



**MONARCH**  
INSTRUMENT



# PLS

## Pocket LED Stroboscope

### Features:

- Intuitive one-handed operation
- Energy efficient with long battery life
- Extremely bright, uniform light
- Quiet, cool operation
- Compact size
- No lamp replacements
- Lightweight
- Digital backlit LCD
- Tripod mounting bushing (1/4"-20)
- NIST Certificate included

### Typical Uses:

- Speed measurement
- Virtual stop motion inspection for quality control and quality assurance
- Predictive maintenance



CE



The PLS Pocket LED Stroboscope is a compact, rugged, lightweight device that provides a super bright, uniform light output for performing visual diagnostic inspection and RPM measurements. The silent cool running LEDs are extremely energy efficient, providing up to 6 hours of operation on a single charge. The PLS has a wide operating range of 30-300,000 flashes per minute, which covers most industrial applications. Additional features include external input for remote triggering or tachometer mode, pulse output, memory for up to 5 preset flash rates, NIST Calibration Certificate, tachometer mode for speed measurements up to 300,000 RPM using optional remote sensors and providing a TTL pulse output.

# PLS Pocket LED Stroboscope

Specifications*	PLS Pocket LED Strobe	
Time Base	Ultra stable crystal oscillator	
Display	LCD with 6 numeric 0.506 in. [12.85 mm] high digits and 5 alphanumeric 0.282 in. [7.17 mm] high digits	
Indicators	Low Battery, On-Target, Select, TACH, and EXT icons	
Memory	Last setting before power down is remembered and restored on next power up; 5 user-settable memory locations	
Flash Duration	Adjustable 0.5 to 1300 microseconds or 0.1 to 10 degrees of rotation (auto adjusts with flash rate)	
Input Power	Battery-powered: internal Li-ion rechargeable batteries 3.6 V dc	
Light Output	Average: 3300 lux @6000 FPM 12" from target @ 2°	
Run Time	5-6 hours typical at 6000 FPM, and 2.0° pulse width with fully charged batteries	
Charge Time	4-5 hours typical with supplied charge	
Weight	0.6 lbs. [0.27 kg] including batteries	
Safety	This product is designed to be safe for indoor use per IEC61010-1.	
Operating Temp.	32 - 104 °F [0-40 °C]	
Humidity	Maximum relative humidity 80% for temperature up to 88 °F [31 °C] decreasing linearly to 50% relative humidity at 104 °F [40 °C]	
	<b>Internal Mode</b>	
	Flash Range	30-300,000 FPM, 0.5 to 5000 Hz
	Flash Rate Accuracy	0.005% of setting or ± last digit
	Flash Rate Resolution	0.01 to 1 FPM (menu selectable), 0.1 FPM resolution above 9,999.99 FPM, 1 FPM resolution above 99,999.9
	Display Update Rate	Instantaneous
	<b>External Modes</b>	
	Flash Range	0 to 300,000 FPM, 0 to 5000 Hz
	Tachometer Mode	0 to 300,000 RPM
	Accuracy	±0.005% of reading up to 250,000 or ± last digit
	Display Update Rate	0.5 second typical above 120 RPM
	Trigger to Flash Delay	~ 15 µsec
	External Input	2.5 V to 12 V peak pulse 500 nanosecond min. pulse width; Positive or Negative edge triggered (menu selectable)
	Output Pulse	3 V pulse; one pulse per flash in internal mode mimics input pulse in external mode
	Pulse In to Out Delay	< 0.2 µsec (External Mode)

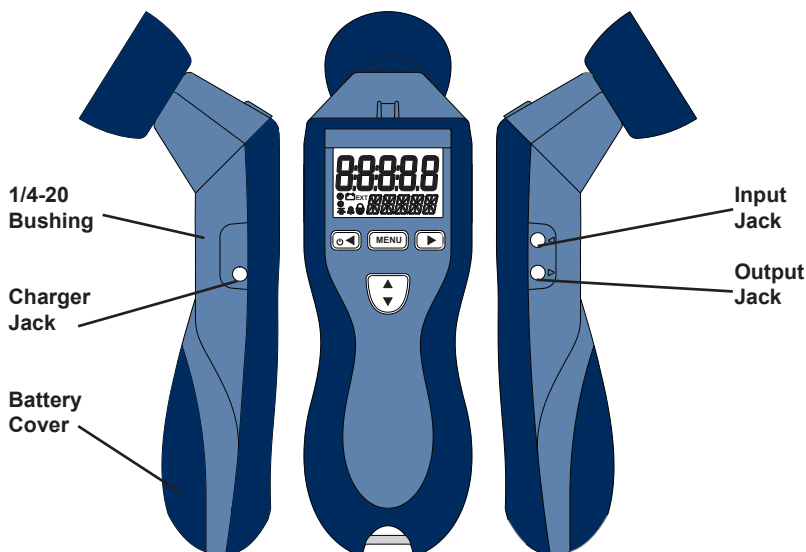
\*Specifications are subject to change without notice.

## Ordering Information

Model	Description	Part No.
PLS	Pocket LED Stroboscope, universal 115/230 V ac recharger with interchangeable wall plugs and NIST Certificate	6235-010
PLS Kit	Same as above with die-cut foam-lined latching carry case	6235-011
PLS Kit Plus	Same as PLS Kit above; includes ROLS-P Remote Optical Laser Sensor for triggering flash or for use as a laser tachometer	6235-012

Accessories available on website

For details, see PLS webpage.



## Accessories:

Remote Optical Laser Sensor  
PN: 6180-029



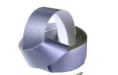
Remote Optical Sensor  
PN: 6180-057



Replacement Lithium Battery  
Charger 115/230 with  
interchangeable plugs  
PN: 6280-027



Reflective Tape - 5 ft. x 1/2" roll  
PN: 6180-070



Protective Carry Pouch  
PN: 6280-073



Replacement Li-ion Battery Pack  
PN: 6280-074



Tripod Mini  
PN: 6180-040

