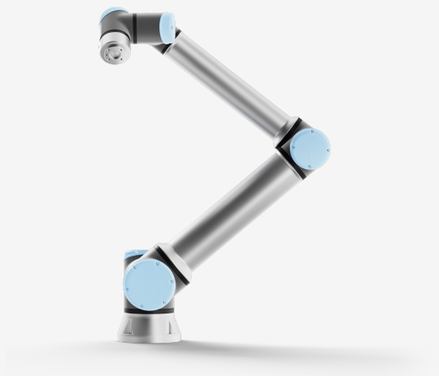


UNIVERSAL ROBOTS
A Teradyne Robotics Company

# UR12e

# Technical specification

**Our most versatile robot, the UR12e delivers an impressive payload of 12.5 kg and 1300 mm reach, making it ideal for a wide range of applications.**

Today, more than 100,000 UR collaborative industrial robots have been delivered to customers across industries and around the world. The e-Series of cobots brings incredible flexibility and unparalleled ease of use to your application.

Updated September 2026

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## UR12e

### General specification

| | |
|---|---|
| Payload | 12.5 kg / 27.6 lbs |
| Reach | 1300 mm / 51.2 in |
| Degrees of freedom | 6 rotating joints |
| Programming | 12 inch touchscreen with PolyScope graphical user interface |
| **Power consumption** | |
| Maximum power | 615 W |
| Operating temperature range | Ambient temperature: 0-50 ˚C / 32-122 ˚F |
| Safety functions | 23 configurable safety functions |
| In compliance with | EN ISO 13849-1 (PLd Category 3), EN ISO 10218-1 |

## UR12e Robot Arm

### Performance

| **Force sensing, tool flange/torque sensor** | **Force, x-y-z** | **Torque, x-y-z** |
|---|---|---|
| Range | ± 100.0 N | ± 10.0 Nm |
| Precision | ± 5.0 N | ± 0.2 Nm |
| Accuracy | ± 5.5 N | ± 0.5 Nm |

### Movement

| | | |
|---|---|---|
| Maximum TCP speed | 4 m/s | |
| Pose repeatability per ISO 9283 | ± 0.05 mm | |
| **Axis movement** | **Working range** | **Maximum speed** |
| Base | ± 360° | ± 120˚/s |
| Shoulder | ± 360° | ± 120˚/s |
| Elbow | ± 360° | ± 180˚/s |
| Wrist 1 | ± 360° | ± 180˚/s |
| Wrist 2 | ± 360° | ± 180˚/s |
| Wrist 3 | ± 360° | ± 180˚/s |

### Features

| | |
|---|---|
| IP Classification | IP54 |
| Noise | < 65 dB(A) |
| Arm mounting | Any orientation |
| **I/O Ports at tool flange** | |
| Digital In | 2 |
| Digital Out | 2 |
| Analog In | 2 or 1 x RS485 |
| Power supply voltage | 12/24 V |
| Power supply | 2 A (Dual pin), 1 A (Single pin) |

### Physical

| | |
|---|---|
| Footprint | Ø190 mm |
| Materials | Aluminum, plastic, steel |
| Tool flange | EN ISO-9409-1-50-4-M6 |
| Connector type | M8 8-pin female |
| Cable length (robot arm) | 6 m / 236 in |
| Weight including cable | 33.5 kg / 73.9 lbs |
| Humidity | ≤ 90% RH (non-condensing) |

## Contact

**Bizit Systems (M) Sdn Bhd**

Designer Office, V03-08-23A,
Lingkaran SV, Sunway Velocity,
Jalan Peel, 55100 Kuala Lumpur,
Malaysia.

+603 2710 5044

12-2, Jalan Persiaran Teknologi,
Taman Teknologi Johor,
81400 Senai, Johor,
Malaysia.

