

258 Series 1/8 DIN Panel Mount Pressure Indicator Programming, Menu's & Operating Guide Version 1.08



Operating & Design Overview

The ONEhalf20 258 Series is a micro-processor digital design based precision pressure, or pressure & temperature 1/8 DIN panel mount indicator featuring dual 5-digit LED displays of process variables. With standard features such as a push button auto-zero and peak display function, as well as a simple "one-touch" calibration procedure for melt pressure transducers, the 258 series indicators offer enhanced user functionality and versatility.

The IPT258 version of the indicator is capable of displaying both the process melt pressure and melt temperature simultaneously for operator monitoring of critical real-time process parameters in a compact package.

The 258 series indicator offers up to three fully programmable alarm relays, suitable for pressure and/or temperature alarming. The alarms can be programmed for both manual or automatic reset and early warning indication; ideal for optimum process monitoring, alarming, and first alert indication.

The 258 series also offers a digital input for remote alarm reset, as well as optional 4-20mA, or 0-10Vdc, user selectable and scalable, process pressure value re-transmission. RS485 MODBus communications is also available.

The ONEhalf20 258 series panel mount indicators incorporate an 8 bit microprocessor with a dual channel 16 bit A/D differential input converter and a single channel 14 bit D/A output device insuring high accuracy and reliability.

The 258 series indicators utilize proprietary programmable firmware which completely eliminates the need for internal jumpers and/or switches. All of the indicators configuration, set-up and user variables are fully programmable via either the (4) front panel buttons or with the optional Windows based software via RS485 communications.

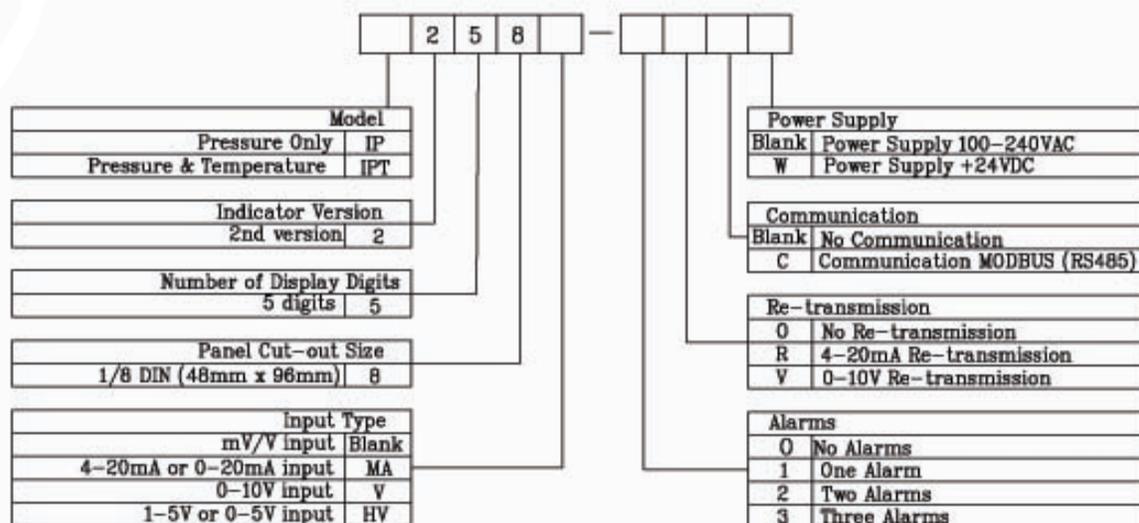
The ONEhalf20 258 series advanced features guarantee the user a highly accurate, reliable and repeatable pressure measurement.

