Microprocessor Bargraphic Display Scaling Meter

FineTek
Your Made-To-Order Solutions

INTRODUCTION

FEATURES

Adapts microprocessor control circuit, modular design, advanced digital calibration, and switching power supply technology.

Modulized design is a concept to adapt different analog input signals by means of changing different signal board (such as temperature, pressure, alternating voltage, electric current.). Also, optional output board could add the analog output signal (isolated). By using advanced digital calibration capability, its analog input/output could be accurate to +/- 1 bit.

PB SERIES---BARGRAPH DISPLAY

It is easy to tell the measuring, operator can tell measuring range easily by eyesight even in the remote site.

Provides not only 4 digits numerical display with bargraph analog output indicator but also 6 relay setting points. It makes users to tell Process setting position without difficulties by bargraph indicator. In general, it is an easy applied and understand model to customers.

PB-2471 is designed for dual channel applications. It can measure 2 input signals simultaneously by only one meter. Also, it supports 2 channels analog output signals and 4 relay contacts. To users, it provides both convenient panel layout operation and relatively lower cost when compared with using two panel meters.

PB-1570 and PB-1470 are horizotal mounting design, all functions are same as vertical models.

PM SERIES---DIGITAL DISPLAY

PM-2430 is designed for dual channel applications. It can measure 2 input signals simultaneously by only one meter. Also, it supports 2 channels analog output signals and 2 relay contacts. To users, it provides both convenient panel layout operation and relatively lower cost when compared with using two panel meters.

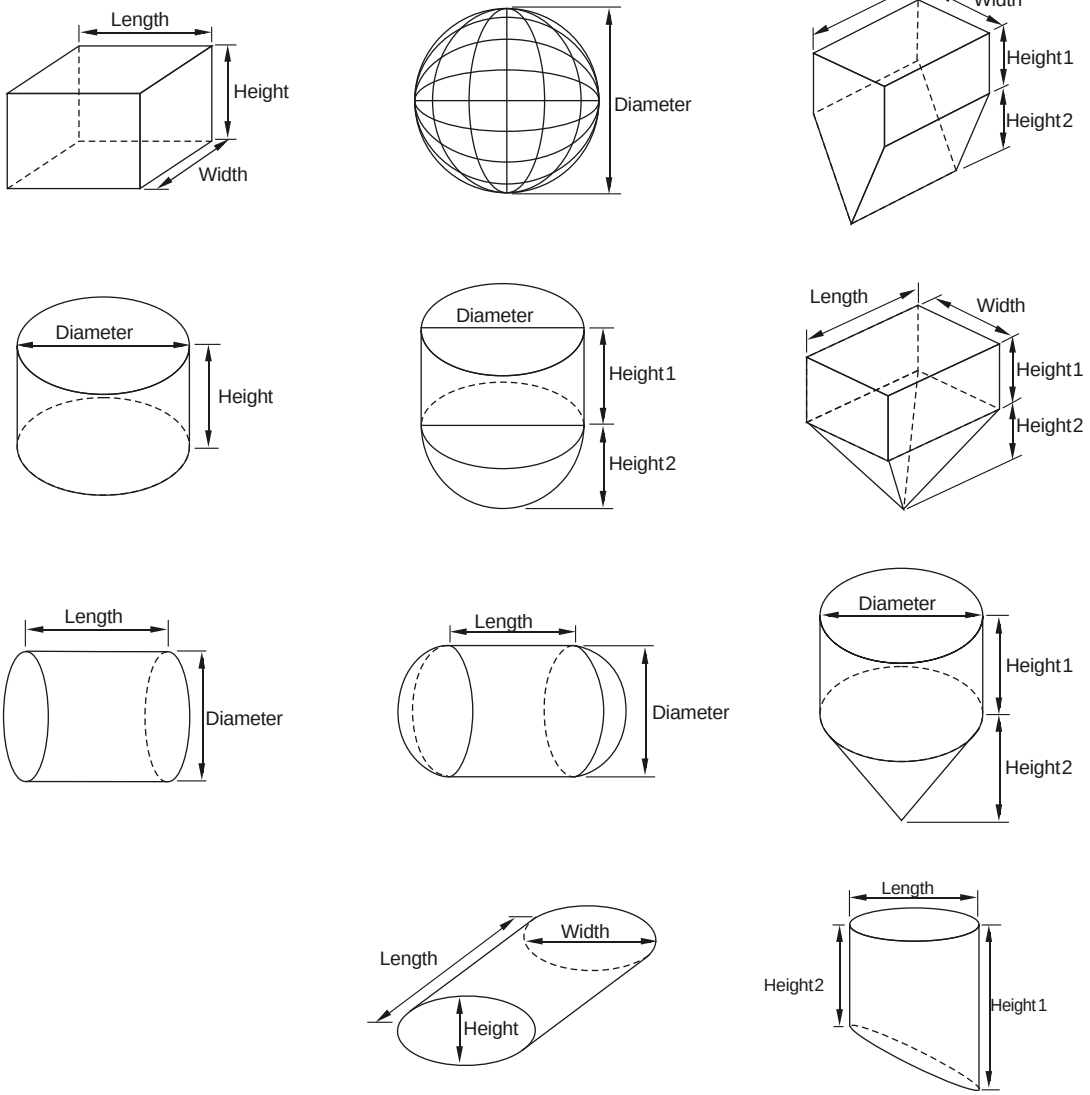
PM-1530/1430 are single channel models with 5-digit or 4 digit LED display respectively.

NON-LINEAR TANK VOLUME CONVERSION FEATURE

NON-LINEAR TANK VOLUME CONVERSION FEATURE

PM/PB Series support volume adjustment function for non-linear tanks. By means of a 20-point look-up table, panel meter calculate tank volume according to the material level measured.
Bundled with this package, a software is provided, user simply select tank type shown as below, and enter necessary dimension, tank volume and 20 control points will be calculated and reported.

TANK TYPE:



SPECIFICATIONS

Microprocessor Bargraph Display Panel Meter

Appearance					
Dimension (mm)		**48 (W) x144 (H) x121.5 (D) DIN 3/16**	**48 (W) x144 (H) x121.5 (D) DIN 3/16**	**144 (W) x48 (H) x121.5 (D) DIN 3/16**	**144 (W) x48 (H) x121.5 (D) DIN 3/16**
Model		**PB-2471**	**PB-1471**	**PB-1470**	**PB-1570**
Display		Dual Row 4-digit 7-segment LED Dual Column 101-segment LED Bargraph Display Totally 8 Set Points	4 Digits 7-Segment LED 101 LED Bargraph Display Totally 6 Set Points	4 Digits 7-Segment LED 101 LED Bargraph Display Totally 6 Set Points	5 Digits 7-Segment LED 101 LED Bargraph Display Totally 6 Set Points
Standard	Display Range	-1999 ~ +9999 ◦	-1999 ~ +9999 ◦	-1999 ~ +9999 ◦	-19999 ~ +32767 ◦
	Input Signal	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)
	Relay Contact	4 Relay	4 Relay	4 Relay	4 Relay
	Power Supply	85 ~ 265V AC or 18 ~ 36V DC	85 ~ 265V AC or 18 ~ 36V DC	85 ~ 265V AC or 18 ~ 36V DC	85 ~ 265V AC or 18 ~ 36V DC
Optional	Relay	Expand to 8 Relay	Expand to 6 Relay	Expand to 6 Relay	Expand to 6 Relay
	Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V	4~20mA, 0~20mA, 2~10V and 0~10V	4~20mA, 0~20mA, 2~10V and 0~10V	4~20mA, 0~20mA, 2~10V and 0~10V
	Communi-cation port	RS-485 (Modbus)	RS-485 (Modbus)	RS-485 (Modbus)	RS-485 (Modbus)
	Non-Linear Function	Non-Linear Tank Volume Conversion Feature (20 points)	Non-Linear Tank Volume Conversion Feature (20 points)	Non-Linear Tank Volume Conversion Feature (20 points)	Non-Linear Tank Volume Conversion Feature (20 points)

SPECIFICATIONS

Microprocessor Digit Display Panel Meter

Appearance					
Dimension (mm)		**96 (W) x48 (H) x128.5 (D) DIN 1/8**	**96 (W) x48 (H) x128.5 (D) DIN 1/8**	**96 (W) x48 (H) x128.5(D) DIN 1/8**	**96 (W) x48 (H) x128.5(D) DIN 1/8**
Model		**PM-1430**	**PM-2430**	**PM-1530**	**PM-1430-W (4 digit) PM-1530-W (5 digit)**
Display		4 Digits 7-Segment LED Totally 4 Set Points	Dual Channel Signal Input Dual 4 Digits LED Numeric Display Totally 4 Set Points	5 Digits 7-Segment LED Totally 4 Set Points	5 Digits 7-Segment LED Totally 4 Set Points
Standard	Display Range	-1999 ~ +9999 。	-1999 ~ +9999 。	-19999 ~ +32767 。	-1999 ~ +9999 。 -19999 ~ +99999 。
	Input Signal	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)	20mA, 200mA, 5V, 10V, 20V ,200V (Refer to Input Signal Setting)
	Relay Contact	2 Relay	4 Relay	2 Relay	4 Relay
	Power Supply	85 ~ 265V AC or 18 ~ 36V DC	85 ~ 265V AC or 18 ~ 36V DC	85 ~ 265V AC or 18 ~ 36V DC	20 ~ 250Vac/Vdc 50/60Hz
Optional	Relay	Expand to 4 Relay	————————	Expand to 4 Relay	————————
	Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V	4~20mA, 0~20mA, 2~10V and 0~10V	4~20mA, 0~20mA, 2~10V and 0~10V	4~20mA, 0~20mA, 2~10V and 0~10V
	Communi-cation port	RS-485 (Modbus)	RS-485 (Modbus)	RS-485 (Modbus)	RS-485 (Modbus)
	Non-Linear Function	Non-Linear Tank Volume Conversion Feature (20 points)	Non-Linear Tank Volume Conversion Feature (20 points)	Non-Linear Tank Volume Conversion Feature (20 points)	Non-Linear Tank Volume And Input Signal Conversion (each 20 points)

