



UR30

Technical Specification

Building off the same architecture as the UR20, the UR30 offers extraordinary lift in a compact footprint with superior motion control ensuring the perfect placement of large payloads.

Boasting 25% more torque the UR30 opens the door for high torque screw driving and the 30 kg payload brings productivity to everything from machine tending with multiple grippers to palletizing heavy parts.

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UR30

General specification

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Payload	30 kg (66.1 lbs) 35 kg (77.1 lbs) with boundary conditions according to manu
Reach	1300 mm (51.18 in)
Degrees of freedom	6 rotating joints
Programming	12 inch touchscreen with PolyScope graphical user interface (see Teach Pendant)
Power consumption (average)	

750 W Maximum power 300 W Moderate operating settings

Ambient temperature: Operating temperature range 0-50°C (32-122°F)

17 configurable safety functions Safety functions EN ISO 13849-1 (PLd Category In compliance with 3) and EN ISO 10218-1

Joint architecture 2-1-3

UR30 arm

Performance

Force sensing, tool flange/torque sensor	Force, x-y-z	Torque, x-y-z
Range	± 200,0 N	± 20,0 Nm
Precision	± 5,5 N	± 0,2 Nm
Accuracy	± 10,0 N	± 1,0 Nm

Movement

Max TCP speed	4 m/s	
Pose repeatability per ISO 9283	± 0,1 mm	
Axis movement	Working range	Maximum speed
Base	± 360°	± 120°/s
Shoulder	± 360°	± 120°/s
Elbow	± 360°	± 150°/s
Wrist 1	± 360°	± 210°/s
Wrist 2	± 360°	± 210°/s
Wrist 3	± 360°	± 210°/s

Features

IP rating	IP65
•	11-03
Cleanroom classification	01 4 -+ - 000/*
ISO 14644-1 *Velocity and payload	Class 4 at ≤ 80%*
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Noise	< 65 dB(A)
Arm mounting direction	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	2 A (Dual pin), 1 A (Single pin)

Physical

Footprint	Ø 245 mm
Materials	Aluminum, plastic, steel
Tool flange	EN ISO-9409-1-80-6-M8
Connector type	M8 8-pin female
Cable length (robot arm)	6 m (236 in/19.68 ft)
Weight including cable	63,5 kg (139.9 lbs)
Humidity	≤ 90% RH (non-condensing)

Contact

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3-Position Enabling Teach Pendant

Features

IP classification

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)

IP54 water protection

1,8 kg (3.961 lbs) Weight including 1 m of teach pendant cable

Cable length 4,5 m (177.17 in)

Control Box

Features

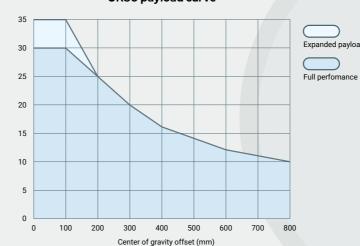
IP classification	IP44
Humidity	≤ 90% RH (non-condensing)
I/O Ports Digital In Digital Out Analog In Analog Out Quadrature digital inputs I/O Power Supply	16 16 2 2 4 24V, 2A
Industrial protocols	Modbus TCP (Client/Server) Ethernet/IP Adapter PROFINET device/PROFIsafe ROS/ROS2
Hardware interfaces	Ethernet 1 Gb/s USB 2.0 USB 3.0 Mini DisplayPort Injection Moulding Machine Interface (SPI AN-146 & Euromap-67)
Power Source	115/230 VAC, 60/50 Hz

Physical

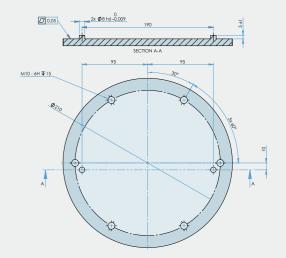
460 mm x 449 mm x 254 mm (18,2 in x 17,6 in x 10 in)
12 kg (26,5 lbs)
Powder coated steel

The control box is also available in an OEM version

UR30 payload curve

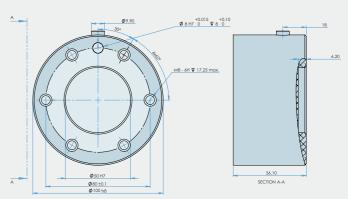


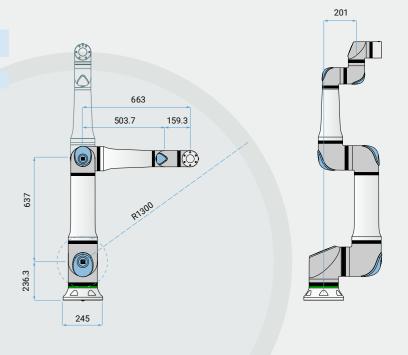
Mounting hole pattern with pins for robot base



Recommended hole pattern for robot base

UR30 tool flange





UNLESS OTHERWISE SPECIFIED: Dimensions are in millimeters. Tolerance \pm 0,1 mm \pm 0,5°