

# EC-101 ROBOT PALLETISER

The EC-101 robot offers production rates up to 15 cycles per minute utilising only 2kVA.



by



## DESCRIPTION

This unit is a highly efficient robotic palletiser which provides the least expensive solution in our robot family with the ability to meet low- to medium-production requirements. When using the EC-101 robot, you will receive “added value” for years to come given the cycle rate to power consumption ratio.

This new generation robot provides an ultra-quiet operation, improved efficiencies, and maximum flexibility.

## TECHNICAL DATA

|                                     |  |
|-------------------------------------|--|
| Model                               | <b>EC-101</b>  |
| Mechanism                           | Articulated Robot  |
| Action Mode                         | Cylindrical  |
| Weight Capacity (Including Hand)    | 120kg  |
| Palletising Capacity (Cycles/Hour)  | 1000 Cycles/Hour   |
| Degree of Freedom                   | 4 axes   |
| Operational Space:                  |  |
| Z Axis (Vertical)                   | 2300mm   |
| R Axis (Longitudinal)               | 1500mm   |
| θ Axis (Turn)                       | 330°   |
| a Axis (Wrist)                      | 330°   |
| Hand Gripper                        | Clamp, Fork, Vacuum, Custom Designed                           |
| Memory                              | 120 Recipes  |
| Teaching Method                     | Teaching Playback<br>Teaching Support<br>Teachingless (Option) |
| Power (200/220V, 3-Phase, 50/60 Hz) | 2kVA   |
| Main body weight (without hand)     | 800kg  |

**NOTE:** Capacities stated are the maximum that may be achieved by the robot under ideal conditions. Capacity rates can be significantly affected by layouts, product types, and can only be confirmed after a detailed analysis of an application.

# FEATURES

## GENERAL

- Ultra quiet operation
- Unique linear guides designed specifically for palletising (Exclusive to Fuji Ace)
- Polycarbonate cover to reduce weight
- EC Series (Energy Conservation) designed to save energy, resources, and money
- Simple, compact and durable design
- Multiple end effector applications for bags, boxes, cases, pails, drums, bottles, and shrink wrapped packages

## CUTTING-EDGE CONTROL

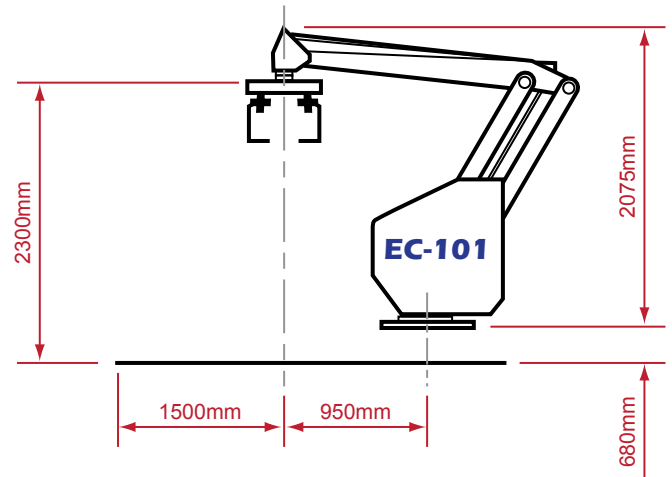
Every Fuji Ace robot comes with a touch screen control complete with:

- Pre-programmed pallet patterns embedded in the touch screen to meet your exact specifications
- 60 programmable memory recipes. Once utilized, recipes can be switched within seconds
- Onboard automatic lubrication schedule
- Onboard diagnostics designed to identify errors instantaneously
- Onboard error log history
- Inventory monitoring that corresponds with specific recipes
- High level programming software offering complete onboard control and recipe editing without the need of a laptop computer
- Real time I/O monitoring
- Comes with a user friendly teaching pendant

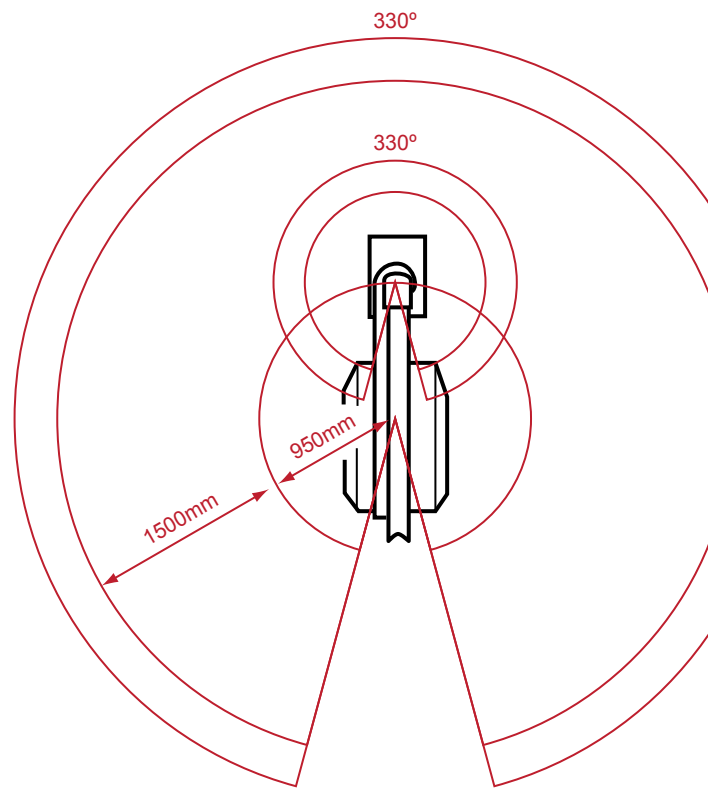
## MECHANICAL ADVANTAGE

- Unique linear track design contributes to decreased power consumption by 50% or more while achieving up to 1000 cycles per hour
- The articulated arm movement is driven by the combination of a servo motor, timing belt, recirculating linear guide bearings and two hardened steel ball screws
- Uses a 5 to 1 movement ratio on the Z axis (arm movement up or down)
- Uses a 6 to 1 movement ratio on the R axis (arm movement in or out)
- The robot pivots (Theta axis) up to 330° on a high density cross roller thrust bearing designed for years of trouble free operation in harsh environments
- The arm end is designed to pivot up to 330°

# DIMENSIONS



## SIDE VIEW



## TOP VIEW

## OPTIONS

- Cold environment upgrade
- Harsh environment upgrade (stainless steel components)
- Memory program expansion
- Auto reject function
- Simultaneous multi-size product handling (5th axis)
- Slipsheet placement
- Pallet placement