PB-2471 Microprocessor Bargraph Display Panel Meter

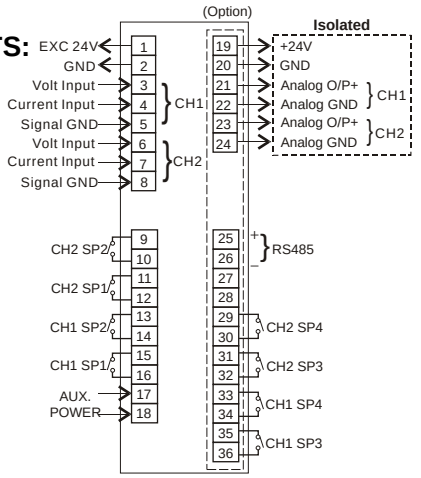
FEATURES:

- Dual 4 Digits LED Numeric Display
- Dual 101-segment LED Bargraph display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP54 Class front panel

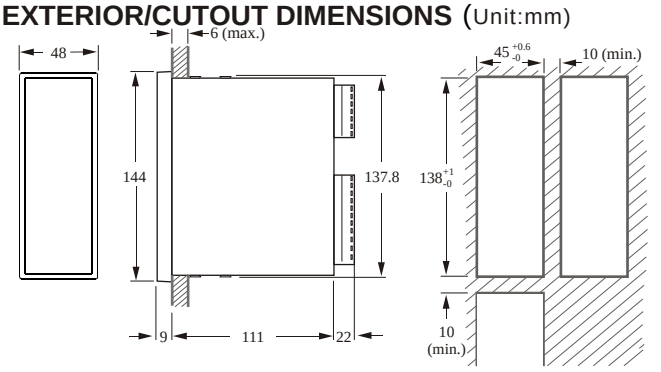
SPECIFICATIONS

Dimension (mm)	**48 (W) x144 (H) x121.5 (D) DIN 3/16**
Model	**PB-2471**
Power Supply	85 ~ 265V AC or 18~36V DC Switching Power Supply
Power Supply for sensor	DC24V, 50mA
Display	Dual 4 Digits, 0.36" 7-Segment LED Display 101 LED Bargraph Display 4 LED set-point indicator Display Range: -1999 ~ +9999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 2 samples/second/channel
Relay Contact	4 relay (up to 8 relay) 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 12VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50℃(20 to 90% RH non-condensed)
Storage condition	0~70℃(20 to 90% RH non-condensed)

TERMINAL ARRANGEMENTS:



EXTERIOR/CUTOUT DIMENSIONS (Unit:mm)



ORDERING INFORMATION:

PB-2471-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal (CH1)	1---4~20mA DC with Exc 24V 2---0~20 mA DC with Exc 24V 3---0~200 mA DC with Exc 24V 4---5V DC with Exc 24V 5---10V DC with Exc 24V 6---20V DC with Exc 24V 7---200V DC with Exc 24V
Input Signal (CH2)	1---4~20mA DC with Exc 24V 2---0~20 mA DC with Exc 24V 3---0~200 mA DC with Exc 24V 4---5V DC with Exc 24V 5---10V DC with Exc 24V 6---20V DC with Exc 24V 7---200V DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays 8---8 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 5---Dual Analog output, 0~10V 6---Dual Analog output, 0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface

Ex: PB-2471-S14-4000
Represents: PB-2471 Model, Power supply 85~265V AC, Analog input signal, CH1: 4~20mA, CH2: 0~5V, 4 relay contact, without Non-Linear Function, without Analog output.

PB-1471 Microprocessor Bargraph Display Panel Meter

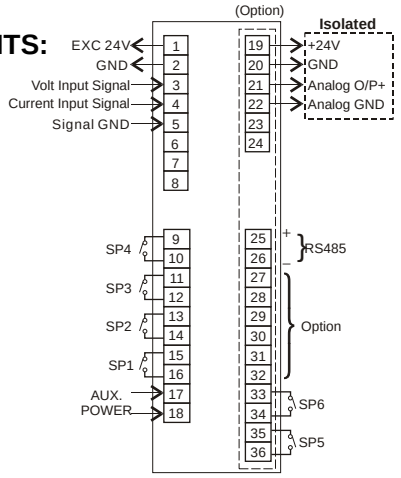
FEATURES:

- 4 Digits LED Numeric Display
- 101-segment LED Bargraph display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP54 Class front panel

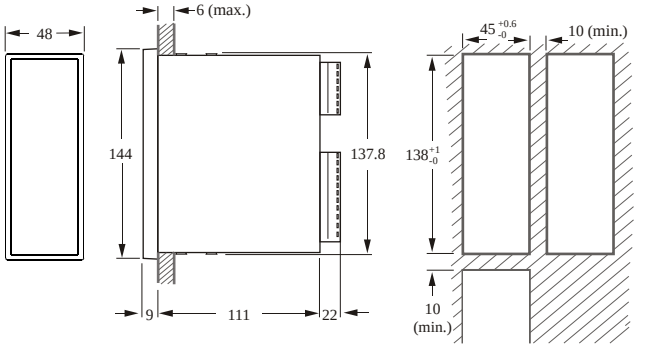
SPECIFICATIONS

Dimension (mm)	**48 (W) x144 (H) x121.5 (D) DIN 3/16**
Model	**PB-1471**
Power Supply	85 ~ 265V AC or 18~36V DC Switching Power Supply
Power Supply for sensor	DC24V, 50mA
Display	4 Digits, 0.36" 7-Segment red LED Display 101 LED Bargraph Display 6 LED set-point indicator Display Range: -1999 ~ +9999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 4 samples/second
Relay Contact	4 relay (up to 6 relay) 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 9VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50℃(20 to 90% RH non-condensed)
Storage condition	0~70℃(20 to 90% RH non-condensed)

TERMINAL ARRANGEMENTS:



EXTERIOR/CUTOUT DIMENSIONS



ORDERING INFORMATION:

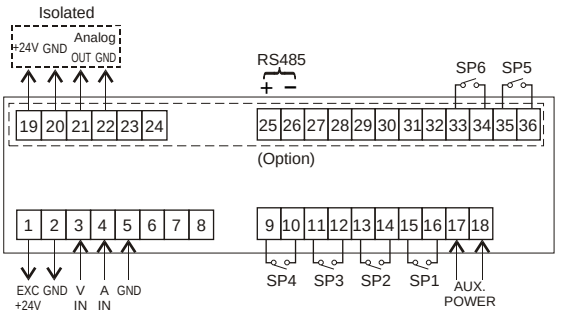
PB-1471-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal	01---4~20mA DC with Exc 24V 02---0~20 mA DC with Exc 24V 03---0~200 mA DC with Exc 24V 04---5V DC with Exc 24V 05---10V DC with Exc 24V 06---20V DC with Exc 24V 07---200V DC with Exc 24V A1---2mA AC RMS A2---20mA AC RMS A3---200mA AC RMS A4---1A AC RMS A5---5A AC RMS B1---100mV AC RMS B2---200mV AC RMS B3---2V AC RMS B4---20V AC RMS B5---200V AC RMS B6---600V AC RMS C1---±2 mA DC with Exc 24V C2---±20 mA DC with Exc 24V C3---±200 mA DC with Exc 24V C4---±1Amp DC C5---±5Amp DC D1---±20mV DC with Exc 24V D2---±50mV DC with Exc 24V D3---±100mV DC with Exc 24V D4---±200mV DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays 6---6 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 1---0~10V Analog Output 2---0/4~20mA Analog Output
Communi-cation port	0---Without 1---Support RS485 interface

EX: PB-1471-S01-4101
Represents: PB-1471 Model, Power supply 85~265V AC, Analog input signal 4~20mA, 4 relay contact, Support Non-Linear Function, without Analog output, Support RS485 interface.