+607 4890 355

UR@bizits.com
https://www.bizits.com/universal-robots

## Teach Pendant

### Features

| | |
|---|---|
| IP classification | IP54 |
| Humidity | ≤ 90% RH (non-condensing) |
| Display resolution | 1280 x 800 pixels |

### Physical

| | |
|---|---|
| Materials | Plastic |
| Teach pendant size (W x H x D) | 300 mm x 231 mm x 50 mm / 11.8 in x 9.1 in x 1.97 in |
| Weight | 1.6 kg / 3.5 lbs including 1 m of teach pendant cable |
| Cable length | 4.5 m / 177.17 in |

## Control Box

### Features

| | |
|---|---|
| IP classification | IP44 |
| Humidity | ≤ 90% RH (non-condensing) |
| **I/O Ports** | |
| Digital In | 16 |
| Digital Out | 16 |
| Analog In | 2 |
| Analog Out | 2 |
| Quadrature digital inputs | 4 |
| I/O Power Supply | 24V, 2A |
| Industrial protocols | Modbus TCP (Client/Server)<br>Ethernet/IP Adapter<br>PROFINET device, PROFIsafe<br>ROS/ROS2 |
| Hardware interfaces | Ethernet 1 Gb/s<br>USB 2.0 USB 3.0<br>Mini DisplayPort<br>Injection Moulding Machine Interface (SPI AN-146 & Euromap-67)* |
| Power Source | 100-240 VAC, 47-440 Hz |

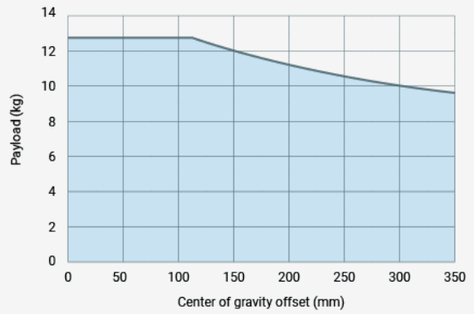
**Only valid for OEM version.*

### Physical

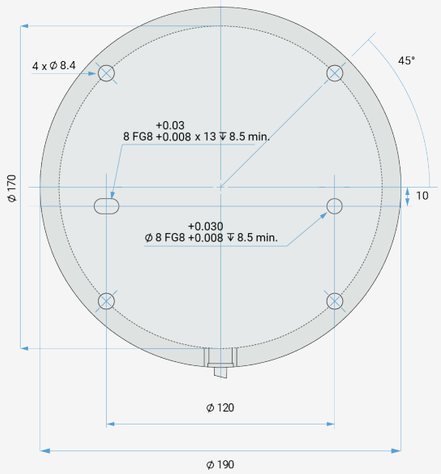
| | |
|---|---|
| Control Box Size (W x H x D) | 460 mm x 449 mm x 254 mm / 18.2 in x 17.6 in x 10 in |
| Weight | 12 kg / 26.5 lbs |
| Materials | Powder coated steel |

*The control box is also available in an OEM version.*

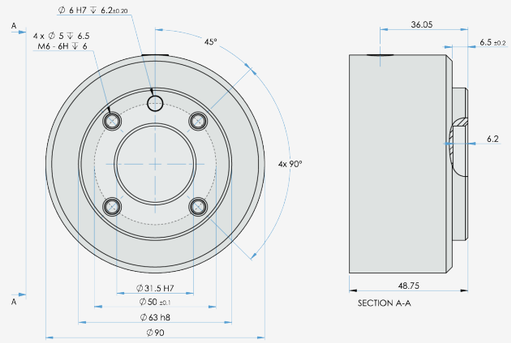
**UR12e payload curve**



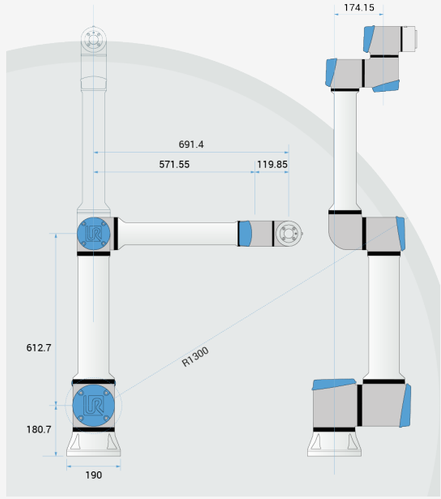

**Interface for UR12e base flange**




**Tool flange for UR12e**




**Dimensions and reach UR12e**




September 2026

UNLESS OTHERWISE SPECIFIED:

Dimensions are in millimeters. Tolerance ± 0,1 mm ± 0,5˚