

MS03 Series Long Range LiDAR



Abstract

MS03 is based on TOF principle. It scans at a high speed at an angle of 120°. The detection distance is up to 2000m with $\pm 2\text{cm}$ accuracy. Widely used in HD maps, smart cities, city 3D modeling, land survey, fire emergency, power inspection, track inspection, mine inspection, tunnel inspection, forest inspection, bridge anti-collision and other fields.

Parameters

Model		MS03					
Channel		4					
Measurement Technique		TOF					
Wavelength		1550nm					
Range		2000m	1000m	500m	300m	200m	100m
Laser Frequency		75kHz	150kHz	300kHz	500kHz	750kHz	1000kHz
Accuracy		$\pm 2\text{cm}$					
Rotation Rate		10Hz / 20Hz / 30Hz / 40Hz / 50Hz / 60Hz					
FOV		120°					
Resolution	10Hz	0.096°	0.048°	0.024°	0.014°	0.01°	0.007°
	20Hz	0.192°	0.096°	0.048°	0.028°	0.02°	0.014°
Data Points Generated		50,000 pts/s	100,000 pts/s	200,000 pts/s	333,000 pts/s	500,000 pts/s	667,000 pts/s
Returns		1-3					
Communication Interface		100M Ethernet					
GNSS Interface		TTL Sync Pulse					
Operating Voltage		14V ~ 36V DC					
IP		IP67					
Storage Temperature		0°C ~ 55°C					
Operating Temperature		0°C ~ 40°C					
Weight		3kg					
Dimension (L·W·H)		230*120*106 mm					