

# 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 drilling and the 30kg payload brings productivity to everything from machine tending with multiple grippers to palletizing heavy parts.

Updated October 2023.  
Preliminary version - subject to change.



## UR30

### General specification

Payload	30 kg (66,1 lbs) in the entire workspace
Reach	1300 mm (51.18 in)
Degrees of freedom	6 rotating joints
Programming	12 inch touchscreen with PolyScope graphical user interface (see Teach Pendant)
<b>Power consumption (average)</b>	
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

## 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	0,1 Nm

### Movement

Typical TPC speed	2 m/s	
Pose repeatability per ISO 9283	± 0,1 mm	
<b>Axis movement</b>	<b>Working range</b>	<b>Maximum speed</b>
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 classification	IP65 water protection
Noise	< 65 dB(A)
Arm mounting	Any orientation
<b>I/O Ports</b>	
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; 6 x M10, 60° 105 mm center
Materials	Aluminum, plastic, steel
Tool flange	EN ISO-9409-1-80-6-M8
Connector type	M8   M8 8-pin female
Cable length (robot arm)	6 m (236 in)
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	IP54 water protection
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 water protection
Humidity	≤ 90% RH (non-condensing)
<b>I/O Ports</b>	
Digital In	16
Digital Out	16
Analog In	2
Analog Out	2
Quadrature digital inputs	4
I/O Power Supply	24V, 2A
Communication	

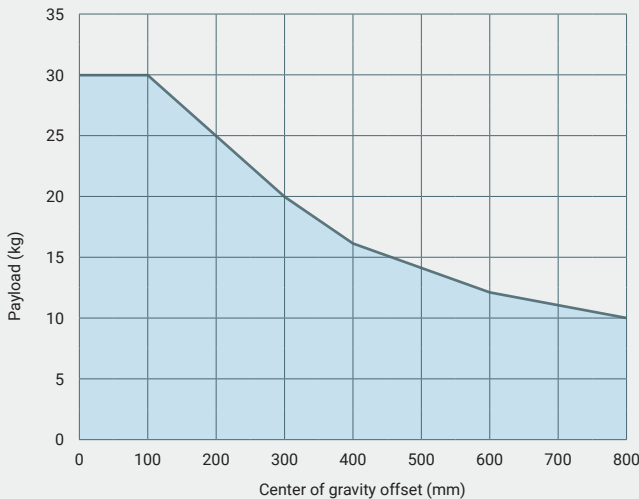
	500 Hz Control frequency
	Modbus TCP
	PROFINET, PROFIsafe (optional)
	Ethernet/IP
	USB 2.0, USB 3.0
	ROS/ROS2 driver support (optional, open source)
	Injection Molding Machine Interface (IMMI, optional)

Power Source	100-240 VAC, 47-440 Hz
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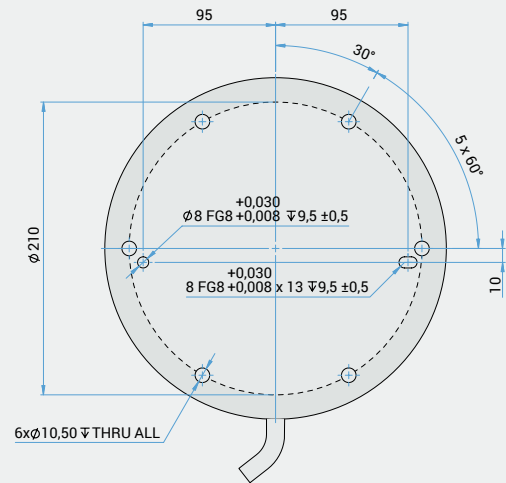
## Physical

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

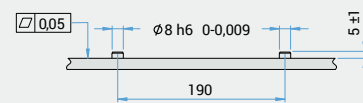
UR30 payload curve



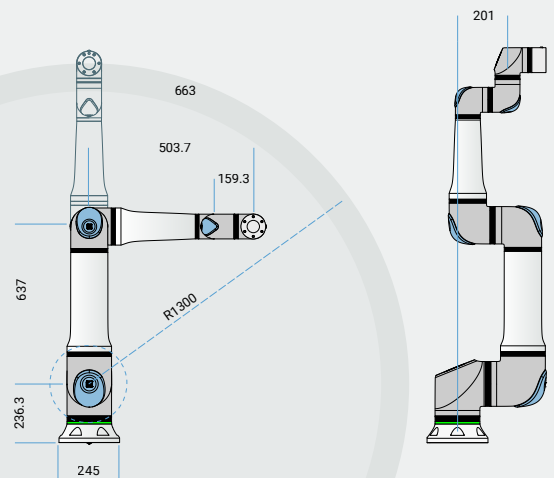
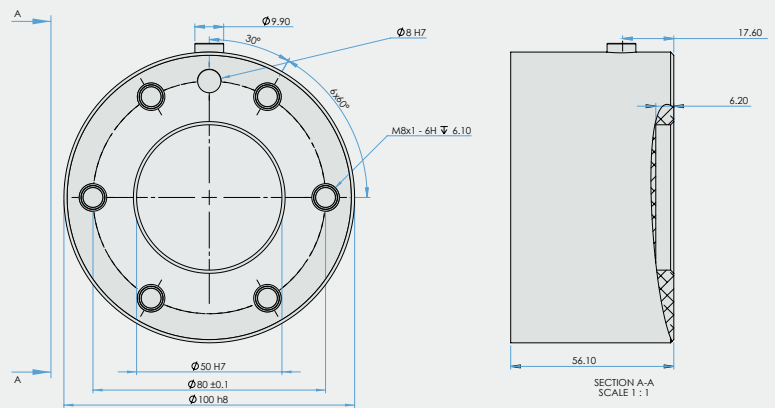
Recommended hole pattern for robot base



Mounting plate with pins for robot base



UR30 tool flange



UNLESS OTHERWISE SPECIFIED:  
Dimensions are in millimeters. Tolerance  $\pm 0,1 \text{ mm} \pm 0,5^\circ$