General Specifications

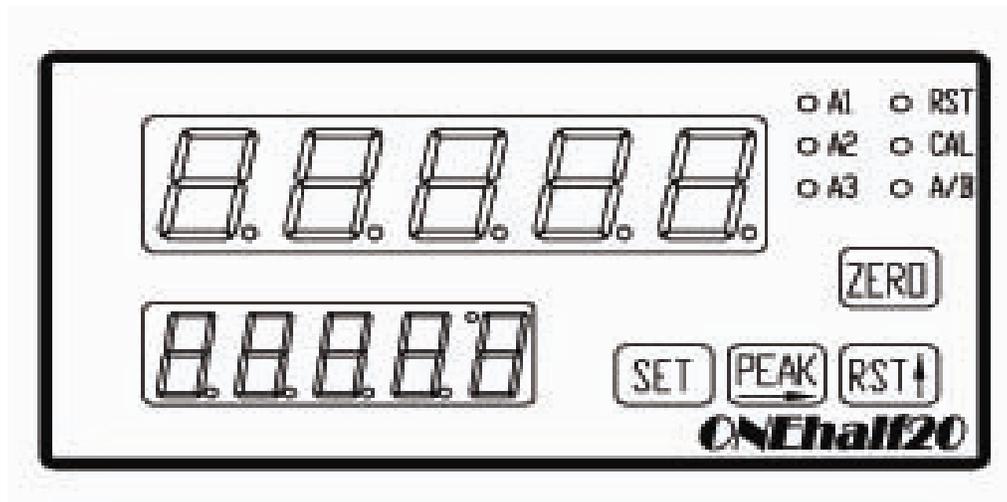
Display	Dual 5-digit LED's, 0.5" Red, 0.4" Green
Pressure (PV)	PSI, bar, kgf/cm ² , MPa, Red LED's - Upper Display
Resolution	1 PSI, 0.1 bar, 0.1 kgf/cm ² , 0.01MPa
Temperature	°C or °F, Green LED's - Lower Display
Resolution	0.1 or 1.0 °C or °F
Accuracy	Pressure 0.05% of FSV, Temperature 5°F (0-1000°F)
LED's	Alarm 1, Alarm 2, Alarm 3, RST, Cal, A/B (MODBus)
Sampling Speed	28 times per second
Alarm(s)	1-SPDT plus 2 - SPST relays, 110-220V 1A
Alarm Range	00001 - Full Scale Value (FSV)
Input Sensitivity	2.0 ~ 4.0mV/V - (3.33mV/V default setting) 4-20mA or 0-10Vdc process input (optional)
Excitation Voltage	+5 VDC for mV/V strain gauge input +20 VDC for 4-20mA or 0-10Vdc process input
Calibration	60% ~ 100% adjustable - (80% default setting)
Digital Input	Remote alarm reset
Re-transmission	4-20mA or 0-10Vdc, user selectable & scalable
Communication	RS-485 MODBus - RTU
Temperature Electronics	0 - 60°C
Humidity	<= 80% RH
Power Supply	Universal 110/220VAC, optional 24Vdc (code-W)
Weight	350g
Electrical Termination	20 screw terminals (2 rows of 10 terminals)
Size & Dimensions	1/8 DIN - 96 mm X 48 mm X 110 mm (W x H x D)
Panel Cutout Dimensions	92 mm X 45 mm

258 Series Model Number Breakdown

Please review the model number breakdown to confirm that the unit which you are intending to use is suitable for your application.



258 Series Front Panel Layout



Front Panel Buttons

- Zero** sets the pressure value at zero or resets the peak values while flashing.
Peak display flashes with the pressure and temperature peak values.
RST manually resets the alarms.
Set enters and exits the menus.

Beacon's/LED's

- AL1** Alarm 1 (flashing in early warning range)
AL2 Alarm 2 (flashing in early warning range)
AL3 Alarm 3 (flashing in early warning range)
RST Remote alarm reset
CAL Shunt calibration signal
A/B MODBus communications

Wiring Terminals

Rear mounted - 2 rows - 10 screw terminals per row - 20 terminals in total



258 Series Menu's & Programming Instructions

Menu/Description

Configuration Menu: This menu is typically used by the technician to set-up/program the Indicator for its intended application. The configuration menu's various codes must be reviewed and reset if necessary prior to using the Indicator. It is recommended that this menu is password protected to eliminate unauthorized access.

