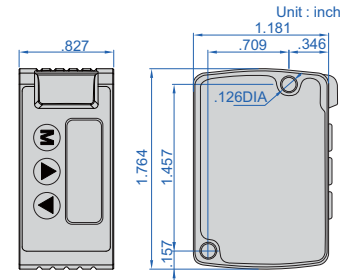


# LASER DISPLACEMENT SENSORS

**IP67**  
WATERPROOF



- High accuracy, non-contact measurement, high speed response, multiple measurement modes, environmental adaptability, programmable control, rich data output interface and easy maintenance.
- Can be used in automated production lines, robotic arms, packaging equipment, printing equipment, medical equipment etc.



## SPECIFICATION

Part No.	NPN	LDS-N30	LDS-N50	LDS-N100	LDS-N200	LDS-N400
	NPN+Analog	LDS-N30-MC	LDS-N50-MC	LDS-N100-MC	LDS-N200-MC	LDS-N400-MC
	NPN+RS485	LDS-N30-RS	LDS-N50-RS	LDS-N100-RS	LDS-N200-RS	LDS-N400-RS
Detection method		diffuse reflection				
Basis (center) distance		30mm	50mm	100mm	200mm	400mm
Detection range (F.S.)		25~35mm	35~65mm	65~135mm	120~280mm	200~600mm
Full scale		10mm	30mm	70mm	160mm	400mm
Repeat accuracy		10µm	30µm	70µm	200µm	200~400mm: 600µm 400~600mm: 1500µm
Linear accuracy		±0.2% F.S.				200-400mm: ±0.2% F.S. 200-400mm: ±0.3% F.S.
Temperature drift characteristics		±0.03% F.S./°C				
light source	medium	red diode laser, wavelength 655nm				
	output power	<1mW				
	laser class	IEC Class 2				
Light spot diameter		Ø50µm	Ø70µm	Ø120µm	Ø300µm	Ø500µm
Output	switch mode	NPN open collector, ≤50mA/DC 24V, residual voltage<1.5V				
	analog	analogue voltage: 0~5V (alarm: 5.2V), analogue current: 4~20mA (alarm: 0mA), Chinese display switchable				
	operation	Light.on/Dark.on selectable				
Response time		1.5ms/5ms/10ms, switchable				
Power supply		DC12~24V				

<b>No-load current</b>	<30mA (at supply voltage 24V DC), <60mA (at supply voltage 12V DC)	
<b>Indicator light</b>	output indicator: yellow, power indicator: green	
<b>Protection circuit</b>	reverse polarity protection/surge protection/short circuit protection	
<b>Protection level</b>	IP67	
<b>Withstand voltage</b>	AC1000V, 50/60Hz, 1min	
<b>Vibration resistance</b>	10~55Hz (period 1min), double amplitude 1.5mm, 2H in each X/Y/Z direction	
<b>Impact resistance</b>	500m/S <sup>2</sup> (approx. 50G), 3 times each in X/Y/Z direction	
<b>Insulation impedance</b>	50MΩ or more (DC500V megohmmeter)	
<b>Material</b>	<b>cover case</b>	aluminium alloy
	<b>lens</b>	PMMA
	<b>guidewire</b>	PVC (polyvinyl chloride)
<b>Connection</b>	switching: lead-in type (4-pole, standard cable length 78.74") analogue: lead-in type (5-pole, standard cable length 78.74")	
<b>Ambient illumination</b>	incandescent lamp ≤ 3000lux, sunlight ≤ 20000lux	
<b>Ambient temperature</b>	operation: 14~113°F, storage: -4~140°F(non-freezing)	
<b>Ambient humidity</b>	operation: 35~85%RH, storage: 35~85%RH (non-condensing)	
<b>Weight</b>	.19lb(include cable)	

#### STANDARD DELIVERY

<b>Main unit</b>	1 pc
<b>Mounting bracket</b>	1 pc
<b>Cable</b>	1 pc