

# UR3e

## Technical Specification

The UR3e is the smallest and most compact of any UR robot. Boasting a 3 kg payload and a 500 mm reach, the small form factor of the UR3e makes it a perfect fit to navigate tight workspaces.

Today, more than 90,000 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.

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### UR3e

#### Specification

Payload	3 kg (6.6 lbs)
Reach	500 mm (19.7 in)
Degrees of freedom	6 rotating joints
Programming	12 inch touchscreen with PolyScope graphical user interface
<b>Power consumption (average)</b>	
Maximum power	300 W
Moderate operating settings	100 W
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
<b>Safety functions</b>	17 configurable safety functions
In compliance with	EN ISO 13849-1 (PLd Category 3) and EN ISO 10218-1

#### Performance

Force sensing, tool flange/torque sensor	Force, x-y-z	Torque, x-y-z
Range	± 30.0 N	± 10.0 Nm
Precision	± 2.0 N	± 0.1 Nm
Accuracy	± 3.5 N	± 0.1 Nm

#### Movement

Axis movement	Working range	Maximum speed
Base	± 360°	± 180°/s
Shoulder	± 360°	± 180°/s
Elbow	± 360°	± 180°/s
Wrist 1	± 360°	± 360°/s
Wrist 2	± 360°	± 360°/s
Wrist 3	Infinite	± 360°/s

#### Features

IP classification	IP54
Cleanroom classification	Class 6 at 20%* Class 7 at ≥ 40%*
ISO 14644-1	
*velocity and payload	
Noise	< 60 dB(A)
Robot mounting	Any orientation
<b>I/O Ports</b>	
Digital In	2
Digital Out	2
Analog In	2
Tool I/O power supply voltage	12/24 V
Tool I/O power supply	600 mA

#### Physical

Footprint	Ø 128 mm
Materials	Aluminum, plastic, steel
Tool flange interface	M8 8-pin female, EN ISO-9409-1-50-4-M6
Connector type	M8 8-pin female
Cable length (robot arm)	6 m (236 in)
Weight including cable	11,2 kg (17.7 lbs)
Humidity	≤ 90% RH (non-condensing)

### Contact

Universal Robots A/S  
Energivej 51  
5260 Odense  
Denmark

+45 89 93 89 89  
[sales@universal-robots.com](mailto:sales@universal-robots.com)  
[universal-robots.com](http://universal-robots.com)

### 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	1,8 kg (3.961 lbs) including 1 m of teach pendant cable
Cable length	4,5 m (177.17 in)

### Control Box

#### Features

IP Classification	IP44
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
Humidity	≤ 90% RH (non-condensing)

<b>I/O Ports</b>	
Digital In	16
Digital Out	16
Analog In	2
Analog Out	2
Quadrature Digital Inputs	4
<b>I/O Power Supply</b>	24V, 2A
<b>Industrial Protocols</b>	Modbus-TCP (Client/Sever) Ethernet/IP Adapter PROFINET device/PROFIsafe ROS/ROS2

<b>Hardware Interfaces</b>	Ethernet 1 Gb/s USB 2.0, USB 3.0 Mini DisplayPort Injection Moulding Machine Interface (SPI AN-146 & Euromap-67)
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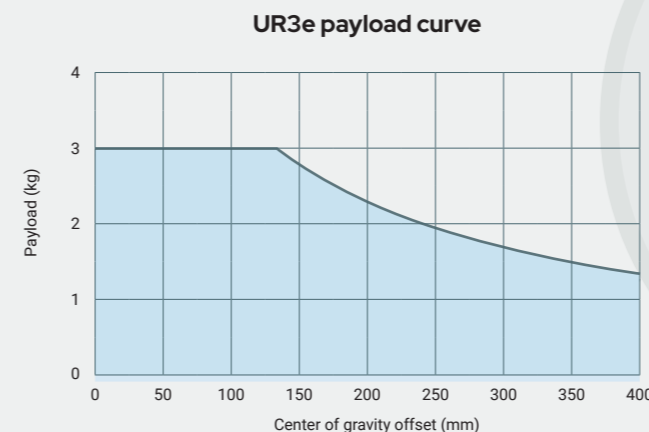
<b>Power Source</b>	100-240 VAC, 47-440 Hz
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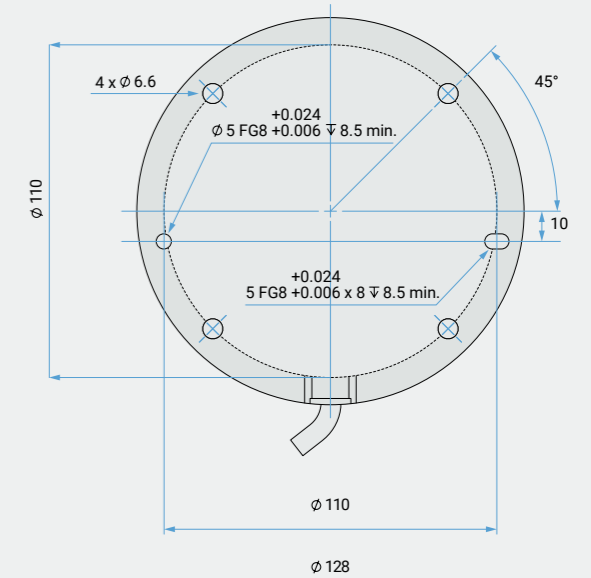
#### Physical

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



#### Interface for UR3e base flange



#### Tool flange for UR3e