The Configuration Menu also permits access to the Calibration Menu.

To enter or exit the Configuration Menu press and hold the "Set" button for 3 seconds.

Basic Calibration Menu: The single point calibration procedure in this menu will provide accuracy consistent with that of the sensor and is appropriate for the majority of applications.

To enter the Calibration Menu set U45=ON in the Configuration Menu and you will jump to U99. Set U99=2345 to begin calibration.

Calibration Note: If you are using a Melt Pressure Transducer with 3.33mV/Volt (33.3 mV output) and the Transducer and Indicators Full Scale Value (FSV) are the same press the "Zero" button. A further calibration is normally not required for most melt pressure applications.

High Accuracy Calibration Menu: The 6 point calibration procedure in this menu will provide overall accuracy that exceeds the sensors accuracy specifications and would typically be used in high accuracy applications or when calibrating to a known certified pressure source for ISO or other quality standards or requirements.

To enter the High Accuracy Calibration Menu set U45=ON in the Configuration Menu and you will jump to U99. Set U99=3456 to begin calibration.

Operator Menu: This menu is typically used by the operator to enter the Alarm SP (Set-Point) values and only after the Alarm modes have been appropriately set in the Configuration menu at U11, U21, and U31. This menu can be password protected in the Configuration Menu.

To enter the Operator Menu press the "Set" button and release.

NOTE: To exit or escape any Menu at any time press and hold the "Set" button for at least 3 seconds.

Configuration Menu

NOTE: Some menu items, codes, and/or configuration settings may not appear as they are model dependent.

Front Panel Button Functions

- Set** enter the current data and move to the next menu item
- Peak** shift the flashing digit from left to right
- RST** edit the flashing digit from 0-9

To enter the Configuration Menu, press and hold the "Set" button for at least 3 seconds. The first menu item to appear will be code U11 as below. U02 appears if a password had been previously set in this Menu @ U92.

You can exit the menu at any time - press and hold the "Set" Button for 3 seconds

Code Configuration (Default)
Settings & definition
U02 Password (Default no password)
This code will only appear if preset at U92
U11 Alarm 1 operating mode (Default 1=PH which is Pressure High)
1=PH (Pressure High) for high pressure alarm
2=PL (Pressure Low) for low pressure alarm
3=tH (Temperature High) for high temperature alarm
4=tL (Temperature Low) for low temperature alarm
5=PHr (Pressure High Failsafe) high alarm - reverse acting
6=PFE (Pressure Low) low alarm with falling edge
7=tHr (Temperature High Failsafe) high alarm - reverse acting
8=tFE (Temperature Low) low alarm with falling edge
9=CON alarm controlled through RS485 communications
U12 Alarm 1 set-point value (Default FSV - full scale value)
NOTE: If this menu item appears you are in the Operator Menu. To escape press and hold the "Set" Button for 3 seconds.
U13 Alarm 1 hysteresis (Default 25)
Adjustable from 0-999
U14 Alarm 1 reset mode (Default 0>manual reset)
0>manual reset - reset the alarm with the "RST" button or by remote input
1=alarm will automatically reset
U15 Alarm 1 early warning offset from set-point (Default 0-no early warning)
Adjustable from 0-999
AL1 LED begins to flash when the process value enters the early warning range. For high alarms the range is from minus offset value to set-point. For low alarms the range is from set-point to plus offset value.

