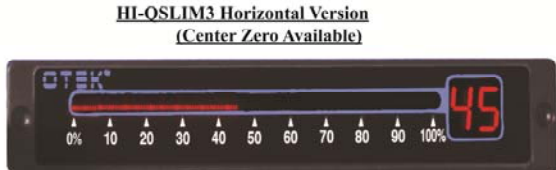


Low Cost Smart Bargraph-Digital Meters
 For V/mADC Input And/Or USB/RS-232C/485, Remote Displays

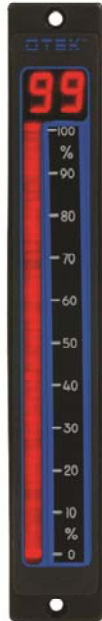
**MODEL
HI-QSLIM**



Zero & Span Adjustments Behind Overlay Not Shown

DESCRIPTION:
 OTEK's new HI-QSLIM series of Low Cost Smart Indicators complement the extensive and proven HI-Q line of **Intelligent Programmable Controllers**. We have applied our expertise to bring you the industry's first low cost bargraph, without sacrificing the quality and reputation of our HI-Q line.
The HI-QSLIM1 offers eight (8) digits, seven-segment 0.6" display with limited alpha characters and 0-9 numerals plus decimal points.
The HI-QSLIM2 has 51 segments (2% resolution & 2 digits(1%)).
The HI-QSLIM3 gives you 1% resolution with its 101 segment high intensity bargraph & 2 digit display.
Whichever you choose for your application, you can depend on its quality and OTEK's limited lifetime warranty.

HI-QSLIM2



2 DIGITS &
51 SEGMENTS
60% of ACTUAL SIZE

FEATURES:

- RS-232C or RS-485 I/O or USB I/O
- ASCII Characters
- Stackable on 1 Inch Centers
- Vertical or Horizontal Viewing (Slim 3)
- Zero & Span Front Panel Controls
- Only 2" Deep NEMA3 Housing 6x1x2" (NEMA4X on Request)
- Max power @5VDC: 1 watt, Universal Power Input
- Standard Unicolor Red or Custom Multicolor (R,G,Y)
- Free Custom Software for Minimum Purchases
- Compatible with Any RS-232/422/485 /USBASCII System
- Lifetime Warranty (LTD.)

HI-QSLIM3



60% of ACTUAL SIZE
2 DIGITS &
101 SEGMENTS



APPLICATIONS:

- Remote Display for RS-232/485/USB
- Process Meter (4-20mA/0-5VDC)
- Trend Indicator
- Counter
- Timer
- Inclinator Indicator
- Well Depth
- Distance
- Position
- Altitude
- Temperature
- Pressure
- Flow
- Humidity
- pH
- RPM
- Strokes Per Hour/Per Minute



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

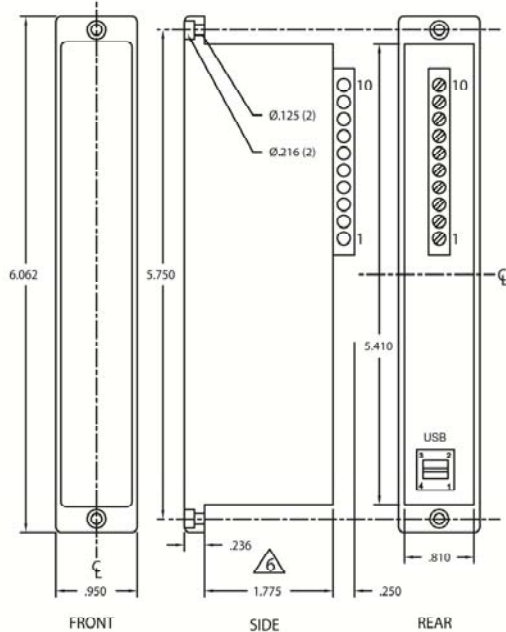
OTEK™
CORP.
SINCE 1974

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



HI-QSLIM 1 USER'S MANUAL

MECHANICAL INFORMATION



- NOTES:
1. RECOMMENDED PANEL CUTOUT: 0.840 x 5.452
 2. MOUNTING HOLES (2) FOR #4 CLEARANCE HARDWARE SUPPLIED
 3. WIRE SIZE ACCEPTED > 24 < 16 GA.
 4. ALL DIM ±0.010"
 5. FOR STACKED APPLICATIONS MAKE MOUNTING HOLES ON 0.960" CENTERS
 6. UNITS W/O POWER SUPPLY ARE ONLY 1.00" DEEP

87SLIMME

TYPICAL CONNECTIONS (All Models)

- Notes:
1. Refer to your specific model# before making connections
 2. Always apply power before signal
 3. 5VDC ±5% (0.25V) at connector
 4. Notice terminal orientation before connecting

