



UR18 Technical specification

The UR18 combines strength and agility, supporting larger end effectors to lift heavier payloads while remaining light enough for easy mounting on most standard gantry systems. With a 950 mm reach and speeds up to 4 m/s, it's ideal for fast-paced pick-and-place deployments where reducing cycle times is crucial.

Today, more than 100,000 UR collaborative industrial robots have been delivered to customers across industries and around the world. The newest series of UR cobots brings unparalleled performance, adaptability and user experience.

UR18

General specification

Payload	18 kg (39.7 lbs)
Reach	950 mm (37.4 in)
Degrees of freedom	6 rotating joints
Programming	12 inch touchscreen with PolyScope graphical user interface
Power consumption (average)	
Maximum power	570 W
Moderate operating settings	350 W
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
Safety functions	20 configurable safety functions
In compliance with	EN ISO 13849-1 (PLd Category 3), EN ISO 10218-1 and UL 1740
Joint architecture	2-1-3

UR18 Robot Arm

Performance

Force sensing, tool flange/torque sensor	Force, x-y-z	Torque, x-y-z
Range	± 150.0 N	± 10.0 Nm
Precision	± 7.5 N	± 0.2 Nm
Accuracy	± 8.3 N	± 0.5 Nm

Movement

Max TCP speed	4 m/s
Pose repeatability per ISO 9283	± 0.05 mm
Axis movement	Working range
Base	± 360°
Shoulder	± 360°
Elbow	± 360°
Wrist 1	± 360°
Wrist 2	± 360°
Wrist 3	± 360°
Maximum speed	
	± 180°/s
	± 180°/s
	± 240°/s
	± 300°/s
	± 300°/s
	± 300°/s

Features

IP Classification	IP65
Noise	< 67 dB(A)
Status identification	Light ring at robot base
Arm mounting	Any orientation
I/O Ports at tool flange	
Digital In	2
Digital Out	2
Analog In	2 or 1 RS-485
Power supply voltage	12/24 V
Power supply	2 A (Dual pin), 1 A (Single pin)

Physical

Footprint	Ø204 mm
Materials	Aluminum, plastic, steel
Tool flange	ISO 9409-1-50-4-M6
Connector type	M8 8-pin female
Cable length (robot arm)	6 m (236 in)
Weight without cable	39.2 kg (86.42 lbs)
Humidity	≤ 90% RH (non-condensing)

Contact

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3-Position Enabling Teach Pendant

Features

IP classification	IP54
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
Cable length	4.5 m (177.17 in)

Control Box

Features

IP classification	IP44
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/Server) 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)*
Power Source
100-240 VAC, 47-440 Hz

*Only valid for OEM version.

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.

Payload curve UR18