Configuration Menu (Cont'd)

Code	Configuration (Default)
	Settings & definition
U21	Alarm 2 operating mode (Default 0=Alarm 2 off)
	0=Alarm 2 off
	1=PH (Pressure High) for high pressure alarm
	2=PL (Pressure Low) for low pressure alarm
	3=tH (Temperature High) for high temperature alarm
	4=tL (Temperature Low) for low temperature alarm
	5=PHr (Pressure High Failsafe) high alarm - reverse acting
	6=PFE (Pressure Low) low alarm with falling edge
	7=tHr (Temperature High Failsafe) high alarm - reverse acting
	8=tFE (Temperature Low) low alarm with falling edge
	9=CON alarm controlled through RS485 communications
U22	Alarm 2 set-point value (Default FSV - full scale value)
	NOTE: If this menu item appears you are in the Operator Menu. To escape press and hold the "Set" Button for 3 seconds.
U23	Alarm 2 Hysteresis (Default 25)
	Adjustable from 0-999
U24	Alarm 2 reset mode (Default 0)
	0>manual reset - reset the alarm with the "RST" button or by remote input
	1=alarm will automatically reset
U25	Alarm 2 early warning offset from set-point (Default 0-no early warning)
	Adjustable from 0-999
	Refer to U15 for details
U31	Alarm 3 operating mode (Default 0=Alarm 3 off)
	0=Alarm 3 off
	1=PH (Pressure High) for high pressure alarm
	2=PL (Pressure Low) for low pressure alarm
	3=tH (Temperature High) for high temperature alarm
	4=tL (Temperature Low) for low temperature alarm
	5=PHr (Pressure High Failsafe) high alarm - reverse acting
	6=PFE (Pressure Low) low alarm with falling edge
	7=tHr (Temperature High Failsafe) high alarm - reverse acting
	8=tFE (Temperature Low) low alarm with falling edge
	9=CON alarm controlled through RS485 communications
U32	Alarm 3 set-point value (Default FSV - full scale value)
	NOTE: If this menu item appears you are in the Operator Menu. To escape press and hold the "Set" Button for 3 seconds.
U33	Alarm 3 Hysteresis (Default 25)
	Adjustable from 0-999
U34	Alarm 3 reset mode (Default 0)
	0>manual reset - reset the alarm with "RST" button or by remote input
	1= alarm will automatically reset
U35	Alarm 3 early warning offset from set-point (Default 0-no early warning)
	Adjustable from 0-999
	AL3 LED begins to flash when the process value enters the early warning range. For high alarms the range is from minus offset value to set-point. For low alarms the range is from set-point to plus offset value.

Configuration Menu (Cont'd)

U41 Pressure Units (Default 0 = PSI)
0=PSI - (resolution 1 PSI)
1=Bar - (resolution 0.1 Bar)
2=Kgf/cm - (resolution 0.1 Kgf/cm)
3=MPa - (resolution 0.01 MPa)
U42 Pressure Display Offset Value (Default 0 = No offset)
Adjustable from -99 to 99
This offset adjustment only affects the indicator's pressure display value.
U43 Full Scale Value (FSV) (Read Only Item)
This read only item displays the Full Scale Value (FSV) of the Indicator. NOTE: You must insure that the indicator's FSV is set the same as the FSV of your Pressure Sensor. If not you must activate the Calibration Menu at U45 and complete the calibration procedure. (The FSV setting is made at UA2 in the basic calibration menu or UA5 in the high accuracy calibration menu)
U44 Zero Limit Adjustment (Default = 400)
Adjustable from 0 to 3,000
This menu item is used to restrict or limit the indicator from being zeroed when a real pressure is present in the process.
U45 Activate the Calibration Menu (Default OFF)
OFF=not activated menu continues on to U46
ON=activated menu will jump to U99 - See Calibration Menus
NOTE: If you are using a Melt Pressure Transducer with 3.33mV/Volt output and the Transducer and Indicators Full Scale Value (see U43) are the same a further calibration is generally not required for most melt pressure applications.
U46 Temperature Units (Default 0=°F with resolution of 0.1)
0=°F - with resolution of 0.1
1=°C - with resolution of 0.1
2=°F - with resolution of 1.0
3=°C - with resolution of 1.0
U47 Temperature Display Offset Value (Default 0)
Adjustable from -300 to 300
This offset adjustment only affects the indicator's temperature display value.

