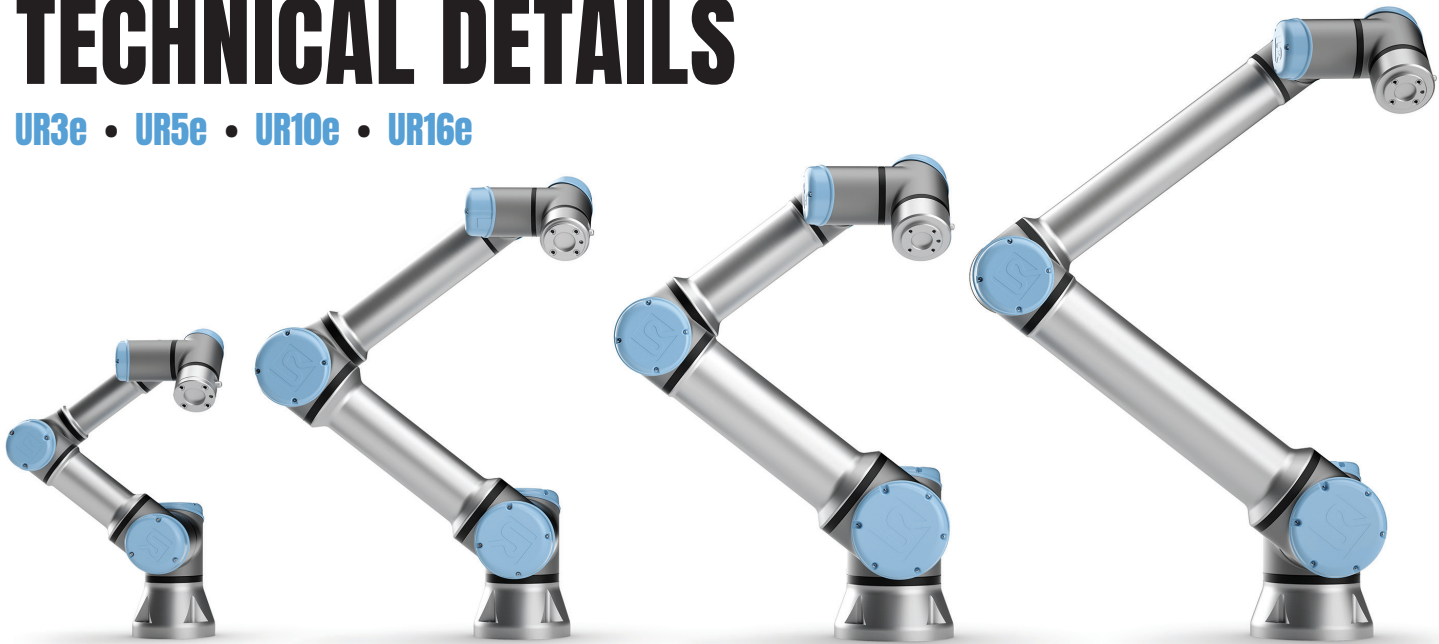


TECHNICAL DETAILS

UR3e • UR5e • UR10e • UR16e



Control box

Features

IP classification	IP44
ISO 14644-1 Class Cleanroom	6
Ambient temperature range	0-50°C
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
Humidity	90%RH (non-condensing)
Physical	
Control box size (WxHxD)	475 mm x 423 mm x 268 mm (18.7 in x 16.7 in x 10.6 in)
Weight	12 kg (26.5 lbs)
Materials	Powder coated steel

Teach pendant

Features

IP classification	IP54
Humidity	90%RH (non-condensing)
Display resolution	1280 x 800 pixels
Physical	
Materials	Plastic, PP
Weight including 1m of TP cable	1.6 kg (3.5 lbs)
Cable length	4.5 m (177.17 in)



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UR3e

UR5e

UR10e

UR16e

Specifications

Payload	3 kg (6.6 lbs)	5 kg (11 lbs)	10 kg (22 lbs)	16 kg (35.3 lbs)
Reach	500 mm (19.7 in)	850 mm (33.5 in)	1300 mm (51.2 in)	900 mm (35.4 in)
Degrees of freedom	6 rotating joints			
Programming	12 inch touchscreen with polyscope graphical user interface			

Performance

Power, consumption, maximum average	300 W	570 W	615 W	585 W
Safety	17 configurable safety functions			
Certifications	EN ISO 13849-1, PLd Category 3, and EN ISO 10218-1			

Force Sensing, Tool Flange Range	Force, x-y-z	Torque, x-y-z	Force, x-y-z	Torque, x-y-z	Force, x-y-z	Torque, x-y-z	Force, x-y-z	Torque, x-y-z
	30.0 N	10.0 Nm	50.0 N	10.0 Nm	100.0 N	10.0 Nm	160.0 N	10.0 Nm
Precision	2.0 N	0.1 Nm	3.5 N	0.2 Nm	5.0 N	0.2 Nm	5.0 N	0.2 Nm
Accuracy	3.5 N	0.1 Nm	4.0 N	0.3 Nm	5.5 N	0.5 Nm	5.5 N	0.5 Nm

Movement

Pose Repeatability per ISO 9283	± 0.03 mm	± 0.03 mm	± 0.05 mm	± 0.05 mm
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Axis movement	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed
Base	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 120°/s	± 360°	± 120°/s
Shoulder	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 120°/s	± 360°	± 120°/s
Elbow	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s
Wrist 1	± 360°	± 360°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s
Wrist 2	± 360°	± 360°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s
Wrist 3	Infinite	± 360°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s

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

IP classification	IP54			
ISO 14644-1 Class Cleanroom	5			
Noise	Less than 60 dB(A)	Less than 65 dB(A)	Less than 65 dB(A)	Less than 65 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	1.5 A (Dual pin) 1 A (Single pin)	2 A (Dual pin) 1 A (Single pin)	2 A (Dual pin) 1 A (Single pin)

Physical

Footprint	Ø 128 mm	Ø 149 mm	Ø 190 mm	Ø 190mm
Materials	Aluminium, Plastic, Steel			
Tool (end-effector) connector type	M8 M8 8-pin			
Cable length robot arm	6 m (236 in)			
Weight including cable	11.2 kg (24.7 lbs)	20.6 kg (45.4 lbs)	33.5 kg (73.9 lbs)	33.1 kg (73 lbs)
Operating temperature range	0-50°C			
Humidity	90%RH (non-condensing)			

* The robot can work in a temperature range of 0-50°C at a high continuous joint speed, ambient temperature is reduced.