



## Technical Catalogue

### MODEL 857 RPM INDICATOR CUM CONTROLLER ( Microprocessor based – Programmable )

#### Introduction

Pantech's RPM Indicator cum Controller, model 857 is an ideal instrument for measuring the speed of any rotating part. The input signal can be pulses from any PULSE generating device. The basic feed in parameter for RPM calculation and display is PPR ( Pulse per Revolution Ratio ). Based on these feed ins, the instrument comes up with a definite display for SPEED. Model 857 is capable to display the RPM value to the resolution of maximum 4/4.5 digits with programmable range selection. However the RPM value is auto calculated, but this programmed range can set the value of retransmission signals which can be optionally taken from the instrument. Further it can be designed to generate maximum of 4 nos. of potential free contacts. All the configurations like : PPR, setpoints, alarm types, ZERO and SPAN for retransmission etc. can be done with the help of front keys only. It is also facilitated with internal transmitter power supply of 12/24 V DC, to power up proximity sensors.

The instruments are available in panel mounting as well as wall mounting versions. All models can be operated on 24V DC, 230V AC and 110V AC power supplies. Power supply is isolated from rest of the circuit.

The instrument incorporates low drift operational amplifiers and industrial grade components for long trouble free operation. Burn in of each module ensures long trouble free operation.

#### Specifications

##### Input – Any one of the below

- PNP / NPN Proximity ( NC type ) – 3 wire
- PNP / NPN Proximity ( NO type ) – 3 wire
- Magnetic pickup – 2/3 wire
- Namur type – 2/3 wire
- UNIVERSAL – with all the above types
- Specials

\*\* The user is required to give FREQUENCY value

##### 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 – SMPS
- 5)Specials

##### Contact ratings

230 V AC, 5 Amps.

##### Security

Single level – password protected

##### Power consumption

4 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 / 48 \* 48 / 72\*144 / SPECIALS

\*All config/calibration from front keys only

##### FEED IN PARAMETERS

PPR ratio  
SETPOINT / ALM. Type/ HYST. ( for c/o o/p )  
Z and S ( for retransmission )

##### Display Range

Auto calculated

##### 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 with 4-20 mA DC output

##### Output accuracy

+/- 0.1% of span

##### Display accuracy

+/- 0.1% of span

##### Transmitter power

12/24 V DC for proximity sensors  
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.



MODAL	Mounting & Dimension in mm (H * W * D)		Inputs	Range	Power	Alarms	Analog output 4–20 mA DC Isolated Non isolated		Display resolution	Display size
857	Panel	96*96*110	Pulses	All	All	Max.4	Yes	Yes	4 digit max.	½" size
		48*96*110	Pulses	All	All	Max.2	No	Yes	4 digit max.	½" size
		144*72*150	Pulses	All	All	Max.4	No	Yes	4 digit max.	½" size

Flame proof versions available  
 Customized changes in above model possible if qty. permits  
 Length counting version possible in this instrument

**Ordering Information**

Please confirm the availability of the model by cross checking the table mentioned on the backside.

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

857 -Programmable RPM

Indicator cum Controller.

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

P-Weatherproof - Panel

W-Weatherproof - Wall

F-Flameproof - Wall / field

I-IP65 grade – wall / field

S-Specials

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

1-PNP – 3 wire

2-NPN – 3 wire

3-Namur type – 2 wire

4-Magnetic pickup

U-Universal

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

3-Any other type of output

