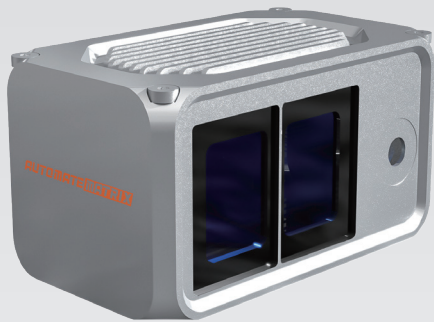


SC-ToF550

Wide FOV iToF
3D Sensor



PRODUCT INTRODUCTION

Automate Matrix's SC-ToF550 is specifically designed for applications that require a wide field of view for 3D data acquisition and RGB image capture, such as intelligent monitoring, panoramic modeling, and large - scale robot navigation. Its unique wide - angle design and excellent performance bring more comprehensive data acquisition capabilities to related projects.

PRODUCT FEATURES



Ultra - wide Field of View Coverage

With a wide FOV of 98°×80°, compared with standard FOV sensors, it can cover a larger spatial range, effectively reducing monitoring blind spots and comprehensively improving the integrity of data acquisition.



Reliable Environmental Adaptability

The operating temperature range is - 20°C to 60°C, the safety class is class1 (compliant with IEC/EN 60825 - 1:2014), the protection rating is IP66, and it is certified by CE and FCC, demonstrating excellent environmental adaptability and safety reliability.



Rich Interfaces and Software Support

Equipped with Gigabit Ethernet ports, CAN interfaces, and external trigger input interfaces, it supports multiple operating systems and a rich SDK. The SDK provides development interfaces for C/C++, Python, C#, as well as support for ROS1 and ROS2 frameworks, facilitating system integration and secondary development to meet the requirements of different projects.

PRODUCT PARAMETERS

Parameter Type	Parameter Name	Parameter Value
General Product Parameters	Operating Temperature	-20°C to 60°C
	Safety Class	Class1 (IEC/EN 60825 - 1:2014)
	Protection Rating	IP66
	Certification	CE/FCC
Hardware Parameters	Power Supply Method	DC
	Power Supply Voltage	24V
	Average Power Consumption	6W
Data Parameters	Output Data Format	Depth/RGB/RGBD
3D Parameters	Pixel Size	5μm
	Ranging Accuracy	0.01
	Resolution	640×480 (VGA)/320×240 (QVGA)
	Frame Rate	VGA: 20 fps; QVGA: 25 fps
	FOV	98°×80°
	Ranging Range	0.2 - 3m (10% reflectivity)
RGB Parameters	Resolution	1920×1080 (1080P), 30 fps
	FOV	80°×60°
Software Parameters	Supported Operating Systems	Windows 7/8/10/11, Linux, Arm Linux
	SDK	Supports low - level development and algorithm implementation using C/C++, Python, and C#; enables robot - related function development based on ROS1 and ROS2