

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

Payload

Specification

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

3 kg (6.6 lbs)

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

Typical TCP speed	1 m/s	
Pose Repeatability per ISO 9283	± 0.03 mm	
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 ISO 14644-1 *velocity and payload	Class 6 at 20%* Class 7 at ≥ 40%*
Noise	< 60 dB(A)
Robot mounting	Any orientation
I/O Ports	
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	EN ISO-9409-1-80-6-M8
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 universal-robots.com

Teach Pendant

Features

IF CIdSSIIICdtion	IF34
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

4,5 m (177.17 in)

Control Box

Features

Cable length

IP Classification	IP44
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
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/Sever) Ethernet/IP Adapter PROFINET device/PROFIsafe ROS/ROS2
Hardware Interfaces	Ethernet 1 Gb/s USB 2.0, USB 3.0 Mini DisplayPort Injection Moulding Machine Interface

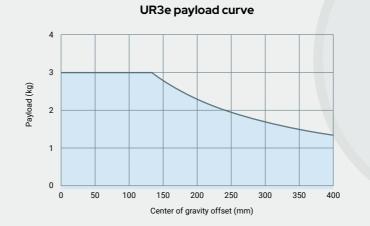
(SPI AN-146 & Euromap-67)

100-240 VAC, 47-440 Hz

Physical

Power Source

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 OFM version	



Interface for UR3e base flange

