

- Smart speed monitor. User can easily set the frequency, rotation rate, pulse, and the warning signal
- Output: PNP, NPN, Relay, 0/4~20mA, 0~10V
- Display: LCD
- Power protection: overload, short-circuit, reverse polarity
- Mounting: DIN35
- Protection classification: IP50
- Certification: CE, RoHS



Speed Monitor SM1001

Linking your system

Applications

This product is applied to monitor rapid pulse-group and meantime the standard signal collected by the sensors can be displayed, detected, and recorded. It is used to broadly monitor the operation of the electric machinery, the rotation of the conveyor belt, the rotation of the wind turbines blades, and the direction of electric machinery.

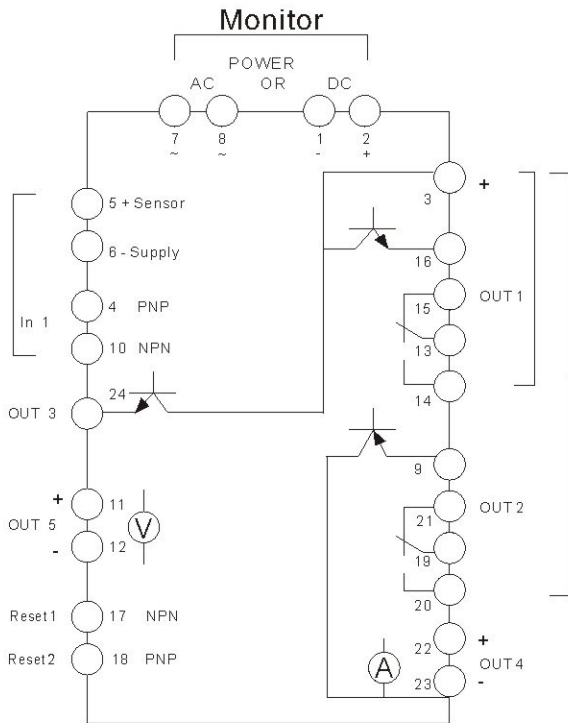
Operating principle

This product can complete test and monitor the speed or pulse sequences by the collections of sensors. It can monitor rotating motion, straight-line motion, and all physical units converted to the pulse-group. It owns powerful and various functions for monitoring the excessive frequency, the speed rate, operation synchronization, and the reverse (slow/quick rate of rotation, and time-consuming synchronization or direction).



Speed Monitor

Connection



Relay output (Out1/2) Analog output (Out4/5)
 Transistor output (Out1/2/3) Reset input (reset1 and reset2)

Wiring

	Function		Function
1	DC Supply voltage (L-)	13	Relay-1 (center contact)
2	DC Supply voltage (L+)	14	Relay-1(NO contact)
3	Supply transistor outputs (L+)	15	Relay-1 (NC contact)
4	Sensors signal PNP	16	Transistor output-1 PNP
5	DC Sensor supply (L+)	17	Reset-1 NPN
6	DC Sensor supply (L-)	18	Reset-2 PNP
7	AC Supply voltage	19	Relay-2 (center contact)
8	AC Supply voltage	20	Relay-2 (NO contact)
9	Transistor output NPN	21	Relay-2 (NC contact)
10	Sensor signal NPN	22	Analog current output (+)
11	Analog voltage output (L+)	23	Analog current output (-)
12	Analog voltage output (L-)	24	Transistor output-2 PNP

Technical Data

Applications	Frequency, rotation rate, and pulse
Setting range [Rotation rate/Frequency]	1~60000RPM/0.1~1000Hz
Rated voltage [V]	230AC (50~60 Hz)/24DC
Voltage tolerance[%]	10%
Contact loading	8A (1250VA/250VAC)
Power consumption[VA]	5/3W
Analog output	0/4~20mA, 0~10V
Pulse Input	PNP/NPN; Supply voltage: 24 VDC/15mA, Switch point for PNP: >12V On; <5V Off, Switch point for NPN: >15V Off; <8V On Input frequency (Max.): 5KHz (Corresponding min. pulse length/interval 0.1ms)
Transistor output	PNP, NPN
Measuring error [% of the final value]	<1%
Switching function	Two switch points required by the range of monitoring under speed/over speed
Max. relative air humidity [%]	75 (35°C)
Operating temperature [°C]	-20 ~ 60
Storage temperature [°C]	-25 ~ 80
Protect classification [Housing/Terminal]	IP50/IP20
Housing material	PBT+GF
Switching State LED	Green (Light on under actuation of relay/connection of transistor)
Input signal LED	Red
Function LED	LCD Display; 7/14 Segment
Connection	Dual-chamber terminals