



UR30

Technical Specification

The UR30 is the strongest UR robot and is part of our next generation heavy payload cobots. These cobots have been redesigned from the ground up to provide extraordinary lift in a compact footprint with superior motion control and a first-class user experience.

Today, more than 75,000 UR collaborative industrial robots have been delivered to customers across industries and around the world. The newest series of heavy payload cobots brings unparalleled performance, adaptability and an unparalleled user experience.

Updated January 2024.

Copyright © 2024 by Universal Robots A/S. All rights reserved.

UR30

General specification

Payload	30 kg (66.1 lbs)
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)	
Maximum power	750 W
Moderate operating settings	300 W
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
Safety functions	17 configurable safety functions
In compliance with	EN ISO 13849-1 (PLd Category 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

Typical TCP speed	2 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
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

Universal Robots A/S Energivej 25 5260 Odense Denmark

+45 89 93 89 89 sales@universal-robots.com universal-robots.com

3-Position Enabling Teach Pendant

Features

Humidity

IP classification

Display resolution

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)

IP54 water protection

1280 x 800 pixels

≤ 90% RH (non-condensing)

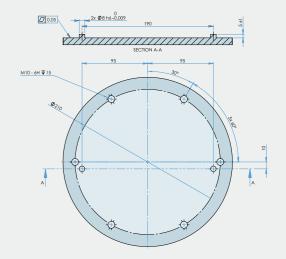
Control Box

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)
	(String 1 10 & Editinap 07)

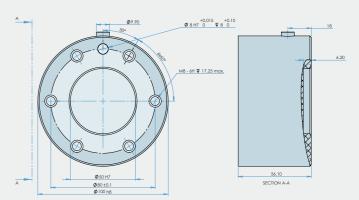
115/230 VAC, 60/50 Hz

Mounting hole pattern with pins for robot base



Recommended hole pattern for robot base

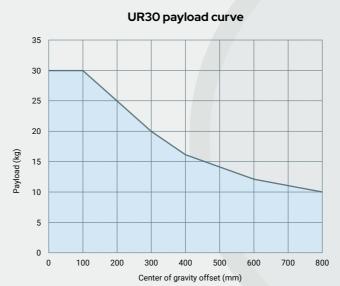
UR30 tool flange

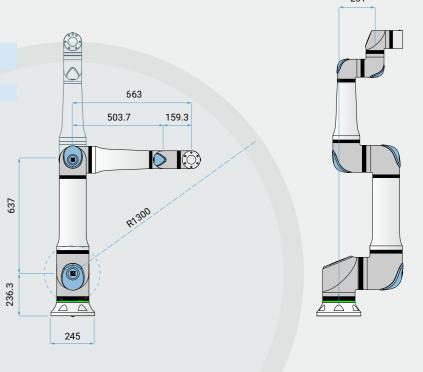


Physical

Power Source

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	le in an OEM version





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