

FEATURES

- ❑ Universal input
- ❑ Smart Teach Option
- ❑ Alarm or Control output
- ❑ Isolated retransmission output
- ❑ Keyboard calibration
- ❑ Custom Engineering unit labels
- ❑ Universal SMPS or 24VDC PS



The MPI-501U is an advanced Microcontroller based single channel Process Indicator / Controller used for monitoring / control of analog signals in majority of industrial processes. MPI501U is available in two versions as an Indicator and as a Controller. In the controller version the relay output is configured for On/Off control application. For indicator version the relays are configured for alarm generation. The unit can accept analog inputs (from RTDs, Thermocouples, current and voltage inputs). For indicator mode optional single or dual alarm output is provided wherein the alarm type and value is programmable from the front keyboard. The unit is calibrated for all the basic inputs and the calibration is not required to be changed if the input type is changed. Recalibration if required could be done through keyboard.

SPECIFICATIONS:

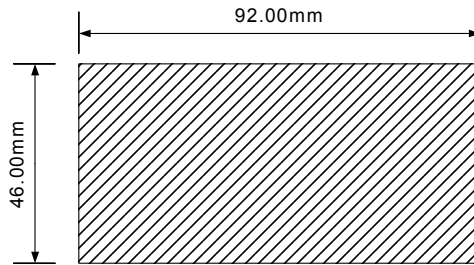
No. of channels	1
Inputs	Universal inputs (Refer Input Table) or Linear input (voltage/current)
Input Connection	Rugged Screw type terminal, suitable for wire size ranging from 0.2-2.5sq.mm
Input Impedance	For Thermocouples & mV inputs: >1 MΩ DC Volts: >100 KΩ
Display	- 4 digit 7seg. Red LED, 0.56" -Range -1999 to 9999
Square root extraction	Provided built-in for linear inputs
Automatic Compensations	-Cold junction compensation for thermocouples -Wire resistance compensation for three wire RTDs.
Accuracy	+/- 0.1% of FS, +/- 1 digit for Linear inputs +/- 0.2% of FS, +/- 1 digit for others
Decimal Point	Programmable as 8888, 888.8, 88.88, 8.888 for Linear Inputs
Noise Rejection	-Common Mode 120dB or better -Series Mode 60dB or better
Control action	ON / OFF (Only for Controller Function)
OUTPUT OPTIONS	1) Upto two 1 CO, 5A / 230 V AC resistive max. Relay or SSR Output 2) Retransmission Output: Isolated 4 – 20mA Programmable 3) Transmitter Excitation Voltage : 24V DC/30mA max.
Battery Backup	EEPROM Nonvolatile Memory (Battery not required)
Power Supply	Universal 95 – 265V AC, 50Hz or 110 – 300 V DC OR 24V DC
Open Sensor Indication	'OPEN' or 'OR' where applicable.
PROTECTION	1) Sensor Burn out Protection : Programmable alarm ON or OFF 2) Set Point & Configuration Protection : Password Protected – User & configuration menu 3) System Protection : Through hardware and software watch dog

contd. specifications:

ENVIRONMENT Operating Temperature Operating Humidity Storage Temperature	0 to +55 Deg. C Up to 95% non condensing -10 to +70 Deg. C
ENCLOSURE Enclosure: IP Rating: Mounting Type: Accessories: External Dimension: Panel Cutout: Gross Weight:	Flame Retardant ABS IP54 (Front panel) Flush on panel Screw type mounting clamp 48(H) x96 (W) x134 (D) mm 46(H) x92 (W) mm, Depth behind panel: 124mm 375 gms approx.

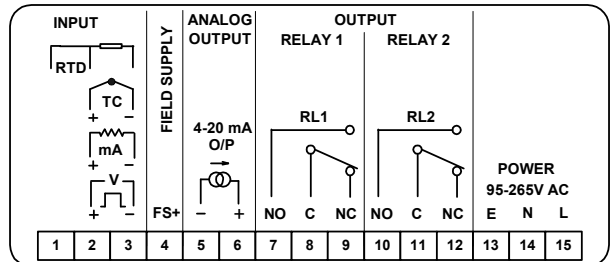
INPUT TABLE:

UNIVERSAL	Linear	mA DC (Use 250Ω)	4 – 20 mA / 0– 20 mA
		V DC	1 – 5 V / 0 – 5 V / 0 – 10V
			0– 75 mV
	RTD PT100	PT100 1 Deg.C resolution	
		PT100 0.1 Deg.C resolution	
	TC	J	
		K	
		T	
		E	
		B	
R			
S			
RESISTANCE		0 to 6KΩ	
POTENTIOMETER		Pot input / Valve position	
RESISTANCE TAP		Tap Position	



PANEL CUTOUT

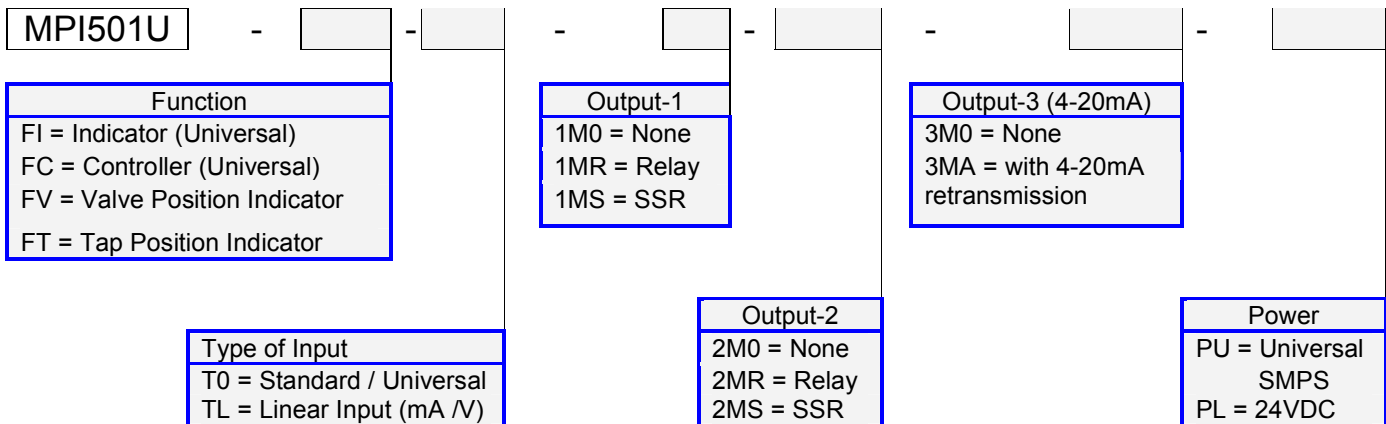
BACK TERMINAL CONNECTION:



2 WIRE TRANSMITTER CONNECTION

NOTE: For valve position indicator input potentiometer should be 1Kohm minimum

ORDERING CODE:



Note: Only for function FI and FC, type of input could be selected as TL.

SAMPLE CODE ORDER:
MPI501U – FC – T0 – 1MR – 2MS – 3MA – PU
 Controller, Universal Input, 1st output Relay, 2nd output SSR, with 4-20mA retransmission, Universal SMPS