

	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	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	UR3e		UR5e		UR10e		UR16e	
Pose Repeatability per ISO 9283	± 0.03 mm		± 0.03 mm		± 0.05 mm		± 0.05 mm	
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)							

Features	UR3e				UR5e				UR10e				UR16e			
IP classification	IP54				IP54				IP54				IP54			
ISO 14644-1 Class Cleanroom	5				5				5				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				2				2				2			
Digital out	2				2				2				2			
Analog in	2				2				2				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	UR3e		UR5e		UR10e		UR16e	
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)							

TECHNICAL DETAILS

Control box

Features	UR3e		UR5e		UR10e		UR16e	
IP classification	IP44		IP44		IP44		IP44	
ISO 14644-1 Class Cleanroom	6		6		6		6	
Ambient temperature range	0-50°C							
I/O ports								
Digital in	16		16		16		16	
Digital out	16		16		16		16	
Analog in	2		2		2		2	
Analog out	2		2		2		2	
Quadrature Digital Inputs	4		4		4		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	UR3e		UR5e		UR10e		UR16e	
Control box size (WxHxD)	475 mm x 423 mm x 268 mm (18.7 in x 16.7 in x 10.6 in)		475 mm x 423 mm x 268 mm (18.7 in x 16.7 in x 10.6 in)		475 mm x 423 mm x 268 mm (18.7 in x 16.7 in x 10.6 in)		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)		12 kg (26.5 lbs)		12 kg (26.5 lbs)		12 kg (26.5 lbs)	
Materials	Powder coated steel							

Teach pendant

Features	UR3e		UR5e		UR10e		UR16e	
IP classification	IP54		IP54		IP54		IP54	
Humidity	90%RH (non-condensing)							
Display resolution	1280 x 800 pixels							
Physical	UR3e		UR5e		UR10e		UR16e	
Materials	Plastic, PP							
Weight including 1m of TP cable	1.6 kg (3.5 lbs)		1.6 kg (3.5 lbs)		1.6 kg (3.5 lbs)		1.6 kg (3.5 lbs)	
Cable length	4.5 m (177.17 in)							

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