



# **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**

Payload	30 kg (66.1 lbs) 35 kg (77.1 lbs) with boundary conditions according to manual
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)	
Massinasses assures	750 W

Maximum power

750 W 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

Z m/s	
± 0,1 mm	
Working range	Maximum speed
± 360°	± 120°/s
± 360°	± 120°/s
± 360°	± 150°/s
± 360°	± 210°/s
± 360°	± 210°/s
± 360°	± 210°/s
	Working range ± 360° ± 360° ± 360° ± 360° ± 360°

#### **Features**

IP rating	IP65
Cleanroom classification ISO 14644-1 *Velocity and payload	Class 4 at ≤ 80%*
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**

Humidity

IP classification

Display resolution

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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**

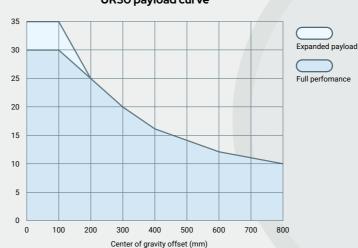
IP classification	IP44
Humidity	≤ 90% RH (non-condensing)
I/O Ports	
Digital In	16
Digital Out	16
Analog In	2
Analog Out	2
Quadrature digital inputs	4
I/O Power Supply	24V, 2A
Industrial protocols	Modbus TCP (Client/Server)
	Ethernet/IP Adapter
	PROFINET device/PROFIsafe
	ROS/ROS2
Hardware interfaces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

#### **Physical**

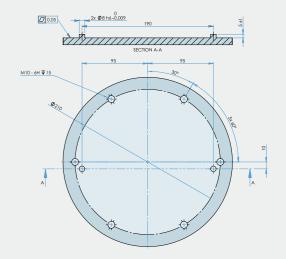
Control Box Size (W x H x D)	460 mm x 449 mm x 254 mm (18,2 in x 17,6 in x 10 in)
Weight	12 kg (26,5 lbs)
Materials	Powder coated steel

The control box is also available in an OEM version

#### UR30 payload curve

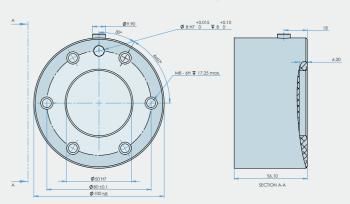


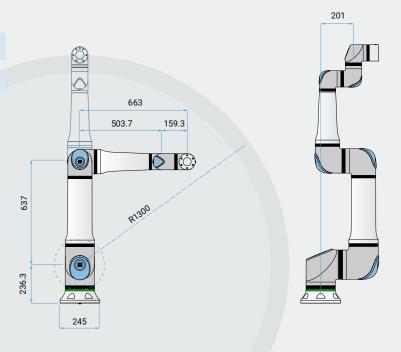
#### Mounting hole pattern with pins for robot base



Recommended hole pattern for robot base

#### **UR30** tool flange





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