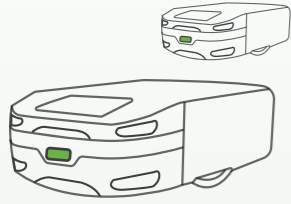


产品应用

Wide Applications



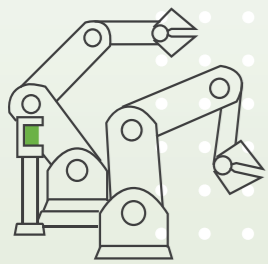
自主移动机器人

Mobile Robot (AGV/ AMR)



视觉引导拆码垛

Palletizing/Depalletizing



工业自动化

Industrial Automation



客流统计

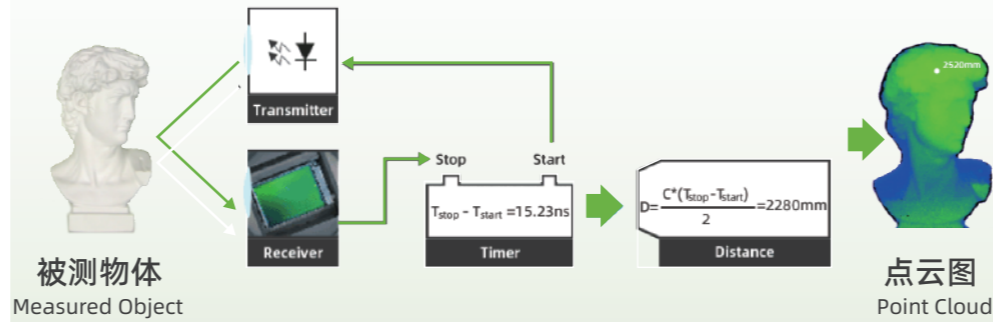
People Counting

关于ToF

About Time-of-Flight

3D飞行时间 (Time-of-Flight, ToF) 相机通过发射红外光并测量其反射回来的时间来测量距离、输出带有深度数据的深度和点云图。拥有部署方便、算法简单、抗环境光干扰强、帧率高等优势,在自动驾驶车辆、手势识别、机器人、智慧物流等行业中大展拳脚。

3D Time-of-Flight (ToF) cameras measure distance by emitting infrared light and measuring the time it takes for the reflection to return, outputting depth data along with depth and point cloud maps. Thanks to their easy deployment, simple algorithms, strong resistance to ambient light interference, and high frame rates, they are widely used in fields such as autonomous vehicles, gesture recognition, robotics, and smart logistics.



