

NEW

48 CHANNEL PROCESS DATA LOGGER

FOR LONG TERM, HIGH CAPACITY (16 GB NVM) RECORDING

**MODEL
PDL**

Features

- *Up to 48 single ended or 24 differential channels
- *Julian Clock, date, time, channel # & value stamp
- *X-Y tables and math functions
- *State-of-the-art "ARM7" and DSP technologies
- *Ethernet/Internet, USB, Mod bus, CAN, RS232/422/485, all ASCII
- *Up to 16 Gbytes SDHC Memory
- *V/mADC Universal Inputs
- *Easy to interface to any sensor
- *Ultra compact - rivals flatscreens
- *Easy operator interface HMI compliant
- *Custom modifications, all modular
- *Lifetime warranty (LTD)



OTEK's NEW Process Data Logger "PDL" specifically designed to satisfy the need for long term and capacity data logging in "burn in" ovens for the semiconductor industry, as well as other high reliability applications.

The **PDL** is loaded with the latest technology (ARM7 Microprocessors, ASICS & DSP) and backed by Otek's over 35 year expertise, patents and exclusive lifetime warranty.

Applications: High volume/capacity/ long term life test and failure analysis of semiconductor burn-in ovens or other multisignal monitor/control & data logging. Since the **PDL** has universal volts/ mA DC inputs, any sensor/transducer can be easily interfaced to it. The modular construction of the **PDL** lends itself to many economical custom variations. Contact Otek for your requirements.

1. THE DISPLAY: 5 color coded "assignable" displays to allow monitoring of any variable. At the push of a button (or Serial command) the operator can recall "Hidden" parameters related to the inputs (i.e. temperature, current, voltage).

The **PDL** will revert to programmed permanent parameter after 10 seconds to allow for manual data logging or profile analysis.

2. THE MEMORY: (16GB NVM)

The memory card is removable (rear) and the **PDL** can address up to 16 GBType: SDHC up to 16 GB.

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



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IN
USA



PROCESS DATA LOGGER

3. THE MEASUREMENT:

The **PDL** uses 1, 2 or 3 high speed 16 S.E. (8 differential) A/D (3 locations) that allows it to scan at 10 channels/second. The multiprocessors (ARM7) allow the **PDL** to do multitasking without compromise to the data logging integrity. Since the **PDL** has zero, offset, span and tare, plus linearization tables and math functions, it can accept direct signals from any sensor, including SSTS and display/process data in engineering units.

4. THE COMMUNICATION PORTS:

We offer Ethernet for accessibility over a network, USB 2.0, RS232C, RS485, RS422, Modbus RTU, DNP 3.0 and CAN; all in accordance with industry standard protocols.

SPECIFICATIONS @ 25°C:

A. DISPLAY:

- *4 each 4 digit 0.4" LED red, green, orange and yellow
- *1 each 6 digit 0.6" LED red
- *5 each push buttons to select temporary (10 sec. max.) "Hidden" parameters for that display.
- *Nema 4X Lexan UV resistant filter

B. INPUTS

- *Standard: +/- 1VDC F.S. (10 Meg Z in)
- *Custom: Contact Otek

C. COMMUNICATIONS:

1. **Serial I/O** Addresses: 8 ASCII Characters
- *RS232/422/485: 4800-38.4K Baud (8N1) No Handshake Required (DB9)
 - ***USB**: 2.0 Compliant (Free Driver) USB Connector Type "B" jack.
 - ***Ethernet**: 10 BaseT, RJ45 Connector (Free Driver)
 - ***CAN**: Compliant To CAN Protocol
 - ***MODBUS** RTU Compliant
 - ***DNP3.0** Compliant

D. POWER INPUTS:

- *90-265VAC, 45-65Hz (10W)
- *5VDC \pm 5%, 10-32VDC (10W)

