

Sensors for Tachometers or Stand Alone Use

Sensors for use with our instruments and for use in universal applications. We offer two types: [Instrument Powered](#) and [Self-Powered Sensors](#)



Optical Sensors

1-250,000 RPM. The most versatile and popular sensors we make. The ROS-5W, ROS-5P and ROS-9P are threaded stainless steel remote optical sensors with a visible red LED light source. All these sensors have the "on-target" green LED indicator.



Proximity Sensor

1-60,000 RPM. The P5-11 is a rugged industrial 2-wire probe style inductive sensor. It can be used 0.2 inches (5mm) from a 0.5 inch (12mm) metallic target such as a bolt head or shaft locking key.



Infrared Sensor

1-999,990 RPM. Both the IRS-5P and IRS-5W are proven to be reliable high-speed sensors. With a working range of 12 to 25 mm from very high-speed equipment or an application providing contrasting light and dark surfaces.



Magnetic Sensors

1-99,999 RPM. Self-powered gear sensor. M-190W and M190P are very popular magnetic sensors commonly used with 60 tooth 20 pitch gears. The sensors mount with 0.005 inches (0.127mm) of a 0.1 inch (2.5mm) target. These sensors require no power from our display modules as they self-generate an AC signal.



Magnetic Sensor with Amplifier Module

1-99,999 RPM. Same as the M-190 sensors but with an enhanced performance from the amplifier. The amplifier extends the operating gap to 0.25 inches (6.35mm) from the target. Frequently used on gears. The MT-190 and MT-190W provide a 0-5V TTL output signal.



Laser Sensor

1-150,000 RPM. The Ultimate speed sensor. The RLS-5p and RLS-5W operate up to 50 feet (1.5m) at 75° from a reflective target. In some applications at close range contrasting colors can trigger the sensor. Adjustable sensitivity provides dynamic fine-tuning of sensor response.

Self Powered Sensors



The unique SPS Series provide a TTL compatible pulse output from any of our four input sensors. The TTL output is switch selectable positive going 0-5V or negative 5-0V pulses provided at the BNC connector. Internal rechargeable batteries provide 7 hours of portable operation. All SPS configurations can be powered by 115 Vac, 239 Vac or 5-12Vdc. The SPS Series makes use of Monarch's sensors combined with the Interface module (SPS-IM) and one of three power sources.

Applications: SPS can provide one pulse per revolution triggers for vibration, spectrum and waveform analyzers, data acquisition equipment, stroboscopes, balancing machines and recorders.

Self-Powered Series Specifications

Range (RPM)-Same as the sensor
Output signal-TTL compatible pulse, 0-5V or 5-0V
Pulse Width-Determined by size of target and rotational speed
Output connector-BNC Connector
Power (4) "AA" (R6) NiCad batteries AC or 5-12 VDC



