

SPSR Self-Powered Sensor



The unique Self-Powered Sensor (SPSR) provides a square wave pulse output from any of five input sensors: RLS-P, ROLS-P, ROS-P, IRS-P or MT-190P (See pages 17-19 for details). The TTL compatible pulse 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 40 hours of operation between charges. For continuous operation, the SPSR can be powered by the included 115/230VAC universal recharger/power supply with interchangeable wall plugs. Self-powered sensors are a critical element for providing one TTL pulse per revolution for vibration analyzers, spectrum analyzers, stroboscopes, data acquisition equipment, tachometers, balancers, and waveform analyzers.



Ordering Information

Model	Description	Part No.
SPSR-115/230	SPSR interface module, power supply/recharger, ROS-P and 12" of T-5 tape	6150-020
SPSR-IM	SPSR interface module only, with power supply/recharger	6150-021

Accessories available on website

For details, see SPSR webpage.

Specifications*	SPSR Sensor
Range (RPM)	Same as sensor
Output Signal	TTL 0-5V or 5-0V (user-selectable polarity)
Pulse Width	Determined by target size and rotational speed
Output Connector	BNC connector
Power	Rechargeable NiMH batteries, 40 hours or continuous with 115/230VAC supply/recharger with interchangeable wall plugs

*Specifications are subject to change without notice.

CSLS Compact Smart Laser Sensor



The Compact Smart Laser Sensor (CSLS) is a self-contained optical sensor intended to be used to make non-contact speed measurements from rotating targets at distances up to 65 feet (19.8 m). The sensor has both digital pulse and analog outputs to provide non-contact reference points to balancing equipment or signals to a vibration analyzer. The sensor will track surface irregularities on rotating shafts and provide pulse outputs from reflective tape, contrasting colors and keyways. The sensor is IP64 rated and is suitable for use in dusty damp environments. Includes ¼-20 tripod mounting bushing.

Features:

- TTL 0-3.0V pulse output
- Analog output to provide reference points for balancing or vibration analyzers
- Measure rotating targets up to 65 feet away



Ordering Information

Model	Description	Part No.
CSLS	CSLS with 3 m power/output cable and roll of T-5 tape	6180-038

Accessories available on website

For details, see CSLS webpage.

Specifications*	CSLS Sensor
Optical	Class 3R (per IEC 60825-1) visible laser 650nm @ 3 mW peak power
Operating Range	Up to 65 ft. (19.8 m) from T-5 reflective tape
Speed Range	1-500,000 RPM
Output Signal	TTL 0-3.0V typical (positive going pulse)
Operating Temp	32° to 120°F (0° to 50°C)
Dimensions	3.5 x 2.4 x 2.2 in. (8.9 x 6.0 x 5.5 mm)
Power	5VDC ± 5% @ 30mA max

*Specifications are subject to change without notice.

SLS Smart Laser Sensor



The Smart Laser Sensor (SLS) 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.

Features:

- "Smart" auto gain provides best performance in picking up target reflections
- Manual sensitivity knob provides dynamic fine tuning of sensor response
- TTL pulse output signal inverter switch
- Signal/Pulse/RS232 Output DIN connector port
- External DC power/recharger port for continuous operation (24/7)



Ordering Information

Model	Description	Part No.
SLS 115/230	SLS with 115/230VAC universal power supply/recharger, BNC cable, 12" of T-5 tape, and NIST Certificate	6180-022

Accessories available on website

For details, see SLS webpage.

Specifications*	SLS Sensor
Optical	Class 3R (per IEC 60825-1) visible laser 650nm @ 3 mW peak power
Operating Range	Up to 65 ft. (19.8 m) from T-5 reflective tape
Speed Range	1-500,000 RPM
Output Signal	TTL 0-5 or 5-0V user-selectable polarity, R232
Operating Temp	32° to 104°F (0° to 40°C)
Dimensions	5.38 x 2.53 x 2.25 in. (13.67 x 6.42 x 5.72 cm)
Power	Internal 4 AA rechargeable NiCd 700 mAh batteries

*Specifications are subject to change without notice.