



**MODEL 805 – MICROPROCESSOR BASED SIGNAL INDICATORS / CONTROLLERS ( High Precision 5 digit and Fully configurable )**

**Technical Catalogue**

**Introduction**

Pantech's Programmable Microprocessor based Indicator cum Controller, model 805 is an ideal instrument for providing indication as well as controlling set points to various processes. This model specially indicates the process value to the resolution of maximum 5 digits i.e high precisions. It is designed to accept various process inputs ( Current, Voltage, RTD, Thermocouples, Resistances ) simultaneously i.e in UNIVERSAL manner or any one of these in PREDEFINED manner. When UNIVERSAL manner, The user can configure from the front keys only to select any one of the input automatically. The user can also configure to set the range of linear inputs or calibrate the instrument without opening it. The model 805 can give maximum 4 relay outputs. All the contact output related specs like – SETPOINT, ALARM TYPE, HYSTERISIS – can be configured easily by the front panel keys itself. Retransmission facility is of course provided with all possible configurations allowed by front keys as usual. The instrument can be optionally equipped with serial communication facility to operate on MODBUS RTU protocols. Single level password is there to keep the settings and configurations intact for the right user only.

Low drift precision components are used for long term accuracy of the instruments. All instruments undergo a burn-in for better reliability. The instrument is available in different formats and sizes. Information regarding specification and size is given below.

**Specifications**

**Inputs ( & Display range )**

- 1)Current, 4– 0 mA DC/ 0–20 mA DC ( -19999 to 59999)
- 2)Voltage, 1–5V/0–10V (-19999 to 59999 )
- 3)RTD Pt 100 – 3 wire ( -100.0 to 600.0 )
- 4)T/C Type J (-100.0 – 800.0)
- 5)T/C Type K ( 0 – 1200.0)
- 6)T/C Type R ( 0 – 1760.0)
- 7)T/C Type S ( 0 – 1700.0)
- 8)T/C Type T (-100.0 – 400.0 )
- 9)T/C Type B ( 450.0 to 1800.0 )
- 10)T/C Type E ( -100.0 to 1000.0 )
- 11)Ohms-0-1K ohms ( -19999 to 59999 )
- 12)mV DC

**13)UNIVERSAL 1** – Containing 1...8

**14)UNIVERSAL 2** – Containing 1...12

- 15)Pulse train input. ( Pulse of 12 V DC )–
  - 16)10 to 10 V DC / -mV to mV DC ( -19999to59999)
  - 17)RTD – Cu 53
  - 18)Special type of inputs of any V/Current/Resistance ( However on factory confirmation only )
- Decimal point configurable

**Input impedance**

200 K for Voltage, mV & T/C inputs  
upto 250 ohms for current inputs

**Display resolution**

5 digits

**Display accuracy**

+/- 0.1% of span

**Alarms**

Maximum 4 nos. of potential free contacts.xxxxxxxx

**Analog output**

Maximum 2 nos. of any of below  
1)Isolated / Non Isolated 4 – 20 mA DC  
2)Isolated / Non Isolated 0-10 V DC  
Other types on factory confirmations

**Analog output load capability**

800 maximum for current outputs

**Output accuracy**

+/- 0.1% of span

**Serial output with open protocol**

- 1)RS232 With modbus RTU protocol
- Rs485 with modbus RTU protocol

Note: Any other protocol on demand

**Transmitter power**

24 V DC for current inputs  
10/12 V DC ( in case of Load cell / Proximity application )  
Specials

**Power supply**

- 1)24 V DC
- 2)110 V AC, 50 Hz, +/- 10%
- 3)230 V AC, 50 Hz, +/- 10%
- 4)90-270 V AC, 50 Hz. – SMPS
- 5)Specials on factory confirmations

**Security**

Single level Password protected

**Contact ratings**

230 V AC, 5 Amps.

**Power consumption**

3 VA max.

**Ambient temperature**

0 – 50 C.

**Storage temperature**

0 – 70 C.

**Humidity**

90% RH (non-condensing)

**Enclosures**

Weatherproof, Flameproof and all other standard types

**Mounting**

Panel / Wall / Field / Dinrail / Eurocard

**Dimensions**

96\*96 / 96\*48 / 72\*72 / SPECIALS

**\*All config/calibration from front keys only**

Following table describes the availability of several models with the company right now. A general preview is only presented to the user. The dimensional and display sizes are the relational virtues of each other and hence the user is always requested to clarify the specifications of instrument with the factory prior to placement of the order.

On confirmation with factory, changes of all types in all specifications is possible.



( 96\*48 type )



( 96\*96 type )



( 96\*96 type )  
7680 ( GROUP )



**PANTECH INSTRUMENTS**

Model	Mounting & Dimension in mm (H * W)		Inputs	Power	Alarms	Retransmission		Process value Display resolution	Process value Display size "
						Isolated or Not-Isolated			
805	Panel	48*96	All	All	Max.2	Max. 1		5 digit	0.25"
		72*72	All	All	Max.2	Max. 1		5	0.25/0.5"
		96*96	All	All	Max.4	Max. 2		5	0.25/0.5"
		144*72	All	All	Max.4	Max. 2		5	0.25/0.5/1"
		72*144	All	All	Max.4	Max. 2		5	0.25/0.5/1"
	Din Rail	70*100 max	All	All	Max. 4	Max. 2		5	0.25/0.5"
	Euro	Std. or as req	All	All	Max. 4	Max. 2		5	0.25/0.5"
	Wall	As required or Optimum possible	All	All	Max. 4	Yes		5	0.25" to 6"

In case the qty. permits, the instruments can be taken to the customized requirements. Contact factor for confirmation

**Ordering Information ( 12 digits )**

**Basic Model No.** (Specified by first 3 digits)

805 -Signal Ind. cumController  
Microprocessor based and Fully configurable

**Enclosure / Mounting** (Specified by letter following 3 digits)

P-Weatherproof - Panel  
R-Weatherproof -Din Rail  
E-Weatherproof - Euro card  
W-Weatherproof - Wall  
F-Flame proof – Wall / Field  
I-IP65 grades – Wall / Field  
S-Specials

**Input** (Specified by first digit following the letter)

1-mA DC signal input  
2-V DC signal input  
3-RTD type  
4-Thermocouple  
5-Resistances  
U-UNIVERSAL1  
V-UNIVERSAL2  
S-SPECIALS

**Power Option** (Specified by the second digit)

1-24 V DC  
2-110 V AC  
3-230 V AC  
4-90-270 V AC – SMPS  
S-SPECIALS

**Alarms Option** (Specified by the third digit)

0-None  
1-1 no. of alarm  
2-2 no. of alarms  
3-3 no. of alarms  
4-4 no. of alarms

**Analog O/P Option** (Specified by the fourth digit)

0-None  
1-1 no. mA/V DC isolated  
2-2 no. mA/V DC isolated  
3-1 no. mA/V DC N. I.  
4-2 no. mA/V DC N.I  
S-Any other type of output

**Communication output**

0-None  
1-YES



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