E. ENVIRONMENTAL:

- *1/4 DIN (92x92x60mm)
- *Metal or Plastic (94 VO)
- *Operating/Storage Temperature: -20+70°C/-40+85°C
- *Front Panel: NEMA 12, NEMA 4X on request
- *Terminals: Plug-in screw terminal
- *Relative Humidity: 5-95% RH N.C.
- *CMTBF: >100,000 hours (>12 years)
- *EMI/RFI Shield: On Request

F. OTHER:

- *Real-time Julian clock for date/time stamp and display with 10 year battery back-up.
- *Labview, Wonderware direct drivers are available from suppliers
- *Boot Loader for field upgrades

G. CUSTOMER INTERFACE:

- *All Plug-In Screw Terminal Connectors with wire protection (#14-24 GA)
- *DB9F For RS232
- *Screw Terminal For **CAN**/RS422/485/MODBUS, DNP3.0
- *USB, Type "B" "Client" Connector for **USB**
- *RJ45 For Ethernet *RJ11 for Modem



PDL MECHANICAL INFORMATION

STANDARD 1/4" DIN CASE & PANEL CUTOUT

**FIG.
DIN-CSE**

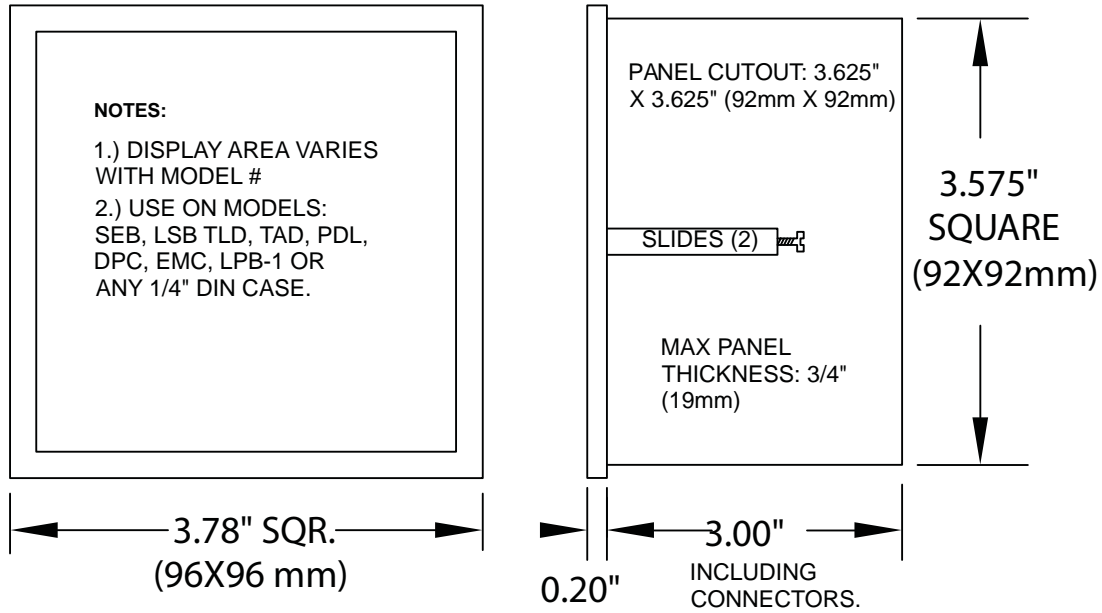


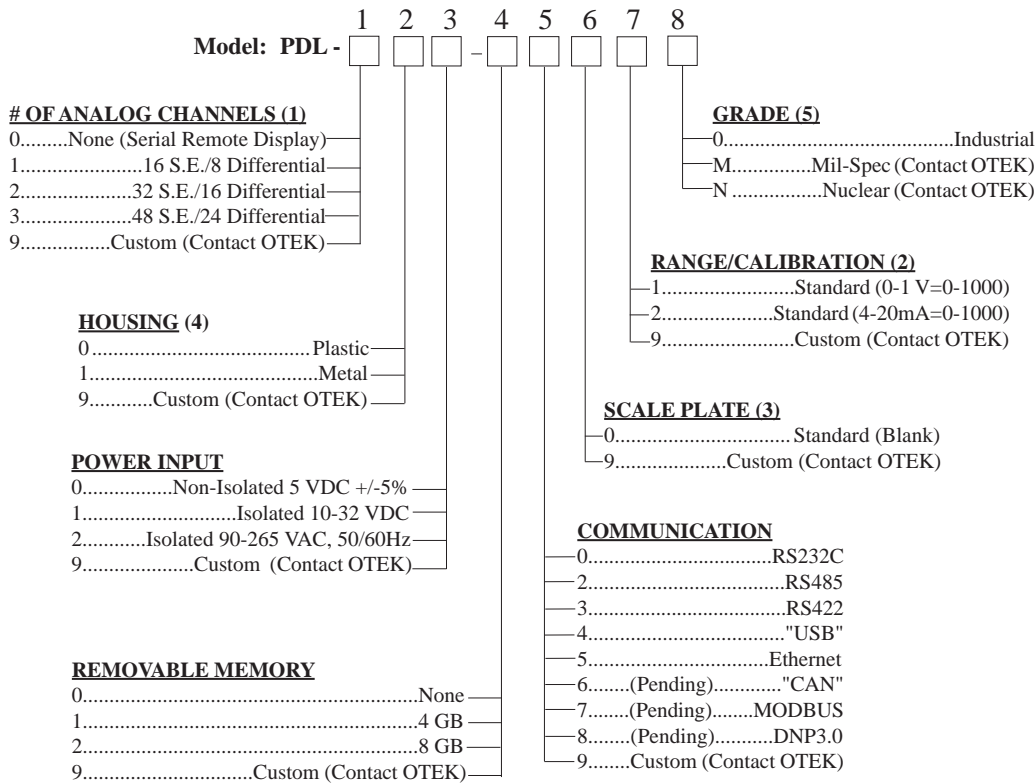
FIG. MOD. PDL TYPICAL CONNECTIONS
PDL

TS1A (SE) (DIFF)		TS2A		TS3A	
1	-SIG IN	GND	1	1	
2	CH15+	CH7-	2	2	
3	CH14+	CH7+	3	3	
4	CH13+	CH6-	4	4	
5	CH12+	CH6+	5	5	
6	CH11+	CH5-	6	6	
7	CH10+	CH5+	7	7	
8	CH9+	CH4-	8	8	