258 Series Calibration & Menu's

Note: If you are using a Melt Pressure Transducer with 3.33 mV/Volt (33.3 mV output) and you have confirmed that the Transducer and Indicators Full Scale Value (FSV) are the same pressing the "Zero" button eliminates the need for a further calibration.

Basic Calibration Menu

Only accessible from the Configuration Menu when U45=activated.

The single point calibration procedure in this menu will provide accuracy consistent with that of the sensor and is appropriate for the majority of applications.

Code	Configuration (Default)
	Settings & definition
U99	Calibration Procedure
	2345=to begin the basic calibration procedure
UA0	Thermocouple Type (Default 0=Type J Thermocouple)
	0=Type J
	1=Type K
	2=Type E
NOTE: This Menu item will only appear on dual input pressure & temperature models.	
UA1	Zero Point Setting
	With no pressure exerted on the diaphragm press the "Peak" button on the Indicator's front panel.
UA2	Full Scale Value (FSV) Setting (Default=10,000)
	Edit the value to match the Full Scale Value of your Pressure Sensor.
UA3	Calibration Point Setting (Default=80% for shunt calibration)
	Adjustable from 60-100% of Full Scale Range
UA4	Calibration Procedure
	Using Internal Shunt: With the shunt wiring from the sensor connected to the rear of the indicator press the "Peak" button on the Indicator's front panel to complete the calibration.
	Using Actual Pressure: With no shunt wiring connected to the indicator exert pressure on the diaphragm and only press the "Peak" button when the applied pressure reaches the value set at UA3.

Note: After completing the Calibration you may want to re-enter the Configuration Menu to review all of the settings.

High Accuracy Calibration Menu

Only accessible from the Configuration Menu when U45=activated.

The 6 point calibration procedure in this menu will provide overall accuracy that exceeds the sensors accuracy specifications and would typically be used in high accuracy applications. This is the recommended calibration procedure when using a known certified pressure source.

Code Configuration (Default)	Settings & definition
U99 Calibration Procedure	3456=to begin the high accuracy calibration procedure
UA0 Thermocouple Type (Default 0=Type J Thermocouple)	0=Type J 1=Type K 2=Type E
NOTE: This Menu item will only appear on dual input pressure & temperature models.	
UA1 Zero Point Calibration	With no pressure exerted on the diaphragm press the "Peak" button on the Indicator's front panel.
UA2 Full Scale Value (FSV) Setting (Default=10,000)	Edit the value to match the Full Scale Value of your Pressure Sensor.
UA3 Primary Calibration Point Selection (Default=80%)	Adjustable from 60-100% of Full Scale Range
UA4 Primary Calibration	Using Actual Pressure: With no shunt wiring connected to the indicator exert pressure on the diaphragm and only press the "Peak" button when the applied pressure reaches the value set at UA3. You can redo if necessary.
UA5 Full Scale Output of the re-transmission signal	Indicates the same value as UA2 and should be identical to the FSV of your sensor. Editing this value would permit maximum turndown of the retransmission signal.
UA6 Modify Factory Defaults (Factory Default Code)	Note: DO NOT EDIT
UB1 Secondary Calibration Point 1 (10% of UA2)	Exert pressure on the diaphragm and press the "Peak" button when the applied pressure reaches this calibration point. You can redo if necessary.
UB2 Secondary Calibration Point 2 (20% of UA2)	Exert pressure on the diaphragm and press the "Peak" button when the applied pressure reaches this calibration point. You can redo if necessary.
UB3 Secondary Calibration Point 3 (40% of UA2)	Exert pressure on the diaphragm and press the "Peak" button when the applied pressure reaches this calibration point. You can redo if necessary.
UB4 Secondary Calibration Point 4 (60% of UA2)	Exert pressure on the diaphragm and press the "Peak" button when the applied pressure reaches this calibration point. You can redo if necessary.
UB5 Secondary Calibration Point 5 (100% of UA2)	Exert pressure on the diaphragm and press the "Peak" button when the applied pressure reaches this calibration point. You can redo if necessary.

