



# IPT258

## Melt Pressure & Temperature Indicator

### Product Introduction

The GT Heaters 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<sup>o</sup> 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

### strain gauge & thermocouple input

IPT 258



### 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 resistor 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

# IPT258

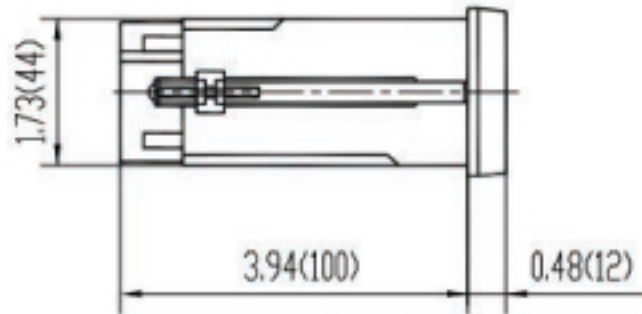
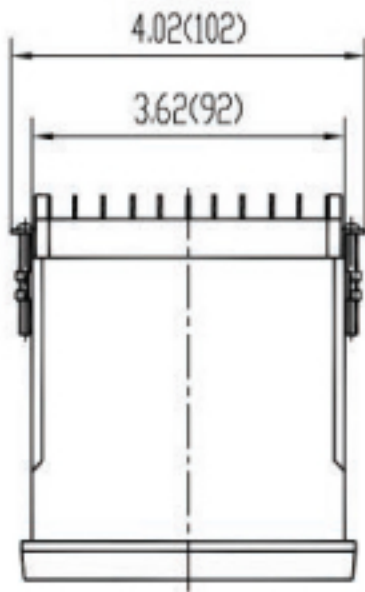
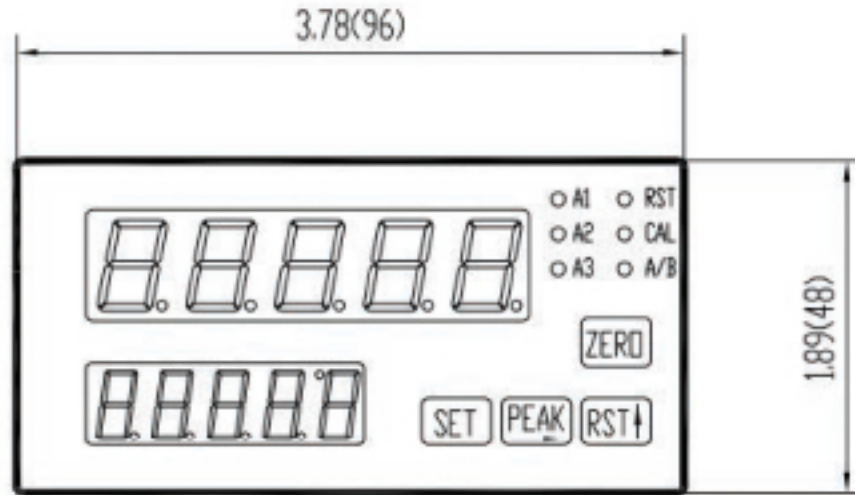
## **Melt Pressure & Temperature Indicator** *strain gauge & thermocouple input*

### Ordering Guide

<b><u>Model Number</u></b> IPT258	<b><u>Style</u></b> 1/8 DIN panel mount (96 X 48mm)
-0 -1 -2 -3	<b><u>Alarms (Pressure or Temperature)</u></b> no alarms, indicator only 1 alarm 2 alarms 3 alarms
O R V	<b><u>Retransmission</u></b> no retransmission signal 4-20 mA 0 - 10 Vdc
-W -C	<b><u>Options</u></b> 24 Vdc power supply MODbus communications

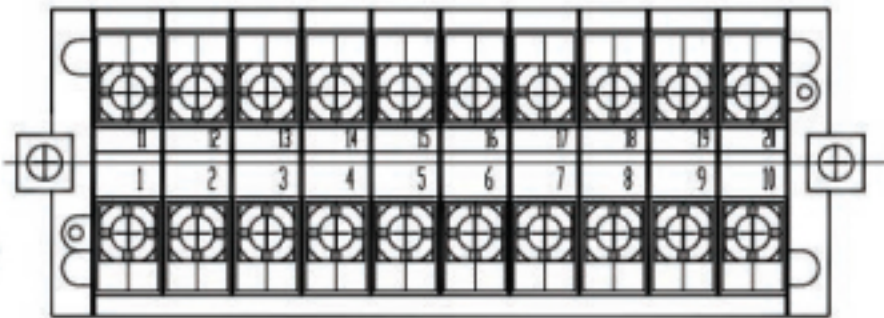


Model: IPT258  
Dimensional Drawing Inches(mm)





Model: IPT258  
Terminal Layout & Wiring Detail



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

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

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

RS485 -B	RS485 +A	AL3 N/D	AL2 N/D	AL1 N/D	Alarm Com	AL1 N/C	+24V (DC)	0V (DC)	Ground ⊥
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10
Signal+ Red	Signal- Black	Exc+ White	Exc-/Com Green/Blue	Cal Orange	T/C+ (J,K,E)	T/C- (J,K,E)	_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

Note: \* Alarm RST switch wired between PIN8 and PIN4  
\* PIN20 should be Grounded ( connected to Earth )