UR3e
Technical Specifications

With a 3 kg payload capacity and 500 mm reach, the compact form factor of the UR3e makes it a fit for tight workspaces.

Today, more than 50,000 UR collaborative industrial robots have been delivered to customers across industries and around the world. UR3e is one of four e-Series cobots, each with a different payload and reach combination. e-Series brings incredible flexibility and unparalleled ease of use to your application.

To learn more, visit www.universal-robots.com or contact our channel partner:

Automation, Inc.

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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

Performance

Power, Consumption, Maximum Average	300 W
Power, Consumption, Typical with moderate settings (approximate)	100 W
Safety	17 configurable safety functions
Certifications	EN ISO 13849-1, PLd Category 3, and EN ISO 10218-1

Force Sensing, Tool Flange	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

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
Typical TCP speed	1 m/s (39.4 in/s)	

Features

IP classification	IP54
ISO 14644-1 Class Cleanroom	5
Noise	Less than 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	Aluminium, Plastic, Steel
Tool (end-effector) connector type	M8 | M8 8-pin
Cable length robot arm	6 m (236 in) cable included. 12 m (472 in) and high-flex options available.
Weight including cable	11.2 kg (17.7 lbs)
Operating temperature range	0-50°C
Humidity	90%RH (non-condensing)



Control Box

Features

IP classification	IP44
ISO 14644-1 Class Cleanroom	6
Operating temperature range	0-50°C
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
Communication	500 Hz Control frequency Modbus TCP PROFINET Ethernet/IP USB 2.0, USB 3.0
Power source	100-240VAC, 47-440Hz

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.

Teach Pendant

Features

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

Physical

Materials	Plastic, PP
Weight	1.6 kg (3.5 lbs) including 1m of TP cable
Cable length	4.5 m (177.17 in)

The teach pendant is also available in a 3PE option.

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