Note: After completing the Calibration you may want to re-enter the Configuration Menu to review all of the settings.

Operator Menu

Front Panel Button Functions

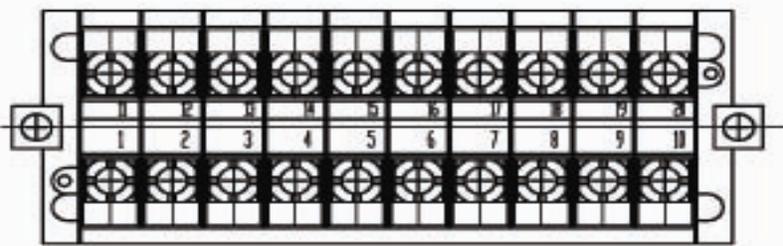
- Set** enter the current data and move to the next menu item
Peak shift the flashing digit from left to right
RST edit the flashing digit from 0-9

To enter the Operator Menu, press the "Set" button and release.

The first menu code to appear is U12 as below.

U01 appears if a password has been previously set @ U91 in the Configuration Menu.

Code Configuration (Default)
Settings & definition
U01 Password (Default no password)
Only appears if preset in the Configuration Menu at U91.
U12 Alarm 1 set-point (SP) value (Default FSV = full scale value)
Adjustable from 1 to FSV
U22 Alarm 2 set-point (SP) value (Default FSV = full scale value)
Adjustable from 1 to FSV
Only appears if an Alarm 2 mode has been set in the Configuration Menu at U21
U32 Alarm 3 set-point (SP) value (Default FSV = full scale value)
Adjustable from 1 to FSV
Only appears if an Alarm 3 mode has been set in the Configuration Menu at U31

258 Series mV/Volt Input - Wiring Details
Rear Terminal Layout & Numbers

IP258 110/240 VAC Power

RS485 -B	RS485 +A	AL3 N/O	AL2 N/O	AL1 N/O	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			_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

IP258 24 VDC Power

RS485 -B	RS485 +A	AL3 N/O	AL2 N/O	AL1 N/O	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			_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

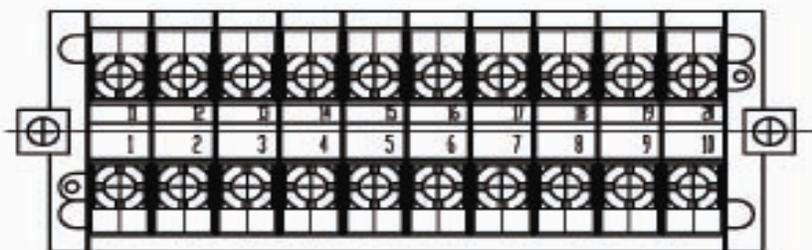
IPT258 110/240 VAC Power

RS485 -B	RS485 +A	AL3 N/O	AL2 N/O	AL1 N/O	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 24 VDC

RS485 -B	RS485 +A	AL3 N/O	AL2 N/O	AL1 N/O	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-

* PIN20 should be Grounded (connected to Earth)

258 Series 4-20mA or 0-10Vdc Process Input – Wiring Details
Rear Terminal Layout & Numbers

IP258 4-20mA process input 110/240 VAC power

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
Input+ Sig. mA+	Input- Sig. mA-	Exc+ 20VDC	Exc-/Com 0V				_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

IP258 0-10Vdc process input 110/240 VAC power

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
Input+ Vin +	Input- Vin -	Exc+ 20VDC	Exc-/Com 0V				_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

IPT258 4-20mA process input & 110/240 VAC power

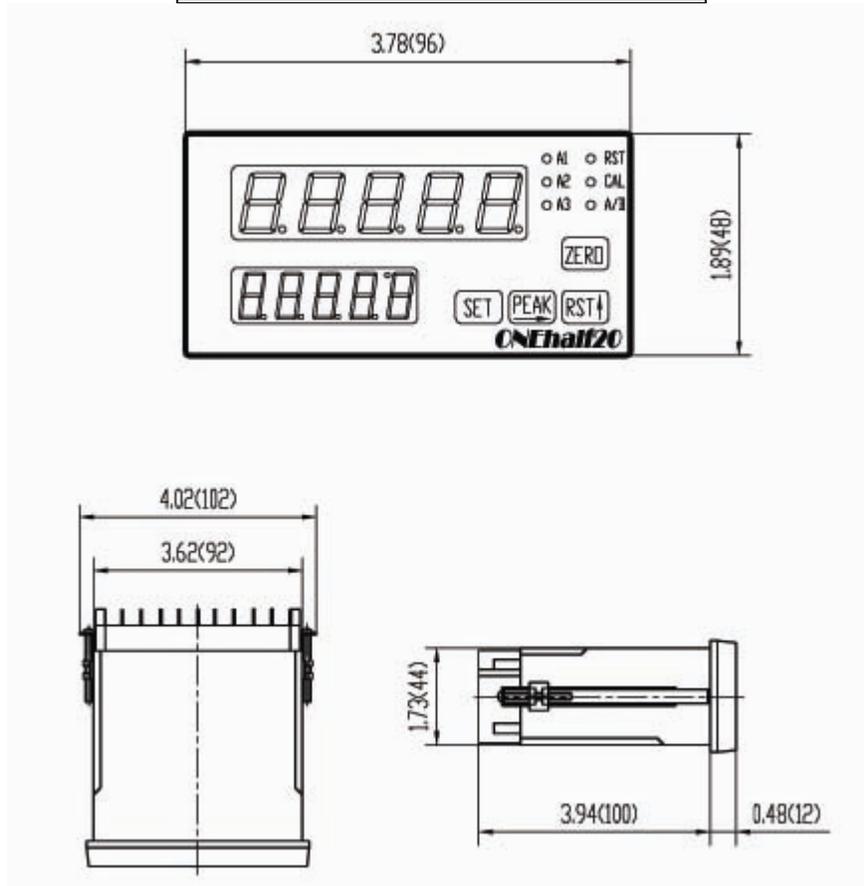
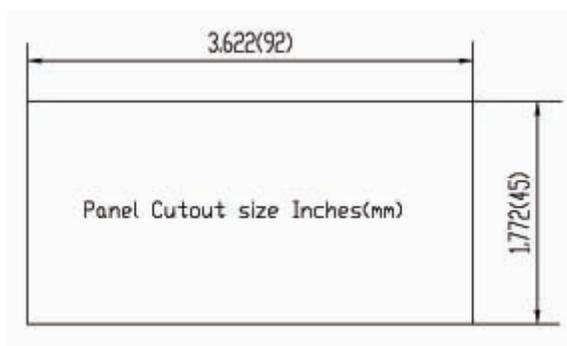
RS485 -B	RS485 +A	AL3 N/D	AL2 N/D	AL1 N/D	Alarm Com	AL1 N/C	VAC 100/240	LN	Ground ⊥
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10
Input+ Sig. mA+	Input- Sig. mA-	Exc+ 20VDC	Exc-/Com 0V		T/C+ (J,K,E)	T/C- (J,K,E)	_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

IP258 0-10Vdc process input & 110/240 VAC power

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
Input+ Vin +	Input- Vin -	Exc+ 20VDC	Exc-/Com 0V		T/C+ (J,K,E)	T/C- (J,K,E)	_RST_ Input	Re-trans mA+ V+	Re-trans mA- V-

* PIN20 should be Grounded (connected to Earth)

* PIN2 and PIN4 are internally connected

Dimensional Details**Panel Cut-Out Dimension**



Frequently Asked Question's

1. How do I calibrate the indicator?

If you are using a Melt Pressure Transducer with 3.33 mV/Volt (33.3 mV output) and you have confirmed that the Transducer and Indicators Full Scale Value (FSV) are the same pressing the "Zero" button eliminates the need for a further calibration. For other methods see the calibration menus on page 9 or 10.

