 1. For USB powered models (digit 2, option 5), serial input must be USB (digit 3, option 2), but not conversely.
- 2. See notes at bottom of page.



NOTES:

- 3. Otek will build to certain MIL-standards but testing and confirmation of compliance, if required, will need to be done by a third party and at customer's expense. Mil-Std. only available with metal case (Digit 4, Option 0).
- 4. The **HI-OREM USB** termination is at the screw terminal connector.
- 5. A maximum of 3 units can fit inside the sanitary case. If ordering more then 1 unit per case, specify option 9 on digit 4 and describe.