PB-1470 Microprocessor Bargraph Display Panel Meter

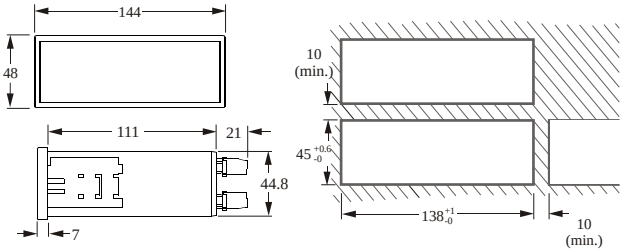
TERMINAL ARRANGEMENTS:



FEATURES:

- 4 Digits LED Numeric Display
- 101-segment LED Bargraph display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP54 Class front panel

EXTERIOR/CUTOUT DIMENSIONS



SPECIFICATIONS

Dimension (mm)	**144 (W) x48 (H) x121.5 (D) DIN 3/16**
Model	**PB-1470**
Power Supply	85 ~ 265V AC or 18~36V DC Switching Power Supply
Power Supply for sensor	DC24V, 50mA
Display	4 Digits, 0.56" 7-Segment red LED Display 101 LED Bargraph Display 6 LED set-point indicator Display Range: -1999 ~ +9999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 4 samples/second
Relay Contact	4 relay (up to 6 relay) 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 9VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50˚C(20 to 90% RH non-condensed)
Storage condition	0~70˚C(20 to 90% RH non-condensed)

ORDERING INFORMATION:

PB-1470-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal	01---4~20mA DC with Exc 24V 02---0~20 mA DC with Exc 24V 03---0~200 mA DC with Exc 24V 04---5V DC with Exc 24V 05---10V DC with Exc 24V 06---20V DC with Exc 24V 07---200V DC with Exc 24V A1---2mA AC RMS A2---20mA AC RMS A3---200mA AC RMS A4---1A AC RMS A5---5A AC RMS B1---100mV AC RMS B2---200mV AC RMS B3---2V AC RMS B4---20V AC RMS B5---200V AC RMS B6---600V AC RMS C1---±2 mA DC with Exc 24V C2---±20 mA DC with Exc 24V C3---±200 mA DC with Exc 24V C4---±1Amp DC C5---±5Amp DC D1---±20mV DC with Exc 24V D2---±50mV DC with Exc 24V D3---±100mV DC with Exc 24V D4---±200mV DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays 6---6 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 1---0~10V Analog Output 2---0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface

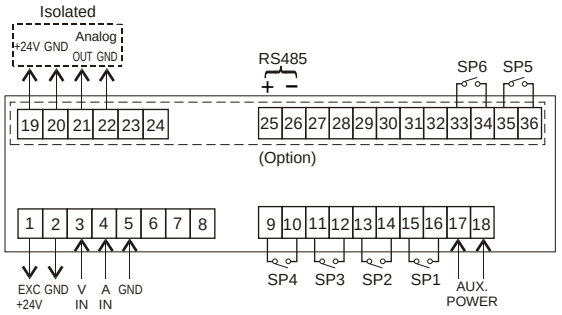
EX: PB-1470-S01-4101
Represents: PB-1470 Model, Power supply 85~265V AC, Analog input signal 4~20mA, 4 relay contact, Support Non-Linear Function, without Analog output, Support RS485 interface.

PB-1570 Microprocessor Bargraph Display Panel Meter

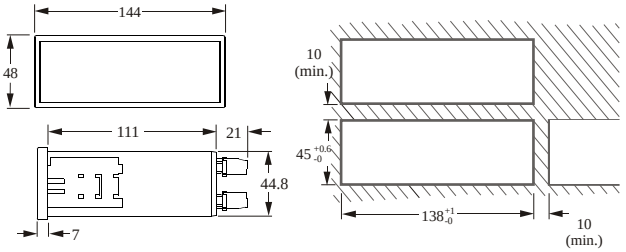
FEATURES:

- 5 Digits LED Numeric Display
- 101-segment LED Bargraph display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP54 Class front panel

TERMINAL ARRANGEMENTS:



EXTERIOR/CUTOUT DIMENSIONS



SPECIFICATIONS

Dimension (mm)	**144 (W) x48 (H) x121.5 (D) DIN 3/16**
Model	**PB-1570**
Power Supply	85 ~ 265V AC or 18~36V DC Switching Power Supply
Power Supply for sensor	DC24V, 50mA
Display	5 Digits, 0.56" 7-Segment red LED Display 101 LED Bargraph Display 6 LED set-point indicator Display Range: -19999 ~ +32767 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 4 samples/second
Relay Contact	4 relay (up to 6 relay) 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 9VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50˚C(20 to 90% RH non-condensed)
Storage condition	0~70˚C(20 to 90% RH non-condensed)

ORDERING INFORMATION:

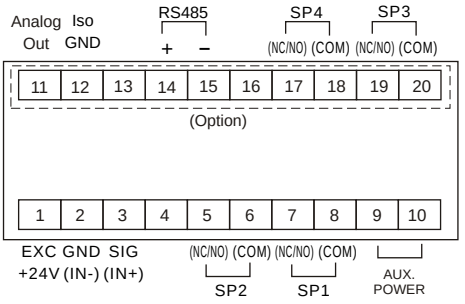
PB-1570-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal	01---4~20mA DC with Exc 24V 02---0~20 mA DC with Exc 24V 03---0~200 mA DC with Exc 24V 04---5V DC with Exc 24V 05---10V DC with Exc 24V 06---20V DC with Exc 24V 07---200V DC with Exc 24V A1---2mA AC RMS A2---20mA AC RMS A3---200mA AC RMS A4---1A AC RMS A5---5A AC RMS B1---100mV AC RMS B2---200mV AC RMS B3---2V AC RMS B4---20V AC RMS B5---200V AC RMS B6---600V AC RMS C1---±2 mA DC with Exc 24V C2---±20 mA DC with Exc 24V C3---±200 mA DC with Exc 24V C4---±1Amp DC C5---±5Amp DC D1---±20mV DC with Exc 24V D2---±50mV DC with Exc 24V D3---±100mV DC with Exc 24V D4---±200mV DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays 6---6 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 1---0~10V Analog Output 2---0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface

EX: PB-1570-S01-4101
Represents: PB-1570 Model, Power supply 85~265V AC, Analog input signal 4~20mA, 4 relay contact, Support Non-Linear Function, without Analog output, Support RS485 interface.

PM-1430 Microprocessor Digit Display Panel Meter

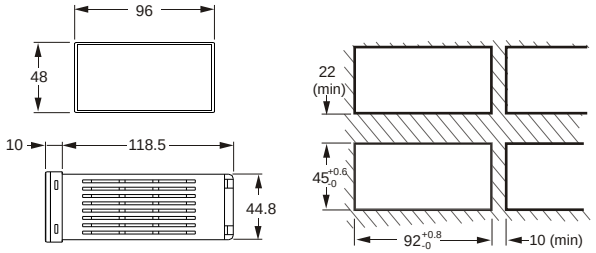
TERMINAL ARRANGEMENTS:



FEATURES:

- 4 Digits LED Numeric Display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP65 Class front panel

EXTERIOR/CUTOUT DIMENSIONS



SPECIFICATIONS

Dimension (mm)	**96 (W) x48 (H) x128.5 (D) DIN 1/8**
Model	**PM-1430**
Power Supply	85 ~ 265V AC or 18~36V DC Switching Power Supply
Power Supply for sensor	DC24V, 50mA
Display	4 Digits, 0.56" 7-Segment red LED Display 4 LED set-point indicator Display Range: -1999 ~ +9999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 4 samples/second
Relay Contact	2 or 4 relay 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 7VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50℃(20 to 90% RH non-condensed)
Storage condition	0~70℃(20 to 90% RH non-condensed)

ORDERING INFORMATION:

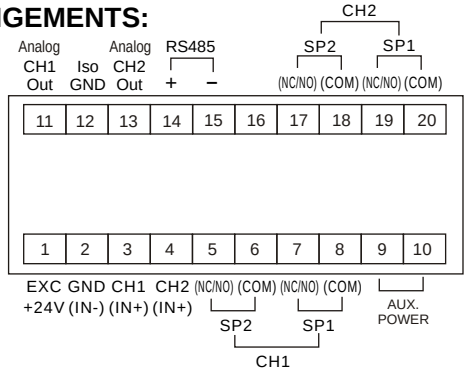
PM-1430-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal	01---4~20mA DC with Exc 24V 02---0~20 mA DC with Exc 24V 03---0~200 mA DC with Exc 24V 04---5V DC with Exc 24V 05---10V DC with Exc 24V 06---20V DC with Exc 24V 07---200V DC with Exc 24V A1---2mA AC RMS A2---20mA AC RMS A3---200mA AC RMS A4---1A AC RMS A5---5A AC RMS B1---100mV AC RMS B2---200mV AC RMS B3---2V AC RMS B4---20V AC RMS B5---200V AC RMS B6---600V AC RMS C1---±2 mA DC with Exc 24V C2---±20 mA DC with Exc 24V C3---±200 mA DC with Exc 24V C4---±1Amp DC C5---±5Amp DC D1---±20mV DC with Exc 24V D2---±50mV DC with Exc 24V D3---±100mV DC with Exc 24V D4---±200mV DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 1---0~10V Analog Output 2---0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface

EX: PM-1430-S01-4101
Represents: PM-1430 Model, Power supply 85~265V AC, Analog input signal 4~20mA, 4 relay contact, Support Non-Linear Function, without Analog output, Support RS485 interface.