2. What does the Fail Safe mode mean for the alarms?

In the event of a failure, the alarm contacts inside the indicator return to the de-energized state.

3. What does the Falling Edge mode mean for the alarms?

The alarm is activated only after the process value exceeded the set point value and has dropped back below the set point value. It can also mean alarm masking.

4. What does Automatic Reset mean for the alarms?

The alarm is automatically deactivated once the alarm condition is off.

5. How do I reset the alarms?

You can press the "RST" button on the front panel of the indicator. You can also use a remote reset device wired between terminals 4 and 8.

6. Why can't I reset the alarms?

Confirm that the all of the alarm settings are correct for your application and the alarm condition is off.

7. I purchased the indicator as part of a MELTPAK package. Do I need to calibrate and/or configure the indicator?

No the indicator has been calibrated to the transducer included with your MELTPAK. You do need to enter the Configuration Menu and set the correct alarm operating mode(s) for your application. You would then need to enter appropriate alarm SP (set point) values in the Operator Menu.

8. Why is the pressure value being displayed incorrect?

The pressure sensor and indicators FSV are not the same. Enter the configuration menu and check the FSV @ U43.

9. Can I make the pressure display more stable?

It is important that the indicator is well grounded via terminal 20. You should also activate the pressure display filter @ U52.

10. I am using a 0-10,000 psi transducer but I want to display the value in MPa will the indicators pressure display still be accurate?

Yes when you change the units of measure @ U41 the indicator automatically re-calibrates the display to the new pressure unit.

11. Why is the melt temperature much lower than the actual temperature in my process?

Check and confirm that the thermocouple type is set correctly at UA0 in the Calibration Menu. Confirm that the extension wire being used matches the thermocouple type.

The transducers temperature sensor is embedded behind the diaphragm and as such will measure a lower melt temperature than the actual process value. You can adjust the indicators temperature display by using the offset feature @ U47.

12. My transducer has a recommended excitation voltage of 10Vdc or a range of 6-12Vdc, is it compatible with the indicator?

Yes the 258 series internal 5Vdc excitation voltage is OK. A lower voltage source is actually preferable and in fact, one could argue that it is better for the transducer as there would be less self-heating of the strain gauge.

13. What is FSV?

FSV is the Full Scale Value of a device or the upper limit of its measuring range.

Additional Technical Support

**North America Toll Free: 877-781-1881 From
Other Locations: 905-474-5650
By Email: sales@onehalf20.com**



Warranty

All ONEhalf20 product excluding rupture disc's, melt temperature sensors, and accessory items are warranted for a period of 1 year from the date of manufacture. This warranty extends to the original purchaser only.

The warranty confirms to the purchaser that the products meet or exceed the published specifications issued from time to time by ONEhalf20. Also, that the products are free from defects in material and workmanship for a period of one year.

This warranty is voided in its entirety if the products have been altered or tampered with.

ONEhalf20 makes no other warranty, express or implied, written or oral, to the design, construction, or performance thereof, including without limitation, implied warranties of merchantability, fitness for a particular purpose, and all such warranties are hereby expressly excluded.

Repair

Questions concerning warranty, repair cost, delivery, and requests for an RMA# should be directed to the ONEhalf20 Service Department, (416)-781-1881 or by email: service@onehalf20.com. Please call for a return authorization number (RMA#) before returning any product. Damaged units should be returned to:

ONEhalf20 Inc.
Attn: Service Department
RMA# _____
20 Steelcase Road Unit 1A
Markham, Ontario L3R 1B2
Canada

Operating Guide Version 1.08
February 2009

www.onehalf20.com

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