Terminal #	Description	Notes
10	Dig. Gnd.	RS-232C & Digital Signal Ground
9	Int 0	Do Not Connect Reserved for Custom
8	T 0	Default Control
7	RXD/DO	Receive Data (RS-232C/485)
6	TXD/DO	Transmit Data (RS-232C/485)
5	Hi Pulse In	+Digital Signal Input or Contact
4	+Signal In	+Analog Signal Input
3	-Signal In or Low Pulse In	Internal Instrument Ground for Analog Inputs
2	+Power In	+For VDC or AC High Input
1	-Power In	Gnd. for VDC or AC Low Power In
USB		
1	VBUS	TYPE B 1 Watt Max
2	D+	+Data Input
3	D-	-Data Input
4	GND.	Power Ground

SPECIFICATIONS

PARAMETER	HI-QSLIM-1	HI-QSLIM-2	HI-QSLIM-3
# Segments	None	51	101
# Digits	Eight (8)	Two (2)	Two (2)
Analog Input Accuracy	(On Request)	±1%	±0.1%
Analog Input Resolution	(On Request)	1% (1 in 100)	±1% (1 in 100)
Polarity	(On Request)	Unipolar	Unipolar
Zero & Span	(On Request)	Yes	Yes
Input Impedance mA/VDC	(On Request)	200Ω/100KΩ	200Ω/100KΩ
Digital Input		TTL/CMOS	TTL/CMOS
Multilevel Inputs		Dry Contact to 250V	Dry Contact to 250V
Frequency Response TTL		10K Hz	10KHz
Serial I/O	RS-232C/RS485	RS-232C/RS485	RS-232C/RS485
Characters	ASCII	ASCII	ASCII
Baud Rate	9600 Std.	9600 Std.	9600 Std.
Address Selection	Via Serial Port	Via Serial Port	Via Serial Port
Power Req't @5VDC	2W	2W	2W
Power Input Non-isolated	5VDC±5% /6-32VDC	VDC±5%/6-32VDC	5VDC±5%/6-32VDC
Power Input Isolated	5-32VDC	5-32VDC	5-32VDC
Power Input Isolated	90-265 VAC	90-265 VAC	90-265VAC
Operating Temperature	0-60°C	0-60°C	0-60°C
Storage Temperature	-20 to 70°C	-20 to 70°C	-20 to 70°C
Humidity	5-95% N.C.	5-95% N.C.	5-95% N.C.
MTBF (Calculated)	100,000Hrs	100,000Hrs	100,000Hrs
Front Panel**	NEMA 3	NEMA 3	NEMA 3
Weight	3 oz. (84g.)	3 oz. (84g.)	3 oz. (84g.)

**NEMA4X On Request (Use #9 & Specify NEMA4X)

* Specifications Subject to Change Without Notice! Contact OTEK for Your Custom Needs!!

520-748-7900

FAX: 520-790-2808

E-MAIL: sales@otekcorp.com

http://www.otekcorp.com

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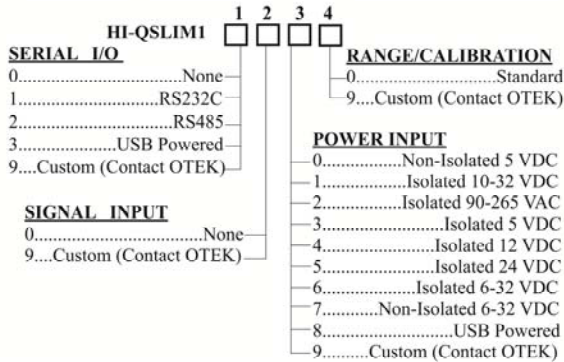
MADE
IN
USA



HI-QSLIM 1 USER'S MANUAL

ORDERING INFORMATION (12-14-11)

8 DIGIT LED COUNTER OR 4 DIGIT PROCESS INDICATOR

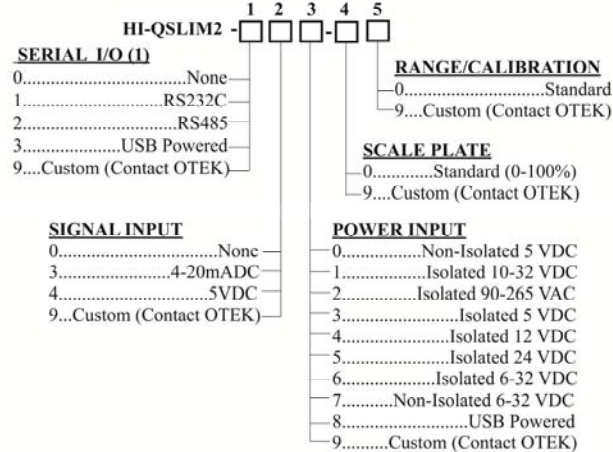


**MODEL
HIQ-SLIM1**

(1) 5½ Digits Only
(50,000 Counts)
(2) Event Counter Only.
Consult OTEK for other
Functions.
(3) Consult Factory for
Availability.

