

#### **Product Introduction**

The ONEhalf20 IPT258 Melt Pressure and Temperature Indicator with strain gauge and thermocouple input features dual 5 digit simultaneous display of process melt pressure and temperature in a compact 1/8 DIN panel mount configuration. The IPT258 is available with up to three fully programmable alarms for either pressure or temperature, 4-20mA or 0-10Vdc process pressure value re-transmission, and MODbus communications.

The IPT258 Melt Pressure and Temperature Indicator offers enhanced user functionality with front panel buttons for Zero, Peak, and Manual Alarm Reset. The IPT258 offers a large 0.5" LED display for process melt pressure indication and a lower 0.4" display which can be configured to indicate melt temperature, pressure units or alarm SP values.

#### **Features**

- dual input strain gauge & thermocouple
- pushbutton or Windows based programming
- 5 digit display with 1 psi and 1° resolution
- multifunctional lower display
- selectable units, psi, bar, Kgf/cm<sup>2</sup>, MPa, °C, °F
- · automatic peak detection and display
- built-in transducer excitation voltage
- · MODbus communications option

#### **Benefits**

- simultaneous pressure & temperature readings
- easy to use
- quick and simplified calibration procedure
- Auto-Zero button
- digital display filter
- · analog re-transmission
- · save panel space with the compact size
- recall melt pressure & temperature extremes
- two levels of password protection

#### **Specifications**

#### **Performance Characteristics**

**Type:** microprocessor based panel meter **Display:** dual 5 digit, PV=0.5", SV=0.4"

**Beacons:** 6 LED's, AL1, AL2, AL3, RST, CAL, A/B **Termination:** 20 screw terminals on rear **Dimensions:** 1/8 DIN (48 H x 96 W x 110 D)

Accuracy: +/- 0.1% of full scale with shunt calibration

Sampling Time: 40ms

Operating Temperature: 0°C - 60°C Retransmission: 4-20 mA or 0-10Vdc

Output Resolution: 14 bits



#### **Electrical**

Input: 350 Ohm strain gauge bridge sensor & Type J, K, or E thermocouple

Bridge Excitation: 5 Vdc

Sensitivity: 2.0 - 4.0 mv/Volt auto sensed Input Power: 85-264 Vac (24 Vdc available) Calibration: shunt resisitor or applied pressure

Shunt Calibration Range: 60-100% Display: keyboard configurable

**Resolution:** 1 psi and 0.1 or 1.0 °C/°F **Zero Balance:** +/- 25% full scale

Alarms: 0, 1, 2, or 3

Alarm Type: Pressure or Temperature,

High or Low setpoints, direct or reverse acting, automatic or manual reset

Main Alarm Output: SPDT, NO and NC 2nd & 3rd Alarm Output: SPST, NO Serial Communications: RS-485 Communication Protocol: MODbus

Communication Baud Rate: 1200-38400 BPS Communication Format: 8 bits + parity or none

ww.one



# strain gauge & thermocouple input

### Ordering Guide

Model Number	<u>Style</u>				
IPT258	1/8 DIN panel mount (96 X 48mm)				
	Alarms (Pressure or Temperature)				
-0	no alarms, indicator only				
-1	1 alarm				
-2	2 alarms				
-3	3 alarms				
	<u>Retransmission</u>				
Ο	no retransmission signal				
R	4-20 mA				
V	0 - 10 Vdc				

## **Options**

-W 24 Vdc power supply -C MODbus communications

For configurations not listed please contact your local *ONEhalf20* distributor.



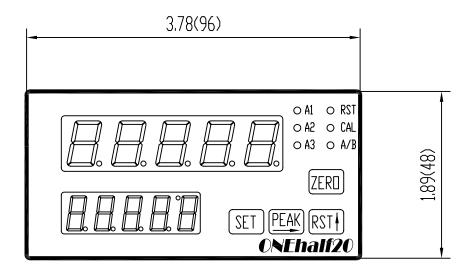
Melt Pressure & Temperature Transducer Packages from ONEhalf20

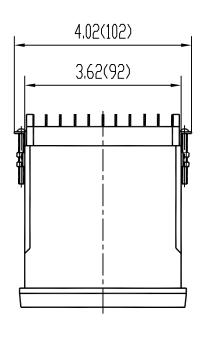
2000

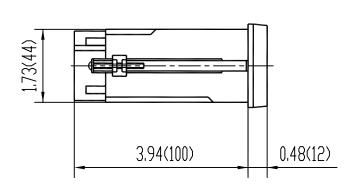
North America Toll Free 877 781-1881 Other Locations 905 474-5650 www.onehalf20.com



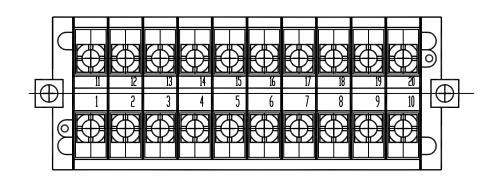
Model: IPT258 Dimensional Drawing Inches(mm)











IPT258 Wiring Diagram Power=(AC 100-240V)

RS485	RS485	AL3	AL2	AL1	Alarm	AL1	VAC	LN	Ground
-B	+∆	N/🛮	N/0	N/🛮	Com	N/C	100/240		<u></u>
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10
Signal+	Signal-	Exc+	Exc-/Com		T/C+	T/C-	_RST_	Re-trans	Re-trans
Red	Black	White	Green/Blue	Orange	(J,K,E)	(J,K,E)	Input	mA+ V+	mA- V-

IPT258 -W Wiring Diagram Power=(DC 24V)

	RS485	RS485	AL3	AL2	AL1	Alarm	AL1	+24V	0V	Ground
	$-\mathbb{B}$	+A	N/🛮	N/0	N/🛮	Com	N/C	(DC)	(DC)	≐
	11	12	13	14	15	16	17	18	19	20
	1	5	3	4	5	6	7	8	9	10
	Signal+	Signal-	Exc+	Exc-/Com	Cal	T/C+	T/C-	_RST_	Re-trans	Re-trans
	Řed	Bľack	White	Green/Blue	Orange	(J,K,E)	(J,K,E)	Input	mA+ ∨+	mA- V-

Note: \* Alarm RST switch wired between PIN8 and PIN4

\* PIN20 should be Grounded ( connected to Earth )

DATE: March/2009 V1.0