

OVERVIEW

ADI is a series of 2D LiDAR. Based on ToF principle, ADI is based on the single-line scanning design and can output 20K (up to 40K) point cloud data per second. It adopts 905nm infrared excitation light, with the self-developed signal processing algorithm, to meet the requirement of outdoor application scenarios. ADI also adopts industrial interface design to transmit point cloud data through network protocol, and the dustproof and waterproof of the whole device reaches IP67 level. ADI structure design is compact, easy to integrate, and provides a complete integrated development interface, widely used in robot navigation and obstacle avoidance, environmental scanning and mapping, industrial AGV, assisted driving and other fields.



TECHNICAL SPECIFICATIONS

PERFORMANCE PARAMETER

Item	Min	Typical	Max	Unit	Remarks
Ranging frequency	10000	20000	40000	Hz	Customizable 40KHz
Scanning frequency	10	20	30	Hz	Software control
Ranging distance	0.05	/	25	m	80% reflectivity
	0.05	/	10	m	10% reflectivity
Field of view	/	300	/	Deg	/
Statistical error	/	20	/	mm	/
Angle resolution	0.18 (10Hz)	0.36 (20Hz)	0.54 (30Hz)	Deg	Ranging frequency=20KHz
	0.09 (10Hz)	0.18 (20Hz)	0.27 (30Hz)	Deg	Ranging frequency=40KHz


PHYSICAL PARAMETERS

Item	Min	Typical	Max	Unit
Supply voltage	9	12	28	V
Operating power	2.4	2.7	3	W
Operating temperature	-10	25	50	°C
Laser wavelength	895	905	915	nm
Lighting environment	/	80000	/	lux
Degree of protection	/	IP67	/	/
Weight	/	TBD	/	g
Dimension	/	53*53*82	/	mm

DEFAULT SETTINGS

Item	Default value	Remarks
Network IP	192.168.0.11	configurable
Ranging zero	Center point of lidar	unconfigurable
Direction of rotation	Clockwise (top view)	unconfigurable
Angle zero	Arrow direction on top of protective cover	configurable
Indicator light	Steady red: The system is in standby state Steady green: The system is working	unconfigurable

LASER OPTICAL PARAMETERS

Item	Min	Typical	Max	Unit	Remarks
Laser wavelength	895	905	915	nm	Infrared band
FDA	 Class I IEC60825-1				