

# PSM-R / M2

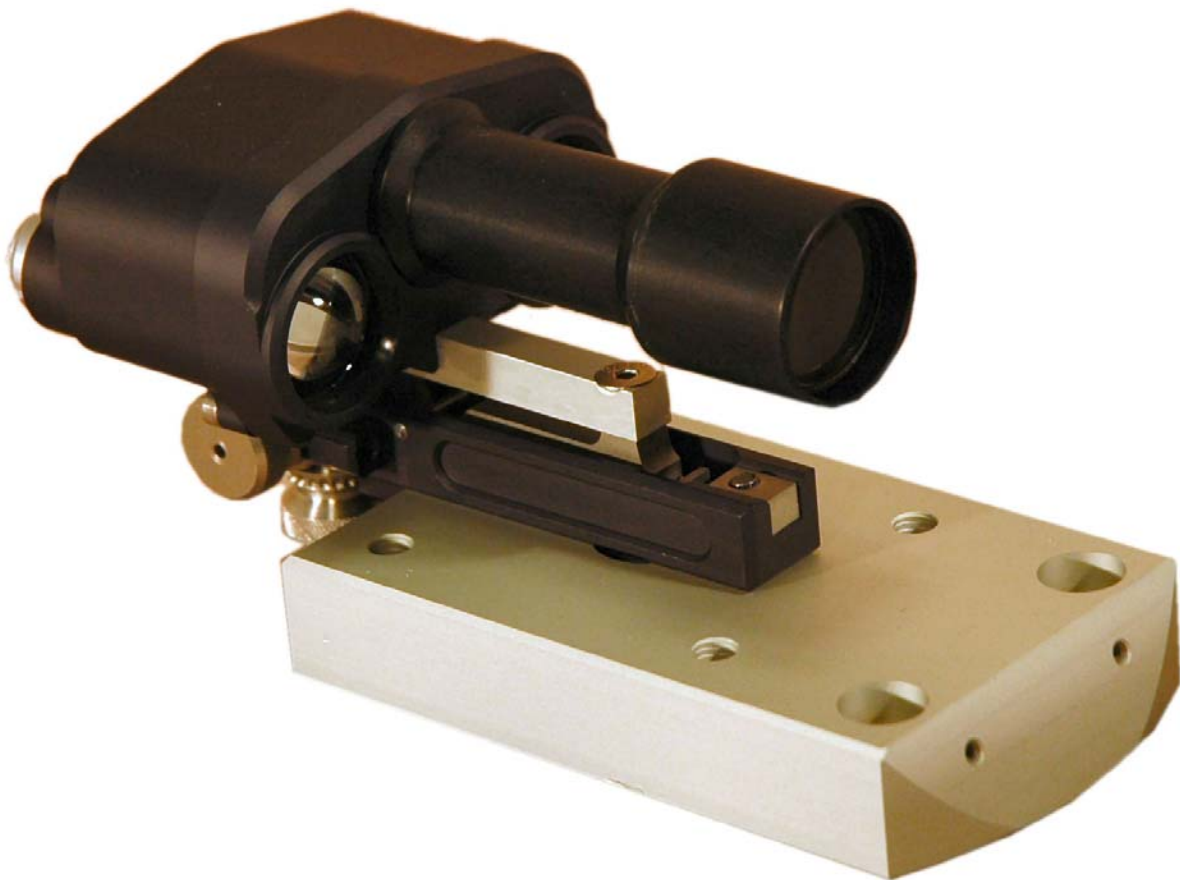
## Displacement sensor

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- **Light weight transceiver for outdoors remote displacement measurement**
  - **Displacement of the object**
  - **Deflection of a bridge**
  - **Movement of tower or mast**
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The PSM-R measuring devices are meant for long distance displacement measurement applications outdoors. It is based on a combined led transmitter and an optoelectronic receiver, which measures the movement of the reflecting target attached to the object to measure. The

operator directs the safe light beam at the receiver and locks it in a steady position. The beam is reflected from the target back to the receiver where the receiver recognizes it and measures its position accurately up to 100 times a second.



# PSM-R / M2 Displacement sensor

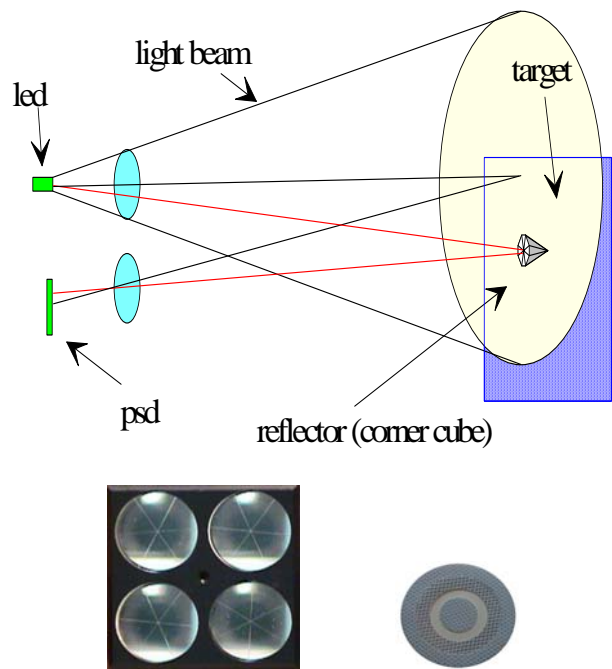
The new PSM-R Displacement sensor is smaller than the predecessors, practical to install to any measurement site. The unit can be mounted to a tripod or to any special mechanical structure, depending on the requirements and possibilities of the measurement site.



## CHARACTERISTICS

The device is meant for outdoor use and the structure is air tight. It is battery operable, but can also be supplied with an external power supply or from the USB port.

The devices can measure the movement of the object at a distance of 5 to 250 meters, depending on the needed accuracy and reflector type. The measuring range can be enlarged and the measuring accuracy improved by using a better reflector, prism or prism group. While the measuring area depends of the distance between the device and the target, the absolute movement or position has to be calculated as a function of the distance. The same reflector can be used simultaneously by several measuring devices.



### TYPICAL TECHNICAL SPECIFICATIONS

• Power supply	7-12 VDC		
• Supply current	10-35 mA		
• Operating temp.	-20 ... +40°C		
• Measuring area			
10 m	20 cm		
50 m	100 cm		
150 m	300 cm		
• Min. meas. distance	10m		
• Max. meas. distance	250m		
• Measuring rate	10 to 50 ms		
• Serial comm.	USB		
• Weight	220 g		
• Dimensions			
Length	120 mm		
Width	68 mm		
Height	40 mm.		
		• Resolution 20 meas./sec	
		10 m	0.1 mm
		50 m	0.5 mm
		150 m	4 mm
		250 m	7 mm
		• Resolution 100 meas./sec	
		20 m	0.3 mm
		50 m	1.5 mm
		100 m	5 mm
		150 m	10 mm
		250 m	17 mm
		• Reflector	
		10 m	plastic -
		50 m	Prism
		150 m	Prism group
		250 m	2 x prism group
		• Safety	Eyesafe