

DCAM550 TOF Camera Product Brief

DCAM500 is designed for high performance applications in professional and industrial environments, such as AMR obstacle avoidance, industry automation, Cobot, palletization and volume measurement etc.



Advantages

High Revolution

- VGA resolution of raw depth data

Outdoor Use

- Can work under 100K Lux ambient light environment

Wide FOV

- Up to 120° horizontal FOV with customized service

Reliability

- -10°C~50°C working temperature environment
- IP42 encloser

Applications



Cobot



Volume Measurement



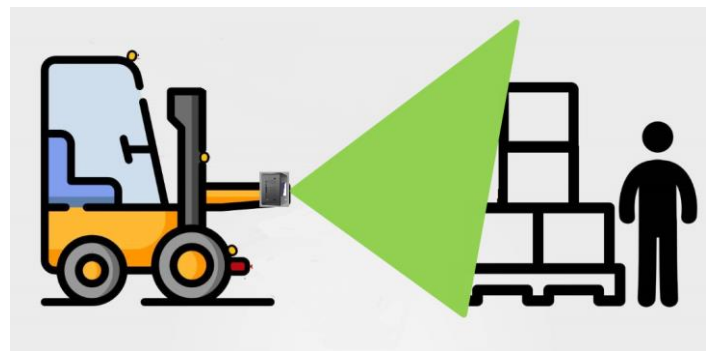
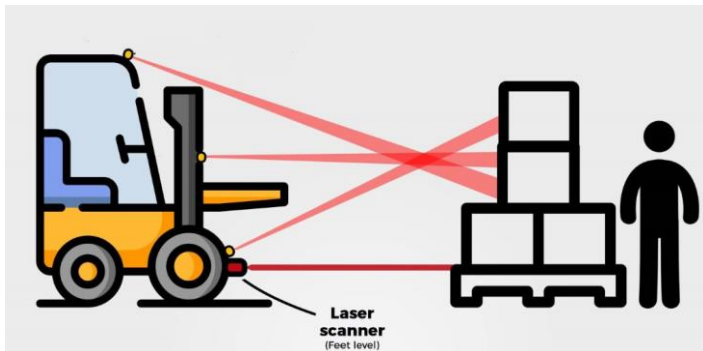
Palletization



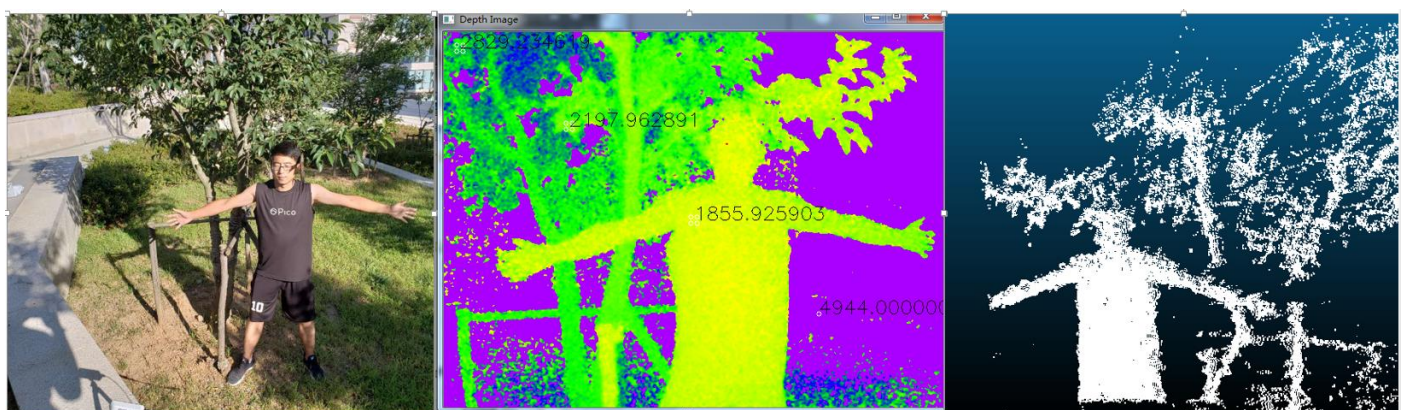
Mobile Robot

Comparison between TOF and LiDAR in AMR

Items	DCAM550 TOF Camera	LiDAR
Sensor	TOF CCD, 640*480	Single Line LiDAR
FOV	Up to H 120°, V 90°	Limited V FOV
Range	0.2m~4m	Long distance, hundreds of meters
Measurement Speed	30fps	10fps
Hardware Interface	100M Ethernet	
Output Data	Point Cloud	Depth Map
Power Consumption	<5W	
Working Temperature	-20°~50°	
Storage Temperature	-30°~70°	



Wider FOV, Less Blind Spot, Fast Response



Performance under Strong Sunlight (82K LUX)

Technical Specifications

Item	DCAM550
Technology	TOF (Time of flight) Depth Camera
Depth Sensor Format & Frame rate	up to 640 x 480(VGA)@30FPS
Output format	Depth Map (RAW12)
Depth Sensor Field of View H - Horizontal, V - Vertical (degree)	H - 69°(Customizable) V - 51°
Distance Range	0.2m - 8m (Customizable)
Accuracy	<1%
Power Consumption	<5W (Depends on distance)
Power Supply Interface	USB and DC Adaptor 12V~24V
Illumination	In-door 850nm/Out-door 940nm, VCSEL
Dimension (L*W*H)	USB Version: 62.5*62.5*43.5mm (Draft) Ethernet Version: 62.5*62.5*51mm (Draft)
Interface	DCAM550-U: USB2.0, RS485, GPIO DCAM550-P: 100Mbps Ethernet, RS485, GPIO
Algorithm / Software	C/C++ SDK, OpenNI, ROS
Operation System	Android / Linux / Windows7/8/10

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