



SENAD

智无限 鉴未来
Infinite wisdom, reflect future



官方公众号
Wechat



官网
Web

赛那德科技 SENAD

 www.senad.cn

 +(86)21 5991 9555

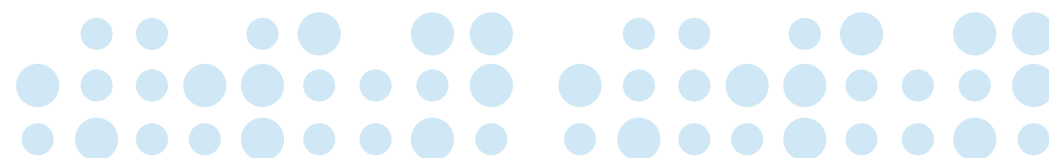
 +(86)21 5991 9333

- 上海: 上海市嘉定区惠亚路117号5栋、7栋7楼
- 北京: 北京市中关村东升科技园二期6号院9号楼京津冀国家技术创新中心
- 深圳: 深圳市南山区粤海街道深圳湾科技生态园11栋A座
- 嘉兴: 浙江省嘉兴市桐乡市经济开发区悦明路89号7幢
- 香港: 香港数码港三座F区15楼
- 新加坡: 112 Robinson Road, #03.01 Robinson 112, Singapore

- Shanghai: Buildings 3 and 5, 599 Huiwang East Road, Jiading District, Shanghai
- Beijing: Building 9, Courtyard 6, Phase II, Dongsheng Science and Technology Park, Zhongguancun, Beijing Tianjin Hebei National Technology Innovation Center
- Shenzhen: Building A, Building 11, Shenzhen Bay Science and Technology Ecological Park, Yuehai Street, Nanshan District, Shenzhen City
- Jiaxing: Building 7, No. 89 Yueming Road, Tongxiang Economic Development Zone, Jiaxing City, Zhejiang Province.
- Hong Kong: 15th Floor, Block F, Cyberport 3, Hong Kong
- Singapore: 112 Robinson Road, #03.01 Robinson 112, Singapore

iLoabot-M 自主装卸机器人

Autonomous loading and unloading robot



自主装卸货机器人

iLoobot-M

Autonomous loading and unloading robot

基于3D机器视觉引导及雷达导航的自主装卸机器人,可自主导航,自主装卸货、智能搬运等。适合集装箱、箱式货车、板车等装卸货,箱装、袋装物品皆可,支持重型货物货车、月台无需改造。

车厢到达指定位置时给出信号,装卸机器人根据信号通过自主导航到达指定位置,通过3D视觉检测确定包裹位置,引导机械臂进行抓取,抓取完成后将包裹放在输送线上传输到后端进行卸货;通过视觉检测判断线体上包裹位置,进行视觉引导机械臂进行抓取以及码货。

Autonomous Loading and Unloading Robot based on 3D Machine Vision Guidance and Lidar Navigation, capable of autonomous navigation, autonomous loading and unloading of cargo, and intelligent handling. Suitable for loading and unloading containers, box trucks, and trolleys. can handle boxed and bagged items, and supports heavy-duty trucks without requiring modifications to the platform.

When the carriage reaches the designated position, a signals given. The loading and unloading robot navigates autonomously to the designated position based on the sinal. Using 3D vision detection, it determines the position of the package and quides the robotic arm to perform thegrasping. After the grasping is completed, the package is placed on the conveyor line for transport to the backend for unloading. Visual detection is used to determine the positionof the package on the conveyor line, guiding the robotic arm for grasping and palletizing



应用场景

Application Scenario

自主装货
自主导航, 智能装货
支持来货方式:
从传送带取货
智能拆垛 (拆笼) 直接装货

Self loading
Autonomous navigation and
Intelligent loading
Supported incoming delivery
methods
Picking up from conveyor belt
Intelligent destacking (cage
dismantling) for direct loading

自主卸货
自主导航到月台, 进入车厢,
智能卸货
支持卸货方式:
自动卸货到传送带
卸货后直接码垛 (码笼)

Autonomous unloading
Autonomous navigation to the
platform, entering the
carriage,
Intelligent unloading
Support unloading methods:
Automatic unloading to
conveyor belt
Direct stacking after unloading
(yard cage)

移动混码垛及拆垛(笼)
可用于箱体移动混码
自主移动包裹码笼拆笼

Mobile mixed stacking and
unstacking (cage)
Can be used for box moving
mixed code
Autonomous mobile package
cage dismantling

