

**NOW
USB**

**TRIPLE AUTOMATIC TRICOLOR
BARGRAPH/CONTROLLER
WITH SERIAL I/O, ANALOG I/O & RELAYS**

**MODEL
HI-Q118**

NUCLEAR, SEISMIC & MIL-SPEC versions of the "**HI-Q118**" are available, including NVG-3 (Night Vision 3rd Generation). Contact OTEK For Specific Information.

DESCRIPTION: The **HI-Q118** was specifically designed to replace (form & fit) the old electromechanical Foxboro's Series **257**, with 21st century technology exclusive to **OTEK**, the originator of the automatic tricolor bargraph P.I.C. (Programmable Intelligent Controllers). The only similarity is the panel cut out, mounting (rack) and bezel, (same edge connector on request) the rest is all OTEK's proven design with thousands of units installed from outer space (MIR & I.S.S. Stations) to military, petrochemical, pharmaceutical, transportation and other critical industries (all products have a **LIFE-TIME WARRANTY {LTD}**).

The New "**HI-Q118**" is housed in an all metal case with standard 8" depth and plug-in screw terminal connectors for all I/O except the serial "RS" has a "**DB-9**" connector. It can be used as a remote display (serial input) for PLC, DCS, SCADA or stand-alone with Analog I/O, Compliance Output (To Power Transmitters), 6 Relays or 8 Open Collector Transistors (O.C.T.) Power Inputs for 10-32VDC, 90-265VAC (5VDC on request) are available.

The 51 segment bargraphs change color automatically upon reaching a programmable limit(s) and can be configured for dimming, blinking, pointers and off. The digital (4 digits) are color coded (red, green & yellow) (blue optional) for ease of identification. The math functions (Floating Point Math) allow scientific calculations, such as polynomials (9th), X-Y Tables (TC & RTD) and Flow Calculations.

New USB V2.0 Compatible:

The USB-232 converter plugs into the **DB9** connector and extends 1.25" on the rear. Has standard "Client" connector.

OTEK's Exclusive Windows Navigator G.U.I. 100% configuration within minutes without lengthy Instruction Manuals (AND IT IS FREE!)

• Replaces Foxboro's "257"

(+ MORE)
FOR T.A. Bailey's "775"
See our **HI-Q117**
FOR T.A. Bailey's "RY"
See our **HI-Q116**



- **Math Functions**
+, -, x, √, ÷
- **1, 2 or 3 Analog Inputs (18 Bits)**
- **Front Panel Replaceable Filter & Scale**
- **1, 2 or 3 Tricolor Bargraphs & 4 Digit Displays**
- **Optional Analog Outputs (16 Bits)**
- **Optional 10A Relay Output (6) or 8 O.C.T.**
- **Optional RF/EMI Shielding**
- **All Metal Construction**
- **Optional 30VDC For Transmitters**
- **Isolated USB RS232C/422/485**

- **Standard 8" Deep/Optional 16" Deep for Direct Replacement**

**MAXIMUM POWER CONSUMPTION:
15 WATTS**

HI-Q118™ ORDERING INFORMATION 4/15/13

NOTE: Please READ BEFORE building part number:

