



**miniPAL®**

**Basic**  
1 - 2 CPM  
48" Load Height  
9.5' x 6.6' Footprint

**Enhanced**  
5 - 8+ CPM  
48" Load Height  
11' x 13' Footprint  
+ Safety Scanners

**Mobility**  
5 - 8+ CPM  
48" Load Height  
11' x 13' Footprint  
+ Safety Scanners  
+ Infeed Conveyor

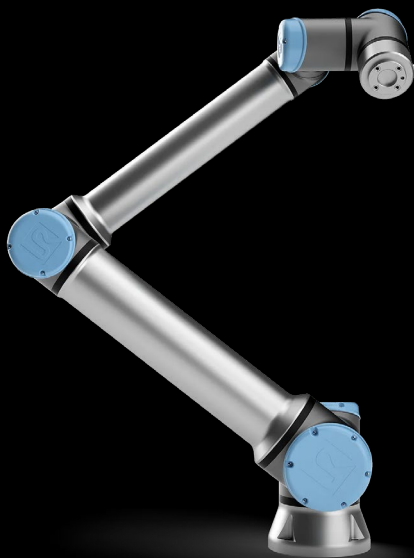
**Comprehensive**  
5 - 8+ CPM  
75" Load Height  
11' x 13' Footprint  
+ Safety Scanners  
+ Infeed Conveyor  
+ Liftkit

SCAN ME

# miniPAL® 10

## COLLABORATIVE ROBOTIC PALLETIZER

The miniPAL® 10, offering a combined payload of 10 kg (22 lbs) offers a compact footprint while still providing a flexible and robust palletizing solution. Containing integrated safety system, the miniPAL® 10 utilizes area scanners and radar, dual stacking locations for continuous load building, and intuitive pattern building software by Rocketfarm®.



- « Applications include cases, spot packs, trays, bundles, and plastic bags
- « Quick payback and flexible deployment with easy setup
- « Speed, flexibility, and custom solutions
- « Equipped with easy-to-use pattern-building software
- « Optimized footprint for your facility
- « Increased productivity with no additional labor costs

### WHY COLLABORATIVE?

Collaborative robotic palletizers are designed to work easily and safely in collaboration with employees, freeing operators to do other tasks, allowing for higher production without having to hire additional people. Their force limiting capabilities make them ideal for facilities with limited floor space, deploying in close proximity to workers without compromising safety.

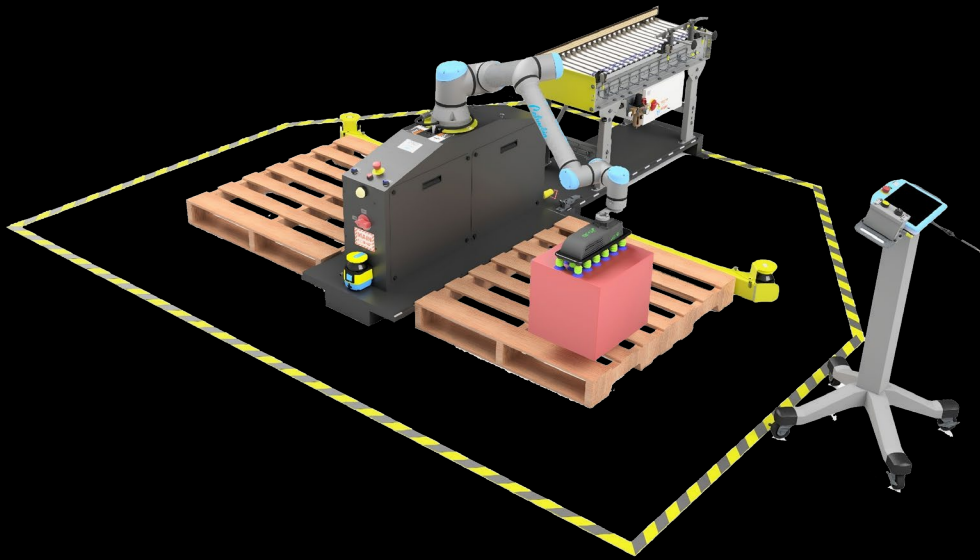


From custom-engineered solutions to complete integration to ongoing support, you can count on Columbia/Okura LLC to support your growth and success as if it were our own. We're committed to maintaining a long-lasting, collaborative partnership focused on meeting your unique needs. We believe in the transformative power of automation.

## SPECIFICATIONS

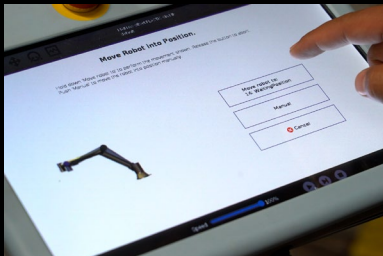
PAYLOAD	12.5 kg / 27.5 lbs	LOAD HEIGHT	2130mm / 84"
LIFTING CAPACITY	10.4 kg / 22.9 lbs (excluding end effector)	PALLET BUILD LOCATIONS	Two (2) - 40" x 48" max pallet size
END EFFECTOR	Vacuum and clamp style end	INFEEED CONVEYOR	Hytrol E24 - 4' with product guides
RATE	5 - 8 picks / min (pattern dependent)	SAFETY COMPONENTS	275° area scanners
REACH	1300 mm / 51'	POWER	110V single phase outlet

*Specifications are subject to change without notice*



## INTEGRATED SAFETY

When collaborative mode is enabled, the robot reduces its force, speed, and power, allowing operators to safely make adjustments within the working cell perimeter without stopping production. Collaborative robots are also equipped with force and power sensors that detect contact and immediately stop the robot, preventing injury to operators or other personnel.



## PALLY® PALLETIZING SOFTWARE

Pally® is a user-friendly palletizing software package developed by Rocketfarm® for Universal Robots. It allows users to create and manage pallet patterns, which are easy to download and upload to your system. Pally is flexible enough to handle changes in production packaging or pattern requirements with minimal downtime.



+1 (360) 735-1952  
columbiaokura.com

**Columbia**  
**okura** LLC