

NEW

**AUTO-TRICOLOR BAR-DIGITAL CONTROLLER
FOR NUCLEAR, MIL-SPEC AND INDUSTRIAL**

**MODEL
HI-Q2000
& HI-Q2K**

Shown with Existing VMI Housing



(No Housing) Option "0"

FEATURES

- *Single or Dual Bar-Digital
- *Vertical or Horizontal Mount
- *Nuclear Qualified
- *Optional Relays (3)
- *Mathematical Functions
- *X-Y Tables & Polynomials
- *AC or DC Power Input
- *No Rewiring Required
- *Lifetime Warranted
- ***USB**, RS232, 422 & 485
- *Field Selectable Ranges
- *Custom Scales

DESCRIPTION:

HFE and HSI compliant display with **OTEK's** exclusive automatic tricolor bargraph. **OTEK's** new **HI-Q2K** not only replaces form fit and function the old units but includes the newest technology made popular by the **HI-Q** Series for ultra high reliability. Hence, its "Lifetime Warranty" (Ltd.).

The **HI-Q2K** is available in several configurations (and if not yours, we will make it) designed for "**Drop-In**" replacement of the old units without rewiring the existing connector. In fact, you can leave the existing casing on the panel, slide out the old and slide in the **HI-Q2K**! The **HI-Q2K** was originally designed and fully approved for **10CFR50-B** (Class 1E) for a major Nuclear Power Plant in record time, so if you need to replace them, don't wait until the last minute, do it now!

What Is The Difference? See Note under ordering information for differences between the HI-Q2K and the HI-Q2000.

Replaces Form, Fit and Function For Versatile (VMI 2000)

SPECIFICATIONS @ 25°C

A/D CONVERTER:

- 16-Bit Plus Sign A/D(50K Counts)*
- Display Resolution: 0.01% of F.S.
- Accuracy: ±0.01% of Full Scale
- Linearity: ±0.01% of Full Scale
- Drift: ±50PPM/°C
- Zero: Automatic/Programmable
- SPAN: Programmable
- F.S.Input: ±0.5 to ±50VDC
- Current Range: ±0.5 to 50mADC
- Sampling Rate: 16/sec. ÷ by Channels
- Input Type: Single Ended/Diff.
- Input Bias: 50pA
- C.M.V.: ±2VDC
- CMR: >90dB
- Averaging (Weighted): None to 255
- Input Impedance: See Ord. Info.
- * Note: Limited by display of model

ON-OFF CONTROL OUTPUTS RELAYS

- Type: S.P.D.T. (1C) 500VAC Isolation
- Max. Switching Current: 10A Res.
- Max. Switching Voltage: 30VDC/240VAC@Rated Current
- Contact Protection: Included to 250VAC

ALARM SET POINTS

- Programmable with P.O.D. and Hysterisis

SERIAL COMMUNICATIONS

- Isolation to 5V or Other Power Inputs: 500VDC
- Baud Rate: to 19.2K Baud
- Protocol: Full ASCII (8N1 Setting)
- Concurrent Use of RS-232C & 422 or RS-232C & RS-485 I/O

POWER INPUTS

- 5VDC±5% Non-Isolated
- Or 10-32VDC (24VAC) Isolated
- Or 90-265VAC (100-300VDC) Isolated
- Power Consumption: 10 Watts

ENVIRONMENTAL (To Specs)

- Operating Temperature:-10-55°C
- Storage Temperature: -20-65°C
- Humidity 10-90% RH, N.C.
- MTBF: > 1000,000 Hrs. (Calculated)

