



## 1006S RPM INDICATOR

Monitor. Protect. Transmit



Accurate



RS-485  
Output



Relay  
Output



Analog  
Output

1006S RPM Indicator is for measuring the rotating speed of a turbine or other rotating machines; it accepts input signal from proximity sensor, it can also accept input signal from other type of proximity sensors, photoelectric sensors, limit switches, the unit has a isolated built-in 24V DC excitation supply to power the input sensors.

1006S RPM comes with 2 set points and relay outputs for alarm and Trip purpose, the set points and relay logic can be user set for over speed/under speed alarming and protection, the unit has built-in acknowledge logic for maintained as well as momentary alarms. Isolated analog output by way of current is available for interface with PLC/DCS systems, also isolated RS-485 Modbus RTU port is provided to incorporate the 1006S in a plant wide SCADA system.

1006S is compact, reliable and fit for most critical speed monitoring and protection, the unit can be programmed for number of events/rotation and displays the speed from 1 RPM to 9999 RPM on a bright 4 digit display.

### Features

- Bright 4 digit display
- Programmable events per rotation
- 2 set point with relay output for alarm/trip
- Analog output for PLC/DCS interface
- Modbus RTU output on RS-485 for SCADA

### Applications

- Turbine speed Monitoring & protection
- Rotating machines speed control

# TECHNICAL SPECIFICATIONS

Input		Power Supply	
Input Type	Proximity sensor/ photoelectric sensors/ limit switches	Supply Voltage	85 to 265 VAC, 50/60 Hz OR 18 to 36 V DC (Optional)
No. of Channel	1	Power Consumption	<10VA
Pulse Per Rotation	1 to 60 (user set)	<b>Isolation (Withstanding voltage)</b> Between primary terminals* and secondary terminals**: <b>At least 1500 V AC for 1 minute</b> Between secondary terminals**: <b>At least 500 V AC for 1 minute</b> * Primary terminals indicate power terminals and relay output terminals. ** Secondary terminals indicate I/O terminals and communication port.	
Max Pulse Input	RPM x slots (Pulse/roted) $\leq$ 600,000		
Input Signal level	0-24V DC, min on pulse width 100 uSec.		
Input High	>1 Volt		
Input Low	<0.2 Volt		
Accuracy	$\pm$ 0.015% FS		
Resolution	1 RPM		
Display & Keys		Physical	
RPM	0.56", Red LED 4 digit	Mounting	Panel Mount
Relay & Communication	Discrete/individual LEDs	Dimensions	96(W) x 48(H) x 110(D) mm
Operation Keys	Menu/enter, up, shift, esc.	Panel Cutout	92(W) x 44(H) mm
		Weight	260 gms (Approx)
		Enclosure Material	ABS Plastic
		Enclosure Protection	IP20
		Terminal & Cable Size	Barrier type terminal 2.5mm <sup>2</sup>
Output		Environmental	
<b>Alarm Output</b>		Operating Temperature	0 to 55 °C
Relays	2	Storage Temperature	0 to 80 °C
Function	Alarm/trip	Humidity	20 to 95 % at RH non-condensing
Logic	Normal		
Contacts	C, NO		
Rating	5A@230VAC / 30VDC		
Response Time	<1 Sec		
Delay	0-9999 sec		
<b>Retransmission output</b>			
Current	4-20mA @ 600 $\Omega$ Max.		
Accuracy	$\pm$ 0.25% of FS		
Sensor Excitation Supply	24VDC ( $\pm$ 10%) @50mA (Current limited)		
<b>Communication output</b>			
Interface	RS-485		
Protocol	Modbus-RTU		
Baud Rate	9600, 19200, 38400		

## Ordering code

Model	Auxiliary Power Supply		Retransmission Output		Communication Output	
1006S	XX		X		X	
	U1	85-265 V AC	N	None	N	None
	U2	18-36 V DC	1	4-20mA	Y	RS-485