



**MODEL 801 – PROCESS INDICATOR / CONTROLLER
ANALOGUE BASED DIGITAL ELECTRONICS**

Technical Catalogue



(72*72, 2 C/O type)



(96*48, 2 C/O type)



(96*48, 2 C/O type)



(96*96, 4 digit, 0.5")



(96*96 , 4 C/O type)



(Wall mount, JUMBO 4" size)

Introduction

Pantech's Signal Indicator cum Controller, model 801 is an ideal instrument for providing indication as well as controlling set points to various processes. It is designed to accept various process inputs (Current, Voltage, RTD, and Thermocouple) however one at a time, display the same and generate potential free contacts when abnormal conditions occur. The model is also equipped with an optional analog output facility (Isolated or non-isolated).

Model 801 is an analog electronics based controller. It is capable to display the process value to the resolution of maximum 3 ½ digits and can be designed to generate maximum of 4 nos. of potential free contacts. A further virtue of the controller is that alarms can be field configurable (i.e. HIGH "or" LOW) and adjustable. Hysteresis (deadband) can be varied from 1% to 15% of span. It is also facilitated with internal transmitter power supply of 24 V DC, to power up two-wire transmitters. Option of a bargraph display is also available in these modules, however no. of LEDs in the bargraph varies according to the size and mounting of the instrument. Note that the instrument is NOT configurable by front keys as other microprocessor models are. The user is required to calibrate, change the display range and etc. works by varying potentiometers, dip switches etc. on PCB levels.

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

Input (Predefined type)

- 1)Current, 4 – 20 mA DC/ 0 – 20 mA DC
- 2)Voltage, 1 – 5 V DC/ 0 – 10 V DC
- 3)RTD Pt 100
- 4)T/C Type J, K, R, S, T.
- 5)Specials (on factory confirmations)

Input impedance

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

Cold junction compensation

Built in for T/C input.

Alarms

Maximum 4 nos. of potential free contacts.

Analog output

- 1)Isolated / Non Isolated 4 – 20 mA DC
- 2)Isolated / Non Isolated 0-10 V DC
- 3)Other types on factory confirmations

Analog output load capability

800 maximum for 4-20 mA DC

Output accuracy

+/- 0.1% of span

Display resolution

2/3/3.5 digit type

Display accuracy

+/- 0.1% of span

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%
- 1)90-270 V AC – SMPS
- 2)Specials on factory confirmations

Contact ratings

230 V AC, 5 Amps.

Power consumption

6 VA max.

Ambient temperature

0 – 50 C.

Storage temperature

0 – 70 C.

Humidity

90% RH (non-condensing)

Enclosures

Weatherproof Panel mounted
Field mounted – WP/IP65/Flameproof
Specials

Mounting

Panel / Wall / Field / Dinrail / Eurocard / Specials

Dimensions

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

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.



PANTECH INSTRUMENTS

Model	Mounting & Dimension in mm (H * W) mm	Inputs	Power	Alarms	Analog output mA or V or Special		Bargraph (BG) availability	Display resolution	Display size (standard types)
					Isolated	Non isolated			
Panel	96**96 72*144 144*72	All	All	Max. 4	Yes	Yes	Yes(21 led)	3 ½ max. with BG	0.25/0.5/0.8/1 "
	48*96	All	All	Max.2	No	Yes	No	3 ½ max.	0.25/0.5 "
	48*48	1,2,3	24 V DC	Nil	Nil	Nil	Nil	3 ½	¼"
DIN	70*100 max Std. or As req	All	All	Max.4	No	No	No	3 ½ max.	¼" size
Euro	As required or Optimum possible	All	All	Max. 4	Yes	Yes	No	3 ½ max.	All Upto 2"/4"...16" size

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

Note :

- 1)The user should opt for this model only if there remains LEAST possibility of change in INPUT / DISPLAY and other related specifications of the instrument. These instruments are of the type : FIT IT and FORGET IT. The stable electronics assures years of consistent run, once preliminary specification cares are taken for.
- 2)The user cannot configure the instrument IN ANY MEANS to change its input types. This can be done at factory only.
- 3)Calibration, Display range, Hysteresis, Alarm type – are the configurations that the user can perform by varying JUMPER, DIP SWITCHES, POTENTIOMETERS on PCB level. The instrument has to be definitely opened up for this purpose and some trained technician has to perform this job.

Ordering Information

Please confirm the availability of the model by cross checking the table mentioned on the backside. FOR INDICATORS, MODEL NO. shall remain in the following format

Basic Model No.

(Specified by first 3 digits)801 -Signal Ind. cumController
Predefined type inputs
Predefined type ranges
Analog type digital elect.

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-T/C J type
5-T/C K type
6-T/C R type
7-T/C S type
8- T/C T type
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-mA/V DC isolated
2-mA/V DC non-isolated
S-Specials

Bargraph Option (Specified by the fifth digit)

0-None
1-YES

Display Resolution (Specified by the sixth digit)

0-No Display i.e BLIND type
Controller only
1-2/3 digit
2-3.5 digit



(Din rail mounted)



(Din rail mounted)



(Din rail mounted)



(96*96, Bargraph type)



(in FLP enclosure)



PANTECH INSTRUMENTS

102, Shailja Complex II, Near R. C. Patel Estate, Akota-Padra Road, Vadodara - 390 020. (INDIA)

Telefax : (0265) 2331380, 6616080 Mobile : 98240 16466, 99242 10722

E-mail : pantech_instruments@yahoo.com URL : www.pantechindia.com