Time-of-Flight (ToF) 飞行时间技术原理示意图

Time-of-Flight (ToF) Technology Working Principle

自研算法

Proprietary Algorithm



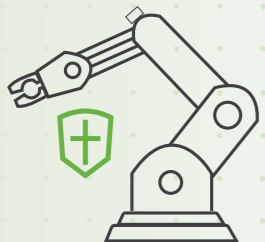
视觉引导拆码垛算法

Palletizing/Depalletizing Algorithm



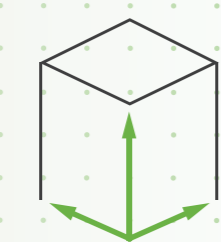
客流统计算法

People Counting Algorithm



智能周界安防算法

Perimeter Protection Algorithm



自动体积测量算法

Dimensioning Algorithm

关于我们

Company Introduction

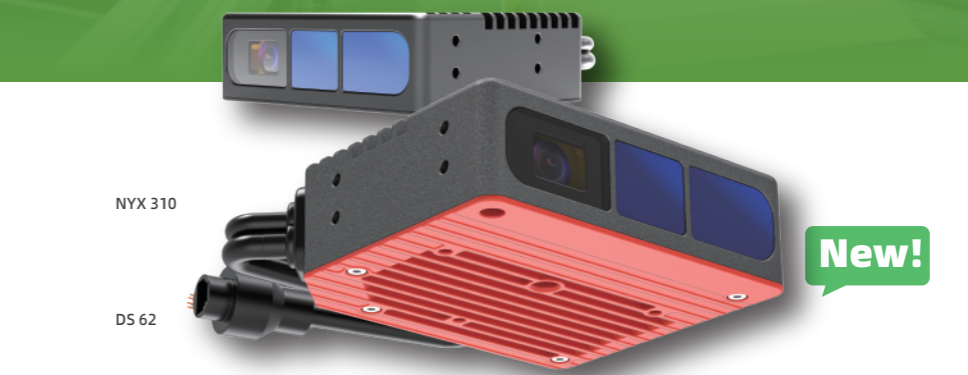
歌尔微电子股份有限公司成立于2017年10月,是以MEMS器件及微系统模组研发、生产与销售为主的半导体公司,为客户提供“芯片+器件+模组+解决方案”的一站式产品解决方案。自主研发生产的3D ToF 深度相机深度赋能工业自动化,为AGV、工业自动化等行业客户提供卓越的产品与算法,让机器立体看世界。

Goertek Microelectronics (Goermicro) Co., Ltd., founded in 2017, is a semiconductor company focused on MEMS devices and micro-system modules. Goermicro's 3D ToF depth cameras deliver advanced machine vision to empower industrial automation, AGVs, and smart machinery.

联系我们

Contact Information

- 网址(Web.): gongye.goermicro.com
- 公司地址(Add.): 山东省青岛市松岭路498号歌尔微电子产业园
- 联系电话(Tel.): 0086-18562876999 (李经理)
- E-mail: industrial@goermicro.com



- 英飞凌芯片: Infineon VGA Depth Chip
- 5W 功耗低: Average Max.5w
- 小尺寸: 25 Millimeters Thick
- 轻量级: 206g in weight ... for DS 62





产品优势 ADVANTAGES

- HDR**
支持HDR模式
Supports HDR
- 双频调制**
Dual-frequencies
- 高精度**
High Accuracy

应用场景 APPLICATIONS

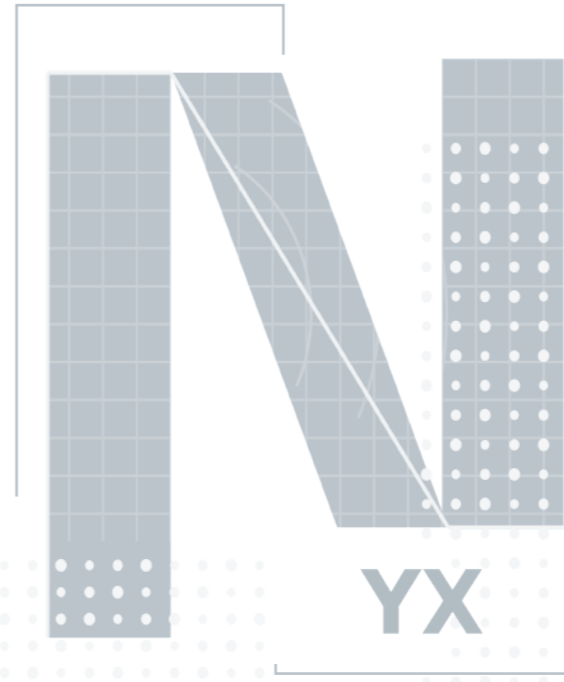
- 视觉引导拆码垛**
Palletizing & Depalletizing
- 焊接粗定位**
Welding Positioning
- 智能料位监测**
Level Detection
- 蜘蛛手快速抓取**
Spider Arm Picking
- DWS 体积测量**
Volume Measurement
- 智慧农业**
Smart Harvesting

产品优势 ADVANTAGES

- 高帧率**
High Frame Rate
- 抗强光**
Light Robustness
- 多机共存**
Multi-Coexistence

应用场景 APPLICATIONS

- 无人叉车**
Autonomous Forklifts
- 机械臂安防**
Robot Safety
- 容器载具识别**
Carrier Recognition
- 托盘识别**
Pallet Recognition
- 医疗设备防护**
Equipment Protection
- 客流统计**
People Counting



