

Laser Displacement Sensor DSL-500

- Reflective laser measurement method;
- Range 500mm, Non-Linearity $\leq \pm 0.1\%FS$;
- Laser wavelength 650nm, Spot diameter 0.3mm;
- Response frequency $\geq 5kHz$;
- Signal output default 0~5V;
- Power supply 9~36V, Max. 2.5W.

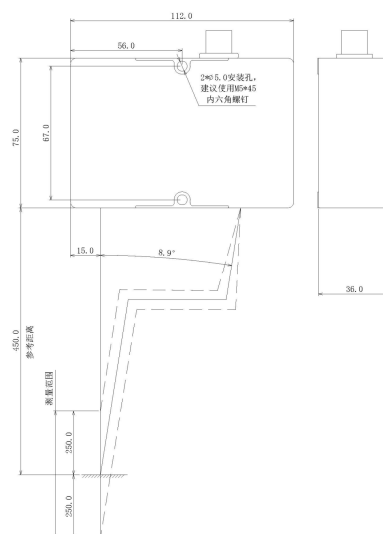


The displacement sensor DSL-500 uses visible red light triangulation for measurement. A fine laser beam is projected onto the surface of the measured object, and the reflected light enters the laser displacement sensor. The target distance is calculated through internal algorithms. The sensor has real-time high-speed calculation capabilities and an extremely short reflection distance establishment time. Additionally, this laser displacement sensor can adapt to various object reflection surfaces. For rough or particularly poor reflection surfaces, reflective stickers can be used to improve performance.

Specification (5V, 25°C)

Name	Unit	Value
Range	mm	500
Start Meas. distance	mm	200
Spot diameter	mm	0.3
Laser type	/	650nm Red
Non-Linearity	%FS	$\leq \pm 0.1$
Output signal	V	0-5 or 0-2.5
Response frequency	kHz	≥ 5
Operating voltage	V	9~36
Power consumption	V	2.5
Status indicator	Yellow	Initializing
	Green	Work
	Red	Out of range
Anti-Shock	g	10@12ms
weight	grams	450
Dimension	mm	112×75×36

Dimension:



Note:

Do not install on impacting objects;

Avoid direct sunlight exposure. Strong lighting may cause interference, so consider appropriate ambient light shielding.

Mounting Fixtures:

