



SPS-5/115 Self-powered Sensor

- Common Applications:**
- High Speed Drills
  - R&D
  - Engines/Motors
  - Felt Belts/Conveyor
  - Data Acquisition

The unique SPS Series of Self-Powered Sensors provide a TTL compatible pulse output from any of four input sensors:

- A visible optical red LED light source (ROS-P)
- An infrared light source (IRS-P)
- An amplified magnetic sensor (MT-190P)

See Page 9 for the sensors best suited to your applications.

The TTL compatible output is switch selectable as either positive going 0-5V pulses or negative going 5-0V pulses provided on a BNC connector. Internal rechargeable batteries provide 7 hours of operation between charges. For continuous operation, all SPS configurations can be powered by 115Vac, 230Vac or 5-12Vdc.

Self-powered sensors are a critical element for providing one pulse per revolution for vibration analyzers, spectrum analyzers, stroboscopes, data acquisition equipment, tachometers, balancers, waveform analyzers and magnetic tape recorders.

Remote Optical Sensor (ROS-P)



2

Magnetic Trigger Sensor (MT-190P)



Infrared Sensor (IRS-P)



Interface Module (SPS-IM)

3

115 Vac Recharger (R-5)



5-12 Vdc Cable (CA-SPS12)



230 Vac Recharger (R-6)



Customize your SPS for your application

- 1 Begin with the SPS-IM Interface Module
- 2 Select the sensor(s) best suited for your requirement
- 3 Choose your preferred power source

Specifications	SPS Series
Range (RPM)	Same as sensor
Output Signal	TTL compatible pulse, 0-5V or 5-0V
Pulse Width	Determined by size of target and rotational speed
Output Connector	BNC
Power	4 "AA" (LR6) NiCad Batteries, AC or 5-12 Vdc



**Smart Laser Sensor** is an internal battery-powered optical speed sensor utilizing a visible Class 3R Laser for a TTL pulse output. Operating range up to 65 feet (19.8 m) with reflective tape and up to 3 feet\* (1 m) from contrasting color targets, keyways, bolt heads or blades.

- "Smart" auto gain provides best performance in picking up target reflections.
- "On Target" Indicator
- TTL pulse output signal inverter Switch
- Manual sensitivity knob provides dynamic fine tuning of sensor response
- Signal/Pulse/RS232 Output DIN connector Port
- External DC power or recharger Port
- Tripod Mounting Bushing (1/4 - 20 UNC)



\* performance subject to intensity of ambient light irradiation.

Specifications	Smart Laser Sensor
Optical:	Class 3R (per IEC 60825-1) visible laser 650nm @ 3 mW peak power
Operating Range:	up to 65 feet (19.8 m) from T-5 reflective tape
Speed Range:	1-500,000 RPM
Output Signal:	TTL 5-0 VDC (user selectable polarity), RS232
Operating Temp:	32° to 104°F (0° to 40°C)
Dimensions:	5.41(L) x 2.35(W) x 2.14" (H) (13.74 x 6.43 x 5.43cm)
Mounting:	1/4 - 20 UNC bushing for tripod



SLS-115/230 Smart Laser Sensor with 115/230 VAC PR Universal recharger, SLS-CA-BNC cable and 12 inches of Reflective Tape.