



METROLOGY RESOURCE CO

## MRL2 DISTANCE LASER SENSORS

The MRL2 Distance Laser Sensors are the new generation of powerful and robust distance measuring modules designed to meet the demands of the industrial measurement market. These modules offer many outstanding features: The MRL2-H Distance Laser Sensors are identical to the MRL2 sensors except, they have an extended temperature range and operate at temperatures down to -40°C.



The features of the MRL2:

- Compatible with MRL-1 measurement laser
- Measurement range 0.05 to 500 m
- Serial interface (RS232 and RS422)
- Connection of up to 10 modules on a single RS422 line
- Programmable analog output
- Two programmable digital outputs
- Digital output for error signalization
- One programmable digital input
- ASCII protocol to control external displays
- 4 LEDs for status signaling
- D-Sub connector and screw terminal for easy connection
- Adapter for telescopic viewer for easy installation
- Solid aluminum metal housing
- IP65 ( protected against ingress of dust and water)
- Complementary configuration software
- Laser class II (<0.95mW)
- Can be mounted with three M4 screws
- Extended temperature range for low temperatures



## DISTANCE LASER SENSORS

Important Technical Data	MRL2-15	MRL2-30	MRL2-H15	MRL2-H30
Typical measuring accuracy	±1.5 mm	±3.0 mm	±1.5 mm	±3.0 mm
Resolution	±0.1 mm	±0.1 mm	±0.1 mm	±0.1 mm
Measuring range on natural surfaces	0.05 to 65 m	0.05 to 65 m	0.05 to 65 m	0.05 to 65 m
Measuring range on reflecting target plate	0.05 to 500 m	0.05 to 500 m	0.05 to 500 m	0.05 to 500 m
Diameter laser dot				
▪ 5 m	4 mm	4 mm	4 mm	4 mm
▪ 10 m	8 mm	8 mm	8 mm	8 mm
▪ 100 m	40x25 mm	40x25 mm	40x25 mm	40x25 mm
Time for measurement				
▪ Single measurement	0.04 to ~ 3 sec	0.04 to ~ 3 sec	0.04 to ~ 3 sec	0.04 to ~ 3 sec
▪ Continuous measurements	0.04 to ~ 3 sec	0.04 to ~ 3 sec	0.04 to ~ 3 sec	0.04 to ~ 3 sec
Power Supply				
MRL-2	9-30VDC@0.5A	9-30VDC@0.5A	9-30VDC@0.5A	9-30VDC@0.5A
MRL-2H heating option	24-30VDC@2.5A	24-30VDC@2.5A	24-30VDC@2.5A	24-30VDC@2.5A
Weight	690 g	690 g	690 g	690 g
Temperature range				
▪ Operation Single measurement	-10°C to 50°C	-10°C to 50°C	-40°C to 50°C	-40°C to 50°C
▪ Operation Continuous measurements	-10°C to 45°C	-10°C to 45°C	-40°C to 45°C	-40°C to 45°C
▪ Storage	-40°C to 70°C	-40°C to 70°C	-40°C to 50°C	-40°C to 50°C



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