产品参数
TECHNICAL PARAMETERS

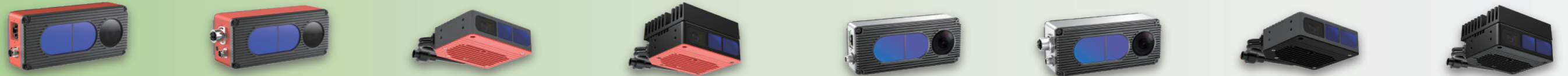
DS 系列
DS SERIES

连续波-iToF RGB-D 相机
CW-iToF RGBD Camera

NYX 系列
NYX SERIES

脉冲-iToF RGB-D 相机
Pulse-iToF RGBD Camera

产品图片
Product Picture



型号 Model	DS86	DS87	DS62	DS63	NYX650	NYX660	NYX310	NYX320
ToF 传感器 ToF Sensor	Sony IMX570 CMOS	Sony IMX570 CMOS	Infineon VGA	Infineon VGA	Nuvoton Pulse iToF	Nuvoton Pulse iToF	Nuvoton Pulse iToF	Nuvoton Pulse iToF
ToF 分辨率 ToF Resolution	640*480	640*480	640*480	640*480	640*480	640*480	640*480	640*480
ToF 帧率 ToF Frame Rate	Max. 15fps	Max. 15fps	Max. 30fps	Max. 30fps	Max. 30fps	Max. 30fps	Max. 30fps	Max. 30fps
ToF 视场角 ToF FoV	67°(H) *50°(V)	67°(H) *50°(V)	55°(H) *42°(V)	67°(H) *50°(V)	70°(H) *50°(V)	70°(H) *50°(V)	60°(H) *45°(V)	70°(H) *50°(V)
RGB 相机 RGB Camera	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RGB 分辨率 RGB Resolution	1600*1200	1600*1200	1600*1200	1600*1200	1600*1200	1600*1200	1600*1200	1600*1200
全局曝光RGB Global Shutter	Yes	Yes	No	Yes	Yes	Yes	No	Yes
物理接口 Interface	M8 A-coded+RJ45	M8 A-coded+M12 X-coded	Gigabit Ethernet +RS485	Gigabit Ethernet +RS485	M8 A-coded+RJ45	M8 A-coded+M12 X-coded	Gigabit Ethernet +RS485	Gigabit Ethernet+RS485
支持 PoE+ 供电 PoE+	No	Yes	No	No	No	Yes	No	No
IP 防护等级 IP Rating	IP42	IP67	IP65	IP65	IP42	IP67	IP65	IP65
工作距离 Working Range	0.15~5m	0.15~5m	0.15~5m	0.15~5m	0.3~4.5m	0.3~4.5m	0.3~4.5m	0.3~4.5m
输出格式 Output Format	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)	16bit (depth) + 8bit (IR) + JPEG (RGB)
操作系统 OS Support	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux	Windows, Linux, Arm Linux
开发语言 SDK Support	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2	C/C++ /Python/C #/ROS1&2
相机尺寸 Camera Size	125.2*50*34.5mm	131.3*50*44.5mm	80*69*25mm	80*69*45mm	125.2*50*34.5mm	131.3*50*44.5mm	80*69*25mm	80*69*45mm
包装尺寸 Package Size	246*152*85mm	246*152*85mm	140*130*76mm	140*130*76mm	246*152*85mm	246*152*85mm	140*130*76mm	140*130*76mm
毛重 Gross Weight	0.68kg	0.85kg	0.21kg	0.35kg	0.68kg	0.85kg	0.21kg	0.35kg

*精度与检测距离随被测物体表面反射率的不同会有差异
Accuracy and detection range vary with the target surface reflectivity.