PM-2430 Microprocessor Digit Display Panel Meter

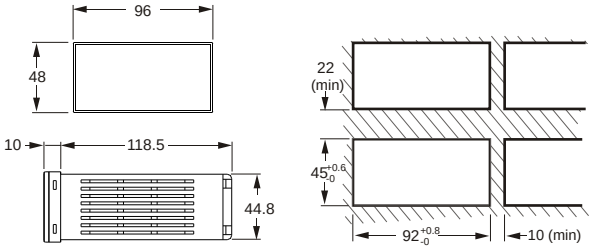
TERMINAL ARRANGEMENTS:



FEATURES:

- Dual Channel Signal Input
- Dual 4 Digits LED Numeric Display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP65 Class front panel

EXTERIOR/CUTOUT DIMENSIONS



SPECIFICATIONS

Dimension (mm)	**96 (W) x48 (H) x128.5 (D) DIN 1/8**
Model	**PM-2430**
Power Supply	85 ~ 265V AC or 18~36V DC Switching Power Supply
Power Supply for sensor	DC24V, 50mA
Display	CH1: 4 Digits, 0.36" 7-Segment red LED CH2: 4 Digits, 0.36" 7-Segment green LED 4 LED set-point indicator Display Range: -1999 ~ +9999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 2 samples/second/channel
Relay Contact	4 relay 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 7VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50℃(20 to 90% RH non-condensed)
Storage condition	0~70℃(20 to 90% RH non-condensed)

ORDERING INFORMATION:

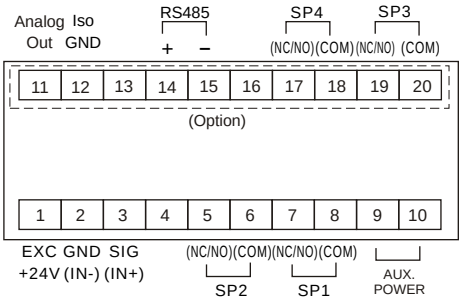
PM-2430-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal (CH1)	1---4~20mA DC with Exc 24V 2---0~20 mA DC with Exc 24V 3---0~200 mA DC with Exc 24V 4---5V DC with Exc 24V 5---10V DC with Exc 24V 6---20V DC with Exc 24V 7---200V DC with Exc 24V
Input Signal (CH2)	1---4~20mA DC with Exc 24V 2---0~20 mA DC with Exc 24V 3---0~200 mA DC with Exc 24V 4---5V DC with Exc 24V 5---10V DC with Exc 24V 6---20V DC with Exc 24V 7---200V DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays 6---6 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 5---Dual Analog Output 0~10V 6---Dual Analog Output 0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface

EX: PM-2430-S14-4000
Represents: PM-2430 Model, Power supply 85~265V AC, Analog input signal CH1: 4~20mA，CH2: 0~5V, 4 relay contact, without Non-Linear Function, without Analog output.

PM-1530 Microprocessor Digit Display Panel Meter

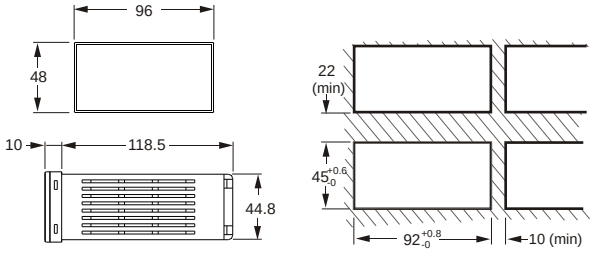
TERMINAL ARRANGEMENTS:



FEATURES:

- 5 Digits LED Numeric Display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 85V~265VAC or 18~36VDC Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP65 Class front panel

EXTERIOR/CUTOUT DIMENSIONS



SPECIFICATIONS

Dimension (mm)	**96 (W) x48 (H) x128.5 (D) DIN 1/8**
Model	**PM-1530**
Power Supply	20~250 Vac / Vdc 50/60Hz
Display	5 Digits, 0.56" 7-Segment red LED Display 4 LED set-point indicator Display Range: -19999 ~ +99999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 24 samples/second/channel
Relay Contact	2 or 4 relay 3A/250V AC or 5A/30V DC (N.C. / N.O. Jumper selectable)
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 7VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50℃(20 to 90% RH non-condensed)
Storage condition	0~70℃(20 to 90% RH non-condensed)

ORDERING INFORMATION:

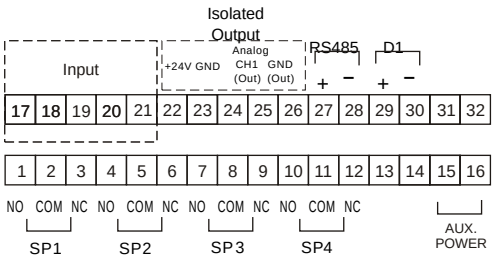
PM-1530-□ □□-□ □ □ □

Power Supply	S---85~265V AC T---18~36V DC
Input Signal	01---4~20mA DC with Exc 24V 02---0~20 mA DC with Exc 24V 03---0~200 mA DC with Exc 24V 04---5V DC with Exc 24V 05---10V DC with Exc 24V 06---20V DC with Exc 24V 07---200V DC with Exc 24V A1---2mA AC RMS A2---20mA AC RMS A3---200mA AC RMS A4---1A AC RMS A5---5A AC RMS B1---100mV AC RMS B2---200mV AC RMS B3---2V AC RMS B4---20V AC RMS B5---200V AC RMS B6---600V AC RMS C1---±2 mA DC with Exc 24V C2---±20 mA DC with Exc 24V C3---±200 mA DC with Exc 24V C4---±1Amp DC C5---±5Amp DC D1---±20mV DC with Exc 24V D2---±50mV DC with Exc 24V D3---±100mV DC with Exc 24V D4---±200mV DC with Exc 24V
Relay Contact	0---0 Relays 2---2 Relays 4---4 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 1---0~10V Analog Output 2---0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface

EX: PM-1530-S01-4101
Represents: PM-1530 Model, Power supply 85~265V AC, Analog input signal 4~20mA, 4 relay contact, Support Non-Linear Function, without Analog output, Support RS485 interface.

PM-1X30-W Microprocessor Digit Display Panel Meter

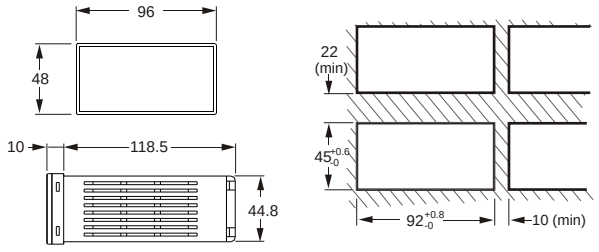
TERMINAL ARRANGEMENTS:



FEATURES:

- 5 Digits LED Numeric Display
- Wide Range of User Definable Scaling Ratio
- Modulized input signal boards available for different applications
- Optional Output Boards with Isolated Analog Output & Relay Output
- 20~250Vac/Vdc 50/60Hz Switching Power Supply
- Support volume adjustment function for non-linear tanks (optional)
- IP65 Class front panel

EXTERIOR/CUTOUT DIMENSIONS



SPECIFICATIONS

Dimension (mm)	**96 (W) x48 (H) x128.5 (D) DIN 1/8**
Model	**PM-1□30-W**
Power Supply	20~250 Vac / Vdc 50/60Hz
Power Supply for sensor	
Display	5 Digits, 0.56" 7-Segment red LED Display 4 LED set-point indicator Display Range: -19999 ~ +99999 Over Range Display: "1" or "-1"
Input Signal	Range: Refer to Ordering information Accuracy: 0.1%FS or ±1 digit ADC Resolution: 4-1/2 digit Sampling Rate: 24 samples/second
Relay Contact	4 relay 3A/250V AC or 5A/30V DC
Analog Output	4~20mA, 0~20mA, 2~10V and 0~10V (optional)
Power comsumption	Less then 7VA
Communication port	RS485 (optional) Modbus Protocol
Operating condition	0~50˚C(20 to 90% RH non-condensed)
Storage condition	0~70˚C(20 to 90% RH non-condensed)

ORDERING INFORMATION:

PM-1□30-W □□-□□□□□□

Display	4 : 4 digit 5 : 5 digit
Power Supply	20~250 Vac-dc, 50~60Hz
Input Signal	01---4~20mA DC with Exc 24V 02---0~20 mA DC with Exc 24V 03---0~200 mA DC with Exc 24V 04---0~5V DC with Exc 24V 05---0~10V DC with Exc 24V 06---0~20V DC with Exc 24V 07---0~200V DC with Exc 24V A1---0~2mA AC RMS A2---0~20mA AC RMS A3---0~200mA AC RMS A4---0~1A AC RMS A5---0~5A AC RMS B1---0~100mV AC RMS B2---0~200mV AC RMS B3---0~2V AC RMS B4---0~20V AC RMS B5---0~200V AC RMS B6---0~600V AC RMS B7---0~1000V AC RMS C1---0~±2 mA DC with Exc 24V C2---0~±20 mA DC with Exc 24V C3---0~±200 mA DC with Exc 24V C4---0~±1Amp DC C5---0~±5Amp DC D1---0~±20mV DC with Exc 24V D2---0~±50mV DC with Exc 24V D3---0~±100mV DC with Exc 24V D4---0~±200mV DC with Exc 24V E1---5/10/20/50/100/200mV/ V DC (Option) with Exc 24V E2---1/2/5/10/20mV/V DC (Option) with ISO 10V E3---1/2/10/20/40mV/V DC (Option) with ISO 5V F1----TC(K、J、E、N、T) & RTD (PT100、JPT100)
Relay Contact	0~4:0~4 Relays
Non-Linear Function	0---Without (Standard) 1---Support 20 points Vessel Conversion
Analog Output	0---Without 1---0~10V Analog Output 2---0/4~20mA
Communi-cation port	0---Without 1---Support RS485 interface
Digital input	0 : Without 1 : DI

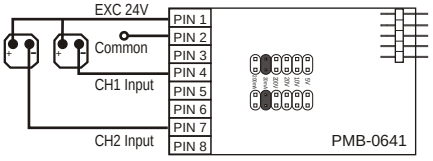
EX: PM-1530-S01-41011
Represents: PM-1530 Model, Power supply 85~265V AC, Analog input signal 4~20mA, 4 relay contact, Support Non-Linear Function, without Analog output, Support RS485 interface.