NOTE: Conformal Coating EMI/RFI Shield On Request



**IF YOU DON'T SEE IT
ASK FOR IT!**

520-748-7900

FAX: 520-790-2808

E-MAIL:sales@otekcorp.com

http://www.otekcorp.com

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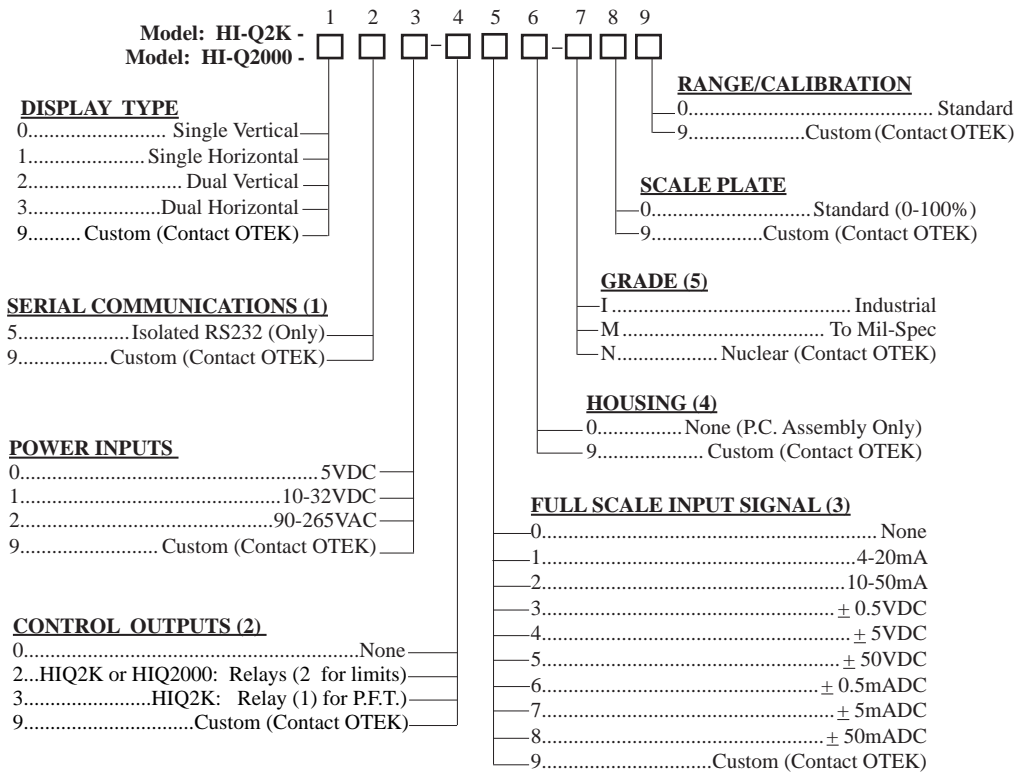
4016 E. TENNESSEE ST.
TUCSON, AZ. 85714 U.S.A.

MADE
IN
USA



HI-Q2K/HI-Q2000 ORDERING INFORMATION

4/10/13



NOTE: The **HI-Q2000** & **HI-Q2K** use existing **VM2000** case and connector without wiring change. For New Installations, see models HI-Q120 & HI-Q121 to replace older units.

NOTES:

1. Only RS232C available on the front behind the filter. For other Serial I/O, see models HI-Q120 & HI-Q121.
2. Either 2 relays for Hi & Lo limits (Digit 4, Option 2), or 1 relay for power failure detect (Digit 4, option 3).
3. Digit 5, option "0" (none) only as serial input remote display. RTD, RMS, TC, S-G inputs on request.
4. Digit 6, option "0" for installing on existing VMI case. For other options contact OTEK, or see models HI-Q120 and HI-Q121.
5. 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.

HI-Q2K Vs. HI-Q2000

1. The HI-Q2K is an upgrade of the HI-Q2000.
2. The HI-Q2K has internal circuitry (TTL) to simulate µC, A/D & power failure for simulator room. The HI-Q2000 does not.
3. The HI-Q2K has either 2 limit relays or 1 power fail test relay but not both.

DOWNLOADS: For manuals, user-software or drivers:
www.otekcorp.com

MECHANICAL (ALL VERSIONS)

Note: **NAKED** Module Fits In Existing VMI2000 Housing and Connector Mates With Back Plate