



GoPal®

THE COMPLETE SOLUTION
FOR SAFE AND SIMPLE
AUTOMATION



robotize

A NEW STANDARD FOR FLEXIBILITY AND SAFETY

GoPal® is a comprehensive range of fully CE-approved solutions for automating internal pallet transport in factories and warehouses.

Our Autonomous Mobile Robots (AMRs) are designed and approved for safe collaboration with humans and support a wide range of pallet types and payloads.

The GoPal solution provides a fully integrated solution with robots, pallet stations and software, which can be deployed in a matter of days and with only minor changes to existing infrastructure.

THE GOPAL SAFETY PHILOSOPHY IS INTEGRATED IN ALL OUR SOLUTIONS



FAST ROI

The GoPal solution will typically begin saving you money within 4-18 months after deployment - depending on salary levels and the shift plan used in your facility.

MAXIMIZE SAFETY

Deploying AMRs both reduces manual labour as well as reduces accidents caused by forklifts and pallet jacks. The GoPal solution will simply make your workplace safer.

MINIMIZE DAMAGES

On occasion, forklift and pallet jack drivers may accidentally destroy goods, materials or even damage parts of your infrastructure. With GoPal, all these costs are minimized.

HEAVILY LOADED WITH BENEFITS

EASY ADMINISTRATION

GoPal operates as a single shift - 24/7/365. Never again will you have to plan shifts or call-in replacements. Our AMRs never call-in sick or need a day off.

DATA & COMMUNICATION

GoPal provides you with a steady stream of valuable data to enable you to continuously optimize your internal pallet operations. GoPal can also be integrated with your ERP/WMS for advanced operations.



WIDE RANGE OF PALLET STATIONS

••••• PICK-UP, DELIVERY AND TRANSIT POINTS

Stations are used as pick-up, delivery, and transit points. Robotize offers a wide range of stations, which allow for seamless integration in your facility - whether you require a conveyor belt interface or a non-standard pick-up delivery height.

••••• SAFE HUMAN-ROBOT COLLABORATION

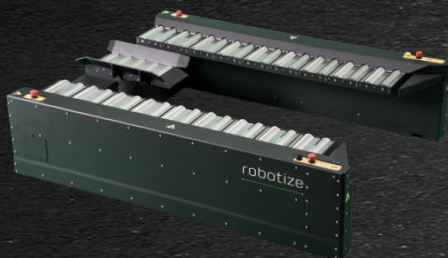
All stations are fully approved for collaboration with humans. The GoPal solution sets new standards for safety in the automation of internal pallet transport, while challenging the notion that robots are unsafe or difficult to handle.



Pallet Station



Pallet Station Expansion



Conveyor Stations



Lift Stations

WIDE RANGE OF ACCESSORIES

••••• **SAFE AND SIMPLE AUTOMATION**

To further facilitate the safe and simple automation of your internal pallet transport, all our accessories are designed, produced, and approved to work seamlessly with our AMRs and our GoControl Fleet Manager. The GoPal is a fully integrated plug-and-play solution that is safe and simple - with no surprises or hidden costs.



**IO
Box**



**Single
Button**



**Multi
Button**



**Virtual
Buttons**



**GoControl
Fleet Manager**



Pallet Sensor



Warning Beacon



Stations

Pickup/delivery/transit



GoPal® AMR

Autonomous Mobile Robot

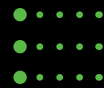
COMPLETE CONTROL - FOR MAXIMUM SAFETY AND SIMPLICITY

All robots, buttons and stations are monitored and controlled by the GoControl Fleet Management System – the heart of the GoPal solution.



TRAFFIC CONTROLLER

In a multi-robot solution, GoControl maintains the optimal traffic flow for maximum safety and efficiency.



DISPATCHER

GoControl receives and organizes all orders in the system and dispatches robots according to order priority.

IO BOX

The IO Box enables features such as wireless activation of automatic doors, automatic robot deactivation in case of fire, automatic detection/transport ordering for pallets on pallet stations and hardwired interface for transport ordering from control devices (e.g. local machines/PLCs).

SIMPLE INTERFACE AND DATA PRESENTATION

GoControl captures and presents all system data (robot position on map, distance driven, pallets moved and much more). GoControl also interfaces with your ERP/WMS system.



TECHNICAL SPECIFICATIONS

GoPal® E22 / E24 / E24W / U24W

		E22	E24	E24W	U24W
DIMENSIONS	Length (mm)	1400			
	Width (mm)	860		1060	
	Height (mm)	340			
WEIGHT	Robot (kg)	187		215	242
PERFORMANCE	Battery time (autonomy)	6-14 hours or ~ up to 20 km			
	Maximum speed m/s (km/h)	2,4 (8,6)		2,2 (7,9)	
	Turning radius (from robot centre) (mm)	950		1000	
LOAD	Maximum payload incl. pallet (kg)	500	1000	1200	
	Dimensions (max.), L x W x H (mm)	1240 x 820 x 2400*		1240 x 1020 x 2400*	
PALLET TYPES	Standard Euro pallets	●	●	●	-
	Standard half-Euro pallets	●	●	●	-
	Industrial Euro pallets	-	-	●	-
	US/UK pallets	-	-	-	●
	Other/custom pallets	On inquiry			
LANE CONDITIONS	Minimum lane width (mm)	1200		1400	
	Recommended lane width (mm)	2100		2300	
	High speed lane width (mm)	2800		3000	
FLOOR REQUIREMENTS	Slope average (max.)	Near-level (2%)			
	Friction coefficient (min.)	0,60			
	Maximum edge height (mm)	4		3	

*Depends on load conditions.

SAFETY

- Laser scanners (360° protection)
- Mechanical bumper (360° protection)
- 4 x emergency stop buttons

ADDITIONAL OBSTACLE AVOIDANCE SENSORS

- 3 x 3D cameras (two front facing and one rear facing)

CHARGER INTERFACE

- Automatic docking interface (at robot front)
- Connector for manually charging (at robot rear)

Due to a policy of continued product development, Robotize reserves the right to change any specification without notice.

BATTERY

- Type / voltageLiFePO₄ / 48 V
- Charge time45 minutes (30-95%)
- Number of chargesAbout 5.000

ENVIRONMENTAL

- Operating temperature-10°C to +45°C
- Humidity (max.)95% (non-condensing)

PALLET CONDITION

- Undamaged, original strength maintained

COMMUNICATION

- Wi-Fi802.11ac

ADVANCED INTRALOGISTICS MADE SIMPLE, SAFE AND SCALABLE

Robotize is a leading manufacturer of mobile and collaborative robotics solutions based just north of Copenhagen in Lyngby, Denmark.

We specialize in the design and manufacture of advanced and safe collaborative Autonomous Mobile Robots (AMRs) for internal pallet transport in factories and warehouses.

We are dedicated to exploring the limits of our fully approved robots in order to provide our customers with all the benefits of automation.

For more information about the GoPal® solution, please visit

ROBOTIZE.COM

Or call us on

+45 3080 9070