**移动智能分拣及码垛 (笼)、
自动拆垛(笼)供包**
分拣中心格口
代替人工自动取货码垛

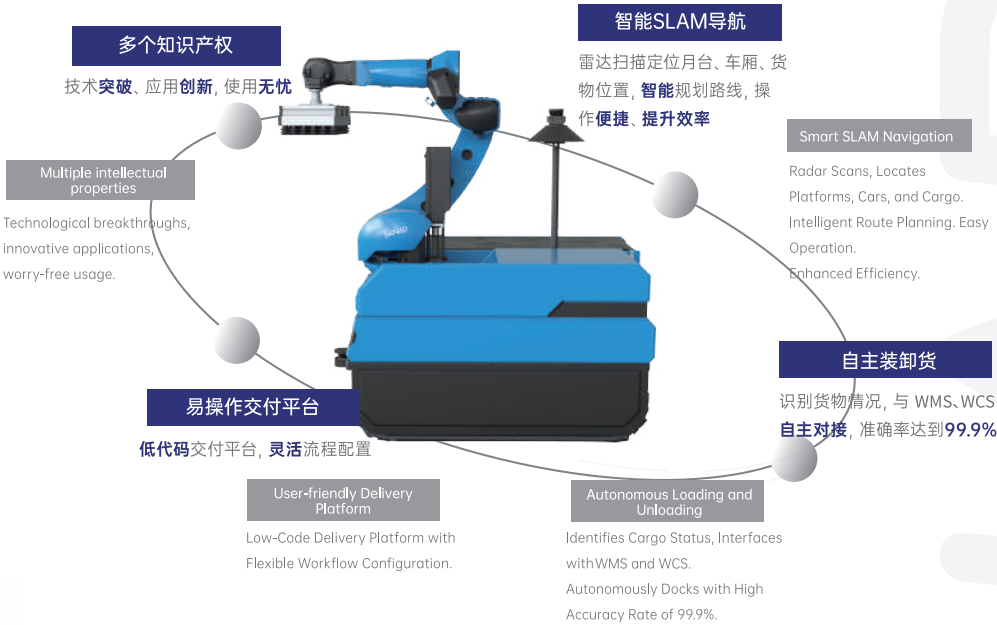
Mobile intelligent sorting and
palletizing (cage)
Automatic unstacking (cage)
supply
Sorting center compartments
Replacing manual automatic
picking and palletizing
Direct stacking after unloading
(yard cage)

尺寸Robot Size	1600x1400x 2250mm
重量Robot Weight	800kg
工作温度Working Temperature	-20~60°C
驱动模式Drive mode	履带式差速 crawler differential
货物尺寸Cargo size	默认机械臂可适配货物尺寸Default robot arm are compatible with: 最小尺寸Minimum:200*200*200mm 最大尺寸Maximum:600*960*1000mm 机械臂可根据货物尺寸进行定制 The robot arm can be adjustedaccording to the cargo sizes.
货物重量Cargo weight	默认机器人手臂支持2Kg~35Kg只需要调整机械臂即可支持高达100Kg The default robot arm supports2Kg~35KgOnly need to adjust the robot arm tosupport up to 100Kg.
货物形状Cargo shape	与盒、袋和软袋桶形等兼容。可根据需要定制 Compatible with boxes, bags, and softbagsBarrel shape, etc. can be adjustedaccording to needs.
外接电源External power supply	AC220V~240V
导航方式Navigation method	激光雷达和结构光的混导Navigation integrating LIDAR and structured light



自主装卸机器人之四大“自主”

The Four 'Autonomy'
of iLoobot-M



灵活更换执行机构, 兼容箱体、袋装等货物
Flexible fixture changing, compatible with boxes, bags etc.



ASV 橡胶履带底盘适合复杂工况的高速稳定装卸
ASV rubber crawler belt chassis suitable for high-speed and
stable loading and unloading in complex working conditions.



通过3D视觉检测, 自主识别货物
Autonomous identify goods through 3D visual inspect



融合多传感器及AI决策引起, 感知场景, 自主导航
Combine multi-sensors and AI decision-making, scene
perception and autonomous navigation.

自主装卸及移动拆码垛整体解决方案

Solutions

自主卸货, 动态上传送带
自主移动混码垛(笼)
自主移动拆垛(笼)
动态抓取, 自主装车
移动自主供包

Autonomous unloading, supply packages to conveyor dynamically
Autonomous mobile mixed stacking (cage)
Autonomous mobile destacking (cage)
Dynamic grabbing and autonomous loading
Mobile autonomous package supply