PB DC SIGNAL INPUT MODULE

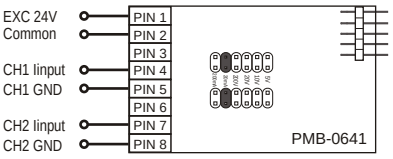
This section will elaborate how to adapt to different input signals in the PB series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Dual Channel Signal Input Module: (for PB-2471)

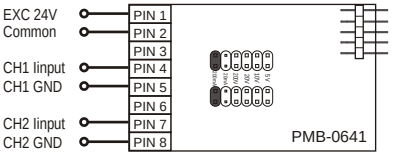
11: 4~20mA DC with Excitation +24V



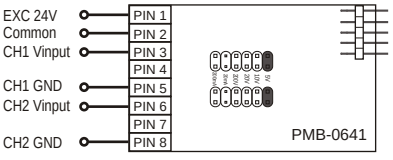
22: 0~20mA DC with Excitation +24V



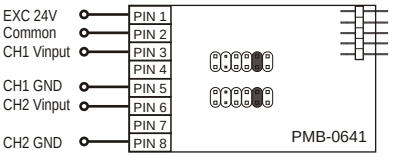
33: 0~200mA DC with Excitation +24V



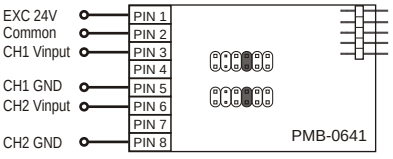
44: ±5V DC with Excitation +24V



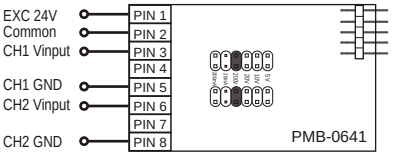
55: ±10V DC with Excitation +24V



66: ±20V DC with Excitation +24V

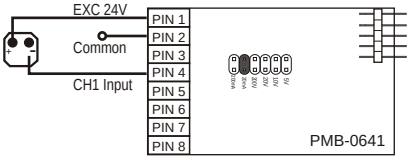


77: ±200V DC with Excitation +24V

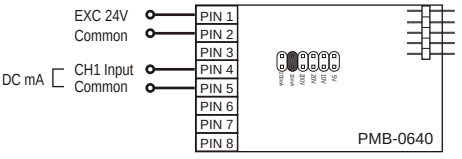


Single Channel Signal Input Module: (for PB-1471, PB-1470, PB-1570)

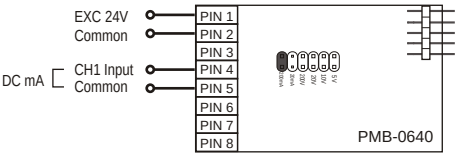
01: 4~20mA DC with Excitation +24V



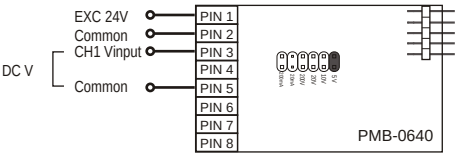
02: 0~20mA DC with Excitation +24V



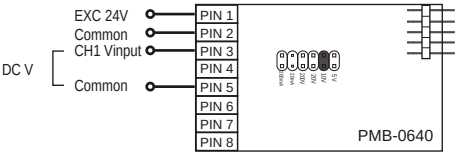
03: 0~200mA DC with Excitation +24V



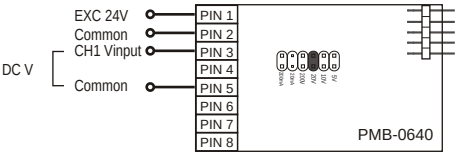
04: ±5V DC with Excitation +24V



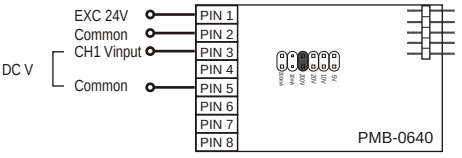
05: ±10V DC with Excitation +24V



06: ±20V DC with Excitation +24V



07: ±200V DC with Excitation +24V

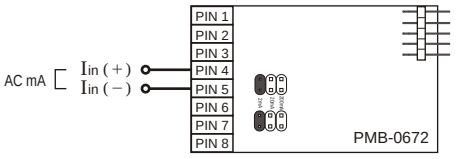


PB AC SIGNAL INPUT MODULE

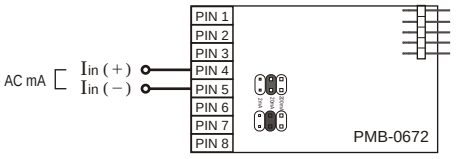
This section will elaborate how to adapt to different input signals in the PB series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Single Channel Signal Input Module: (for PB-1471, PB-1470, PB-1570)

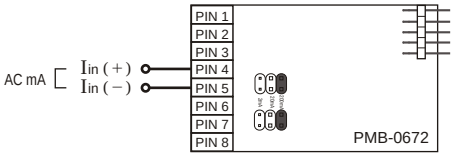
A1: 2mA AC Scaled RMS



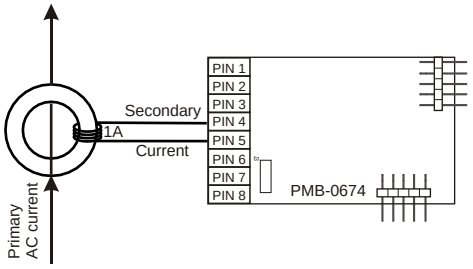
A2: 20mA AC Scaled RMS



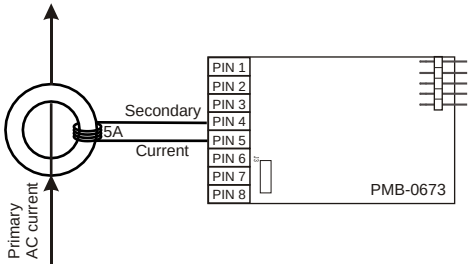
A3: 200mA AC Scaled RMS



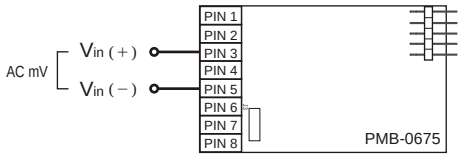
A4: 1Amp AC Scaled RMS



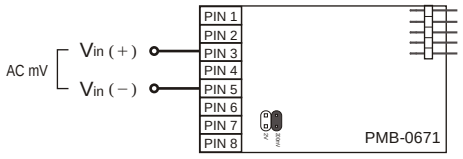
A5: 5 Amp AC Scaled RMS



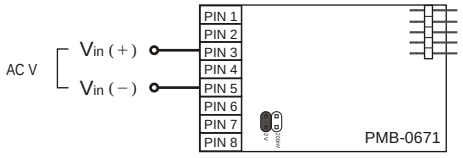
B1: 100mV AC Scaled RMS



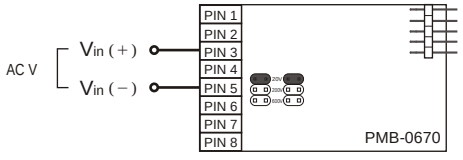
B2: 200mV AC Scaled RMS



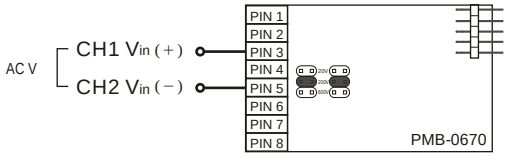
B3: 2V AC Scaled RMS



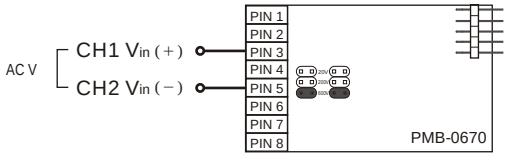
B4: 20V AC Scaled RMS



B5: 200V ACScaled RMS



B6: 600V AC Scaled RMS

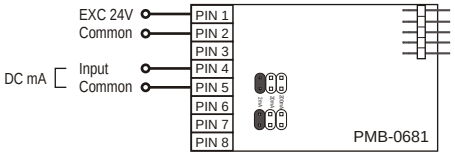


PB DC SIGNAL INPUT MODULE

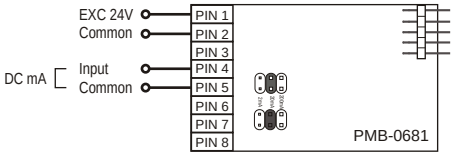
This section will elaborate how to adapt to different input signals in the PB series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Single Channel Signal Input Module:
(for PB-1471, PB-1470, PB-1570)

