

## 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
Power, Consumption, Typical with moderate operating settings (approximate)	100 W	200 W	350 W	350 W

Safety	17 configurable safety functions			
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Certifications	EN ISO 13849-1, PLd Category 3, and EN ISO 10218-1			
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Force Sensing, Tool Flange	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
Range	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			
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ISO 14644-1 Class Cleanroom	5			
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Noise	Less than 60 dB(A)	Less than 65 dB(A)	Less than 65 dB(A)	Less than 65 dB(A)
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Robot mounting	Any Orientation			
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I/O ports				
Digital in	2			
Digital out	2			
Analog in	2			

Tool I/O Power Supply Voltage	12/24 V			
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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)
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### Physical

Footprint	Ø 128 mm	Ø 149 mm	Ø 190 mm	Ø 190 mm
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Materials	Aluminium, Plastic, Steel			
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Tool (end-effector) connector type	M8   M8 8-pin			
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Cable length robot arm	6 m (236 in)			
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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)
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Operating Temperature Range	0-50°C			
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Humidity	90%RH (non-condensing)			
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# TECHNICAL DETAILS

## OEM Control Box

### Features

IP classification	Not rated
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ISO 14644-1 Class Cleanroom	Not rated
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Operating Temperature Range	0-50°C
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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
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Communication	500 Hz Control frequency Modbus TCP PROFINET Ethernet/IP USB 2.0, USB 3.0
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Input Voltage	AC Model: 100-240 VAC, 47-440Hz DC Model: 24-48 VDC (typical)
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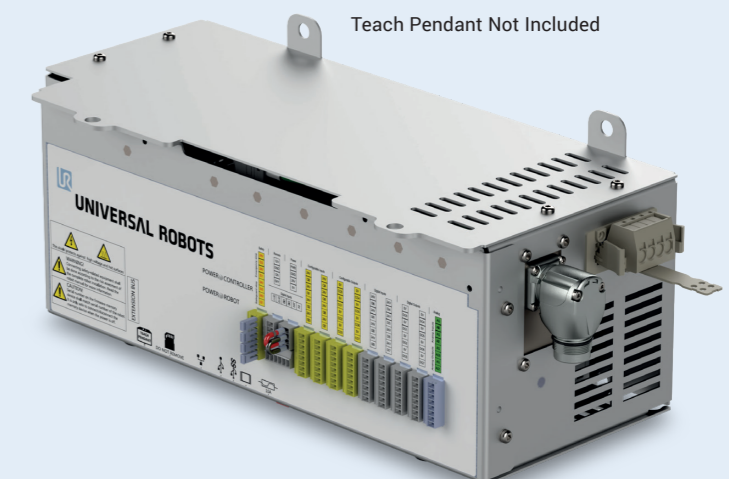
Humidity	90%RH (non-condensing)
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### Physical

OEM Control Box size (WxHxD)	451 mm x 168 mm x 150 mm (17.8 in x 6.6 in x 5.9 in)
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Weight	AC Model: 4.7 kg (10.4 lbs.) DC Model: 4.3 kg (9.5 lbs.)
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Materials	Aluminum
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