9	CH8+	CH4+	9	9	
TS1B		TS2B		TS3B	
1	CH7+	CH3-	1	1	COM PORTS VARY
2	CH6+	CH3+	2	2	
3	CH5+	CH2-	3	3	
4	CH4+	CH2+	4	4	
5	CH3+	CH1-	5	5	
6	CH2+	CH1+	6	6	
7	CH1+	CH0-	7	7	
8	CH0+	CH0+	8	8	
9	+5VOUT (<50mA)		9	9	
		POWER IN TS4			
		H1	V+		
		G2	G		
		L3	V-		

- NOTES:**
- 1.) WIRE GAUGE TS1-TS3 : 16-26AWG
TS4 : 12-24AWG
 - 2.) VERIFY POWER BEFORE CONNECTING TO TS4.
 - 3.) TS1-TS3 SIGNAL INPUTS HAVE SAME PINOUTS SINGLE ENDED (TS1-CH0-15; TS2-CH16-31; TS3-CH32-47) FOR DIFFERENTIAL INPUTS, DO NOT USE TS1A-1 OR TS2A-1 OR TS3A-1.

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NOTES:

1. Option 0 only for serial input remote display. All channels have the same range and are ±1.0 VDC F. S. For other ranges (up to 200 VDC), use option 9 and specify.
2. Input range as ordered can be lowered via serial command but **NOT** raised. Decimal points are selectable via Serial Port.
3. For standard display configuration see Item 1 on data sheet. All displays are assignable to any channel.
4. ANSI4 (Switchboard style) case available on request.
5. 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.

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