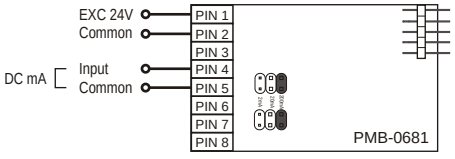
C1: 2mA DC with Excitation +24V



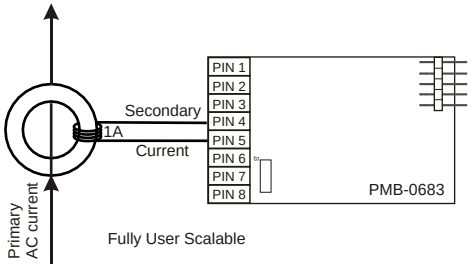
C2: 20mA DC with Excitation +24V



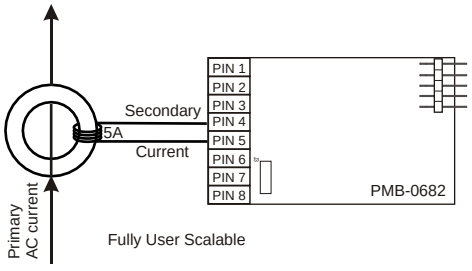
C3: 200mA DC with Excitation +24V



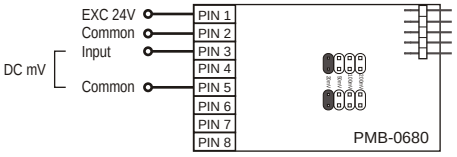
C4: 1A DC



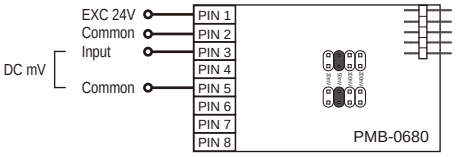
C5: 5A DC



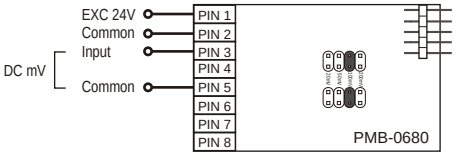
D1: 20 mV DC with Excitation +24V



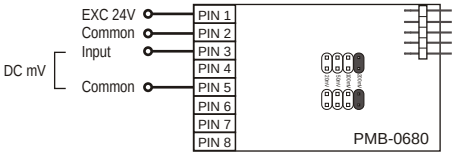
D2: 50 mV DC with Excitation +24V



D3: 100 mV DC with Excitation +24V



D4: 200 mV DC with Excitation +24V

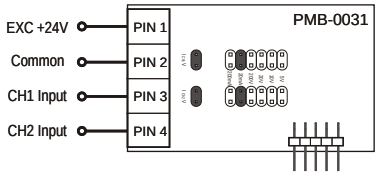


PM DC SIGNAL INPUT MODULE

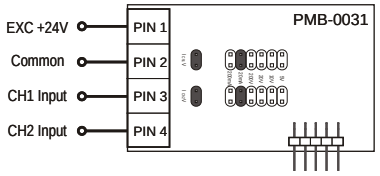
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Dual Channel Signal Input Module: (for PB-2430)

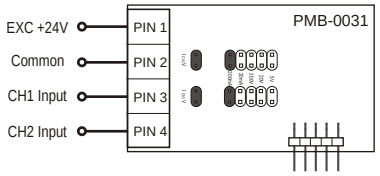
11: 4~20 mA DC with Excitation +24V



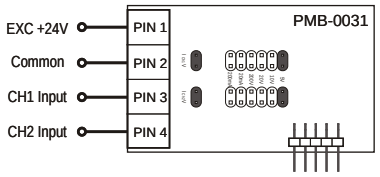
22: 200 mA DC with Excitation +24V



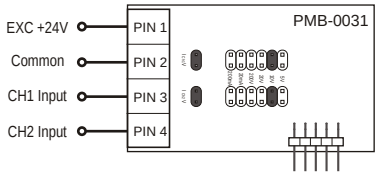
33: 200 mA DC with Excitation +24V



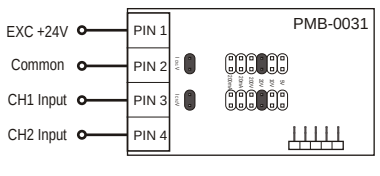
44: 5V DC with Excitation +24V



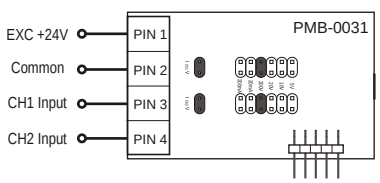
55: 10V DC with Excitation +24V



66: 20V DC with Excitation +24V

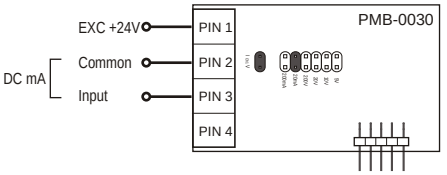


77: 20V DC with Excitation +24V

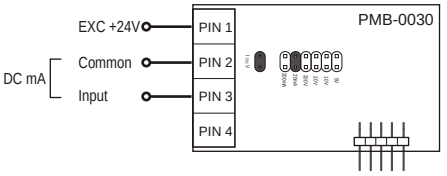


Single Channel Signal Input Module: (for PB-1430, PB-1530)

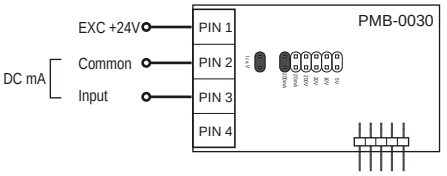
01:4~20mA DC with Excitation +24V



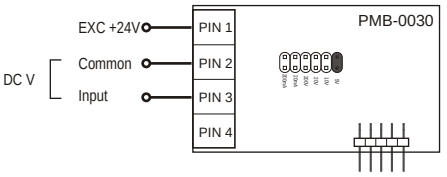
02: 20mA DC with Excitation +24V



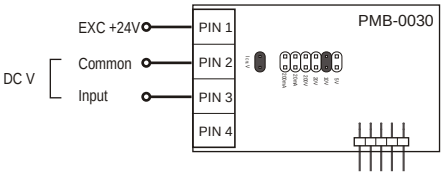
03: 200mA DC with Excitation +24V



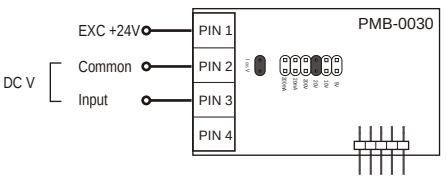
04: 5V DC with Excitation +24V



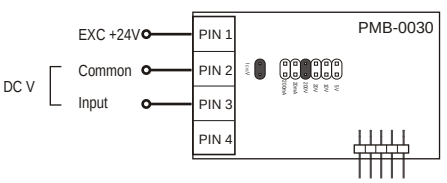
05: 10V DC with Excitation +24V



06: 20V DC with Excitation +24V



07: 200V DC with Excitation +24V

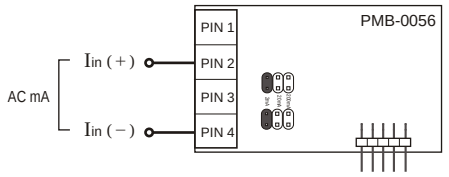


PM AC SIGNAL INPUT MODULE

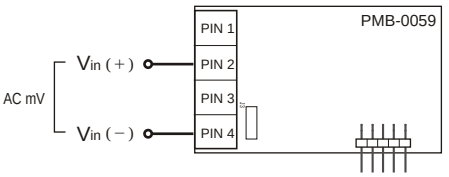
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Single Channel Signal Input Module:
(for PM-1430, PM-1530)