CF: Contact Factory

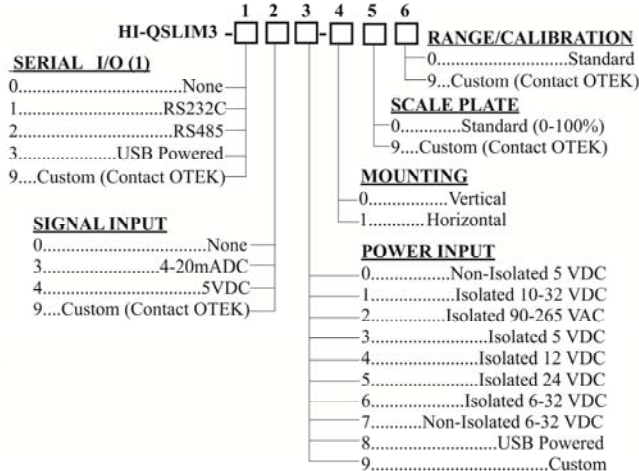
51 SEGMENT LED BARGRAPH WITH 2 DIGIT LED DISPLAY



**MODEL
HIQ-SLIM2**

CF: Contact Factory

101 SEGMENT LED BARGRAPH WITH 2 DIGIT LED DISPLAY



**MODEL
HIQ-SLIM3**

CF: Contact Factory

520-748-7900
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 Tel: 520-748-7900
 Fax: 520-790-2808

SINCE 1974

Serial Communications Protocol for the HIQ-SLIM 1 Remote Display

I. INTRODUCTION

The SLIM 1 uses the standard OTEK communication protocol. The starting character is S followed by the address. The default address is 01. The command follows and must be terminated by a carriage return <CR>. This document applies to firmware release SL1_R100.

II. COMMANDS

COMMAND	DESCRIPTION	RANGE	EXAMPLE
ADDRn	Changes the address. Default is 01.	n = 0 to 6 ASCII characters.	S01ADDRTANK1<CR>
BAUDnn	Changes the baud rate. Default is 9600.	nn = 12 ⇒ 1200 baud. nn = 24 ⇒ 2400. nn = 48 ⇒ 4800. nn = 96 ⇒ 9600.	S01BAUD2400<CR>
CONFn	Change the SLIM configuration. Default is 4.	n = (return). Returns current config. 0 = no echo of serial input. 4 = echo serial inputs.	S01CONF<CR> Shows current configuration.
Dnnnnnnn	Displays ASCII characters on 7 segment display.	nnnnnnnn= ASCII chars.	S01DHELLO ED<CR> display shows HELLO ED
FLASHn	Flashes display	n = 0 to 1 no flashing. n = 2 to 3 slowest (1.14 S). n = 4 to 5 slow. n = 6 to 7 medium. n = 8 to 9 fastest (142 mS).	S01FLASH0<CR> S01FLASH3<CR>
INTn	Change display Intensity. There are four levels. Default is 9.	n = 0 off. n = 1 to 3 dim. n = 4 to 6 medium. n = 7 to 9 brightest.	S01INT0<CR> display off S01INT9<CR> display max
PTn	Light decimal point position. Default is 0.	n = 0 no decimals on. n = 1 to 8, numbered from left of the display.	S01PT1<CR> 1st decimal point on.
RST	Resets SLIM to user values held in EEPROM.	N/A	S01RST<CR>
WRITE	Saves configuration data to EEPROM. Data saved includes: ADDR, BAUD, CONF,FLASH and INT	N/A	S01WRITE<CR>

Serial Communications Protocol for the HIQ-SLIM 1 Remote Display

III. DISPLAYED ASCII COMMAND SET

This table shows the decimal ASCII value, the character for that value and the character as displayed on the SLIM 1 remote display. Sending ASCII 8 (BS - destructive backspace) will erase the previous character sent to the SLIM 1 input buffer. Sending ASCII 27 (ESC) will clear the SLIM 1 input buffer.

<u>Decimal</u>	<u>Char.</u>	<u>Display</u>	<u>Decimal</u>	<u>Char.</u>	<u>Display</u>	<u>Decimal</u>	<u>Char.</u>	<u>Display</u>
45	-	-	61	=	=	76	L	L
46	.	.	62	>	-	77	M	-
47	/	-	63	?	-	78	N	n
48	0	0	64	'	-	79	O	o
49	1	1	65	A	A	80	P	P
50	2	2	66	B	b	81	Q	-
51	3	3	67	C	c	82	R	r
52	4	4	68	D	d	83	S	S
53	5	5	69	E	E	84	T	t
54	6	6	70	F	F	85	U	U
55	7	7	71	G	G	86	V	-
56	8	8	72	H	h	87	W	-
57	9	9	73	I	i	88	X	-
58	:	-	74	J	J	89	Y	Y
59	;	-	75	K	-	90	Z	-
60	<	-						