1. If digit 10 is option E, then digit 9 must be option E.
2. See notes on bottom of page.

HI-Q118 -	1	2	3	4	5	6	7	8	9	10	11	12	
<u>BARGRAPH/DIGITAL</u>													
0.....	1	Each	Center)										
1.....	2	Each	(Sides)										
2.....	3	Each											
<u>BAR-DIGITAL COLOR</u>													
0.....		Std.	Gr-Yel-Red										
9.....		Custom	(Contact OTEK)										
<u>SERIAL I/O</u>													
1.....		Isolated.	RS232C/485										
2.....		Isolated	RS232C/422										
4.....		Isolated	USB										
5.....		Isolated	RS232 Only										
9.....		Custom	(Contact OTEK)										
<u>POWER INPUT</u>													
0.....		5VDC											
1.....		10-32VDC											
2.....		90-265VAC											
3.....		120-350VDC											
9.....		Custom	(Contact OTEK)										
<u>CONTROL OUTPUTS</u>													
0.....		None											
1.....		Relays	(6)										
2.....		O.C.T.	(8)										
<u>ANALOG & POWER OUTPUTS (3)</u>													
0.....		None											
1.....		4-20mA,	1 Each										
2.....		0-5VDC,	1 Each										
3.....		4-20mA,	2 Each										
4.....		0-5VDC,	2 Each										
5.....		4-20mA &	0-5VDC, 1 Each										
6.....		4-20mA &	30V Compliance, 1 Each										
7.....		0-5VDC &	30V Compliance, 1 Each										
8.....		30V Compliance,	1 Each										
9.....		Custom	(Contact OTEK)										
<u>RANGE/CALIBRATION</u>													
0.....		Standard											
9.....		Custom	(Contact OTEK)										
<u>SCALE PLATE</u>													
0.....		Standard	(0-100%)										
9.....		Custom	(Contact OTEK)										
<u>GRADE (1,7)</u>													
I.....		Industrial											
M.....		Mil-Spec											
N.....		Nuclear	(Contact OTEK)										
E.....		To EPRI	(Contact OTEK)										
<u>HOUSING DEPTH (1,6)</u>													
0.....		8" Deep											
1.....		16" Deep											
E.....		12" To EPRI	102323R2										
9.....		Custom	(Contact OTEK)										
<u>SIGNAL & DIGITAL INPUTS (4,5,8,9)</u>													
<u>{2 INPUTS}</u>													
00.....		None											
01.....		Multilevel											
02.....		TTL High Speed											
09.....		Custom	(Contact OTEK)										
<u>ANALOG INPUTS (1 CHANNEL)</u>													
10.....		VDC	(1MΩ)										
11.....		mADC											
12.....		4-20mA Current Loop	(25Ω)										
14.....		VRMS	(1MΩ)										
15.....		mARMS											
17.....		Strain-Gage	(>200<400Ω)										
18.....		Strain-Gage	(>1K<5KΩ)										
20.....		Resistance	(50KΩ)										
21.....		2W Temperature	RTD										
22.....		Temperature	Thermocouple										
23.....		3W RTD											
25.....		mVDC	(1MΩ)										
29.....		Custom	(Contact OTEK)										
<u>ANALOG INPUTS (2 CHANNELS)</u>													
30.....		VDC	(1MΩ)										
31.....		mADC											
32.....		4-20mA Current Loop	(25Ω)										
33.....		Watts DC	(1M-0.1Ω)										
34.....		VRMS	(1MΩ)										
35.....		mARMS											
36.....		Watts RMS	(1M-0.1Ω)										
41.....		2W Temperature	RTD										
42.....		Temperature	TC										
43.....		3W RTD											
47.....		mVDC	(1MΩ)										
49.....		Custom	(Contact OTEK)										
<u>ANALOG INPUTS (3 CHANNELS)</u>													
50.....		VDC	(1MΩ)										
51.....		mADC											
52.....		4-20mA Current Loop	(25Ω)										
53.....		V RMS	(1MΩ)										
54.....		mA RMS											
55.....		2W Temperature	RTD										
56.....		Temperature	TC										
69.....		Custom	(Contact OTEK)										

NOTES (Continued):

3. 30V compliance is for external transmitters/transducers.
4. Volt & Amp ranges are internal jumper range selectable .5, 5, 10 & 50VDC; 1, 5 & 20mA. Shipped with .5V or 1mA unless specified.
5. Mixed or additional inputs (V&A, Temp & 4-20mA, Etc.) are available as customizations. Choose the custom number (09, 29, 49 or 69) and specify custom requirements.
6. 14.5" deep housing with specific connector termination on request.
7. Otek will build to certain nuclear or MIL-Standards but testing and confirmation of compliance, if required, will need to be done by a third party and at customer's expense.
8. Multi-channel input options are factory assigned to specific displays but are field configurable.
9. Digits 7 & 8, Option 00 is for a remote display/controller only.

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