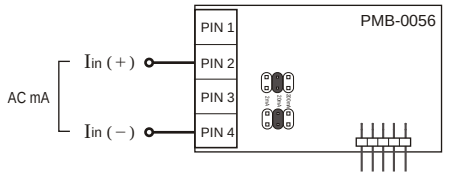
A1: 2mA AC Scaled RMS



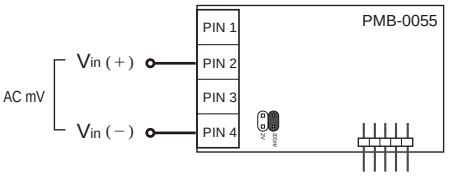
B1: 100mV AC Scaled RMS



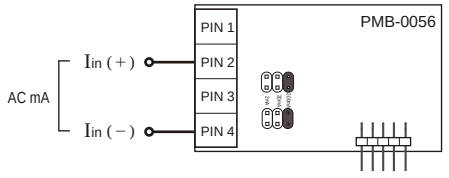
A2: 20mA AC Scaled RMS



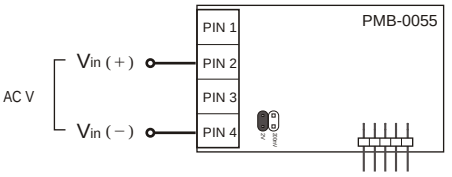
B2: 200mV AC Scaled RMS



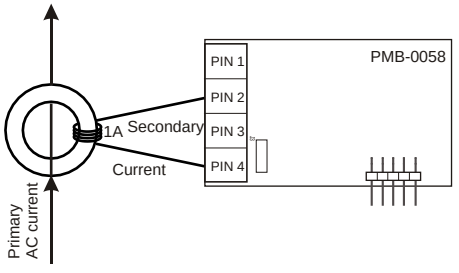
A3: 200mA AC Scaled RMS



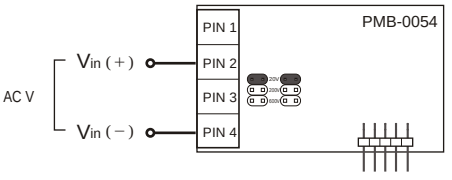
B3: 2V AC Scaled RMS



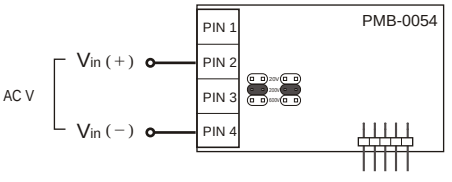
A4: 1Amp AC Scaled RMS



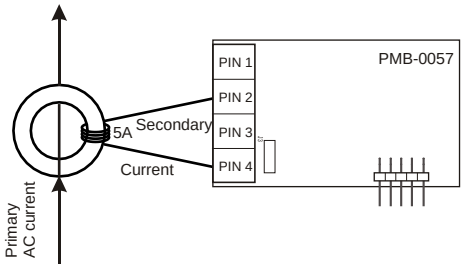
B4: 20V AC Scaled RMS



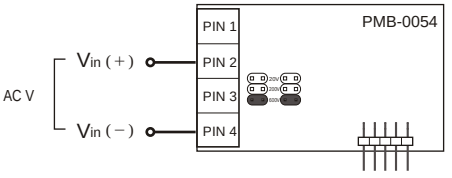
B5: 200V ACScaled RMS



A5: 5 Amp AC Scaled RMS



B6: 600V AC Scaled RMS

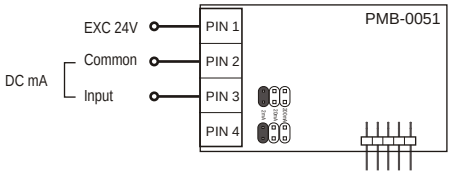


PM DC SIGNAL INPUT MODULE

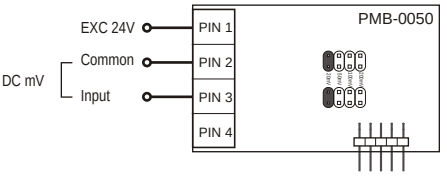
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Single Channel Signal Input Module:
(for PM-1430, PM-1530)

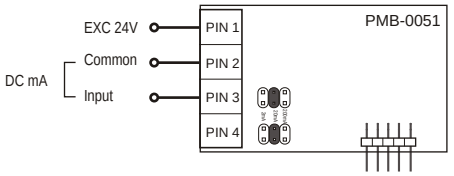
C1: 2mA DC with Excitation +24V



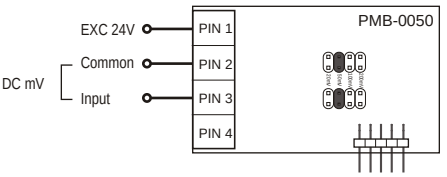
D1: 20 mV DC with Excitation +24V



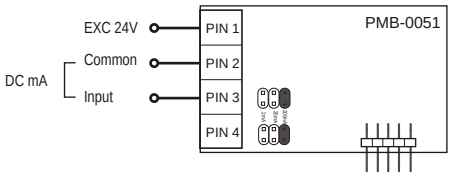
C2: 20mA DC with Excitation +24V



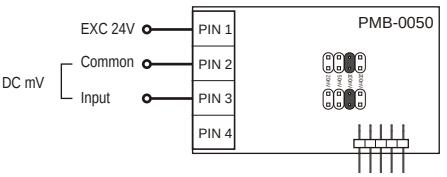
D2: 50 mV DC with Excitation +24V



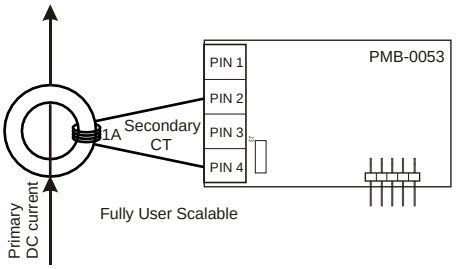
C3: 200mA DC with Excitation +24V



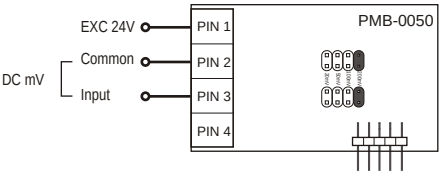
D3: 100 mV DC with Excitation +24V



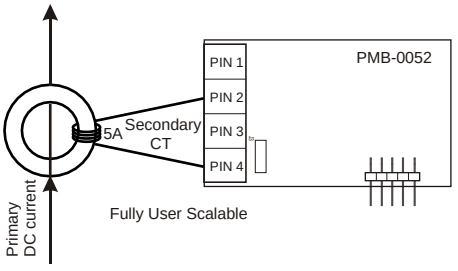
C4: 1A DC



D4: 200 mV DC with Excitation +24V



C5: 5A DC

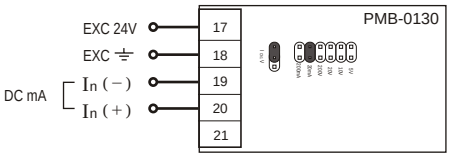


PM -1X30-W DC SIGNAL INPUT MODULE(0)

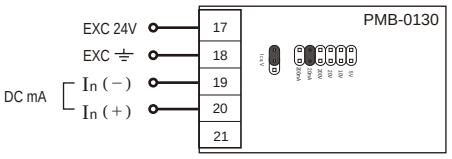
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Signal Input Module:

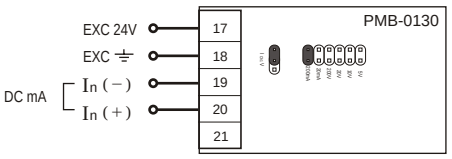
01: 4~20mA DC with Excitation +24V



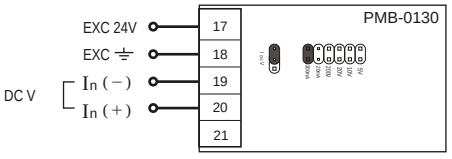
02: 0~20mA DC with Excitation +24V



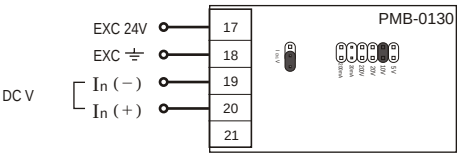
03: 0~200mA DC with Excitation +24V



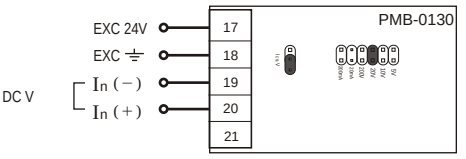
04: 0~5V DC with Excitation +24V



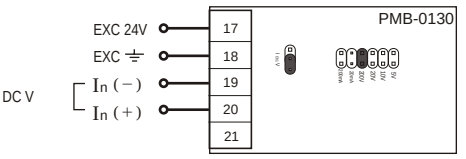
05: 0~10V DC with Excitation +24V



06: 0~20V DC with Excitation +24V



07: 0~200V DC with Excitation +24V

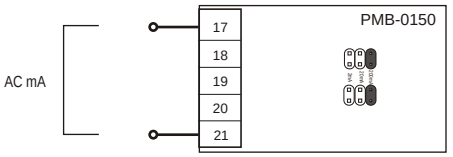


PM -1X30-W AC SIGNAL INPUT MODULE(AB)

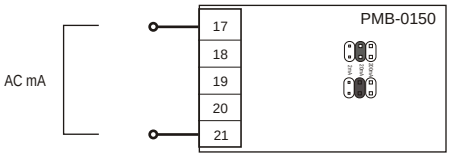
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Signal Input Module:

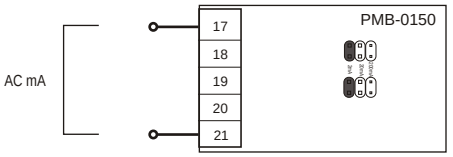
A1: 0~2mA AC RMS



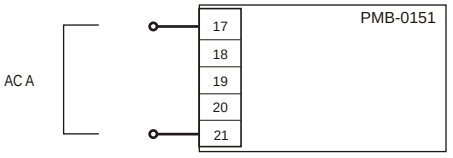
A2: 0~20mA AC RMS



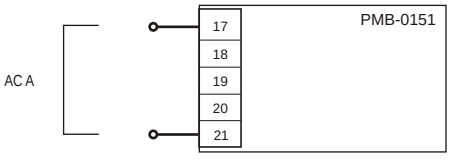
A3: 0~200mA AC RMS



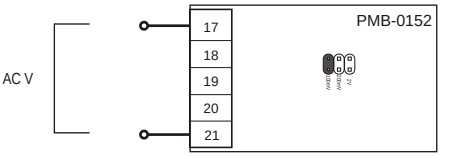
A4: 0~1A AC RMS



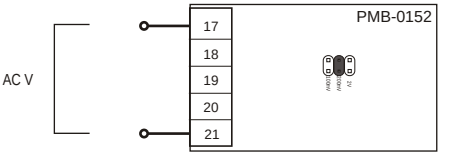
A5: 0~5A AC RMS



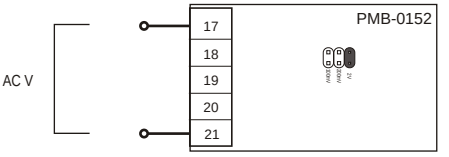
B1: 0~100mV AC RMS



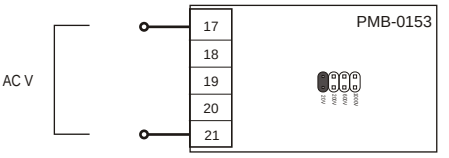
B2: 0~200mV AC RMS



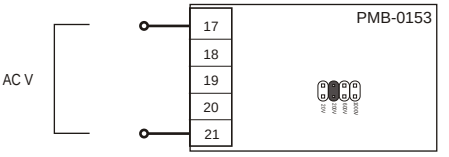
B3: 0~2V AC RMS



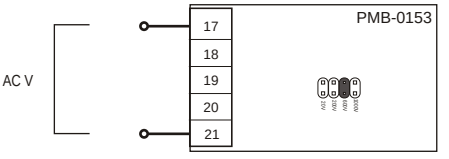
B4: 0~20V AC RMS



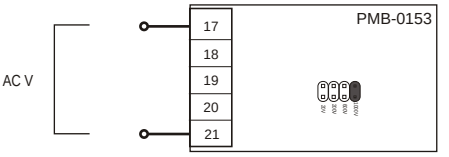
B5: 0~200V AC RMS



B6: 0~600V AC RMS



B7: 0~1000V AC RMS

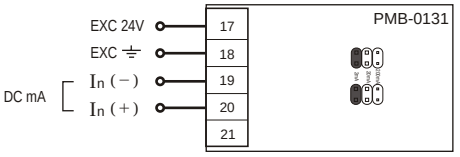


PM -1X30-W DC SIGNAL INPUT MODULE(CDE)

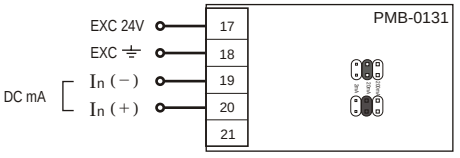
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Signal Input Module:

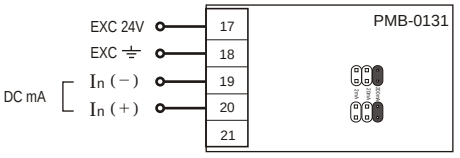
C1: 0~±2mA DC with Excitation +24V



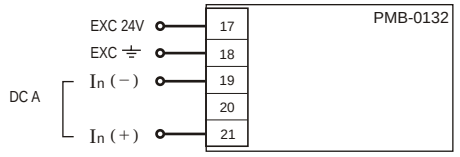
C2: 0~±20mA DC with Excitation +24V



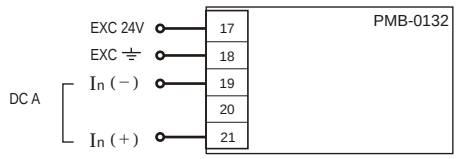
C3: 0~±200mA DC with Excitation +24V



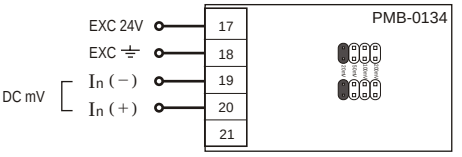
C4: 0~±1A DC



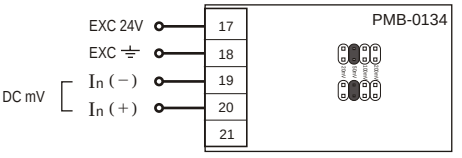
C5: 0~±5A DC



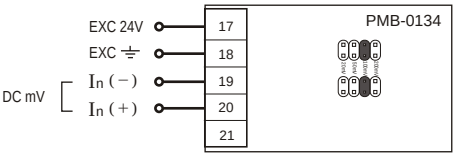
D1: 0~±20mV DC with Excitation +24V



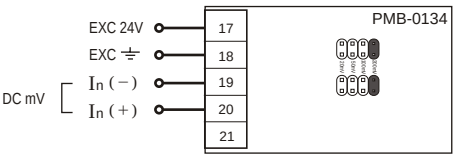
D2: 0~±50mV DC with Excitation +24V



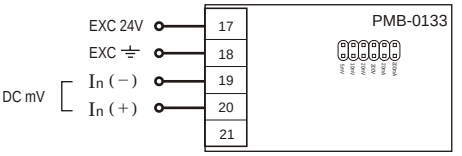
D3: 0~±100mV DC with Excitation +24V



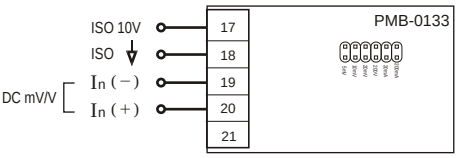
D4: 0~±200mA DC with Excitation +24V



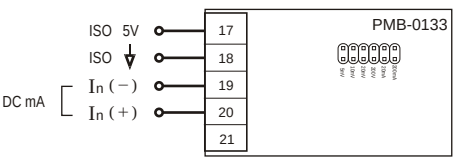
E1: 5/10/20/50/100/200mV DC (Option) with Excitation +24V



E2: 1/2/5/10/20mV/V (Option) with ISO 10V



E3: 1/2/10/20/40mV/V (Option) with ISO 5V

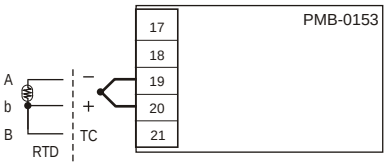


PM-1X30-W TEMPERATURE SIGNAL INPUT MODULE

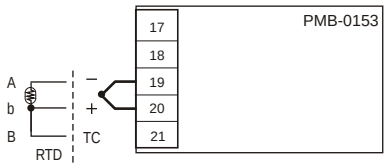
This section will elaborate how to adapt to different input signals in the PM series panel meter, by using the correct jumper and using iSEL command. Panel meter series can accommodate 6 types of conventional input signals, 20mA, 200mA, 5V, 10V, 20V, 200V, please refer below for setup.

Signal Input Module:

F1: TC (K、J、E、N、T) & RTD (Pt100、JPT100)



F2: TC (K、J、E、N、T、R、S、B) & RTD (PT100、JPT100)



Microprocessor Instruments

Bargraph/ Digital display Panel Meter

- Switching power supply 85~265 Vac or 18~36 Vdc
- Wide range of user definable scaling ratio.
- SIM (Signal Input Module) available for different application.
- Isolation in Analog / Relay output.
- Support Non-Linear tank volume conversion.
- RS485 ModBus communication.

Microprocessor Based Counter

- Switching power supply 85~265 Vac
- Counting Speed: 20 K cps (Solid-state), 30 cps (Contact)
- Decimal point setting
- Timer display (user set h/min. min/s or s/0.1s)
- Adjustable output delay timing
- Speed units: Second, Minute, Hour
- Includes multi-parameters for Counter, Timer, Batch-counter, Chronometer, Tachometer
- Data retention & RS485 ModBus communication

Digital Panel Indicator

- 0.56" Large 7-Segment LED Display
- Low Cost and Accurate Panel Indicator
- Support all process signals, AC Voltage, DC Voltage, AC Current and DC Current Measurement.
- IP-65 Class Front Panel

Microprocessor Based Power Quality Meter

- 0.2 grade electrical calibration as well as CE approval
- Monitoring RMS Voltage, Current, Frequency, Power Factor
- Monitoring Active Power (Watts), Reactive Power (Vars), Apparent Power (VA)
- Monitoring Active Energy (Mwh), Reactive Energy (MVArh), Apparent Energy (MVAh)
- Power Quality Harmonics: THD Voltage, THD Current Harmonic distortion
- Password protection on parameters setting
- Provides RS485 ModBus communication interface

PID+Fuzzy Temperature Controller

- ON/OFF, PID+Fuzzy Control
- Auto-tuning, High Accuracy
- Sensor Break Alarm
- Switching Power Supply 85~265 Vac or 18~36 Vdc
- Lock Protection for Variety Parameters Heating / Cooling Bi-directional Control Multi-Input Signals Function Heater Break Detection RS485 ModBus communication

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08-PB-B0-EP, 07/04/2011