

# UR16e

## Technical Specification

The UR16e delivers 16 kg of payload, allowing for heavier end of arm tooling and multi-part handling.

Today, more than 90,000 UR collaborative industrial robots have been delivered to customers across industries and around the world. The e-Series of cobots brings incredible flexibility and unparalleled ease of use to your application.

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### UR16e

#### Specification

Payload	16 kg (35.3 lbs)
Reach	900 mm (35.4 in)
Degrees of freedom	6 rotating joints
Programming	12 inch touchscreen with PolyScope graphical user interface
<b>Power consumption (average)</b>	
Maximum power	585 W
Moderate operating settings	350 W
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
<b>Safety functions</b>	17 configurable safety functions
In compliance with	EN ISO 13849-1 (PLd Category 3) and EN ISO 10218-1

#### Performance

Force sensing, tool flange/torque sensor	Force, x-y-z	Torque, x-y-z
Range	± 160.0 N	± 10.0 Nm
Precision	± 5.0 N	± 0.2 Nm
Accuracy	± 5.5 N	± 0.5 Nm

#### Movement

Max TCP speed	3 m/s
Pose Repeatability per ISO 9283	± 0.05 mm
<b>Axis movement</b>	<b>Working range</b> <b>Maximum speed</b>
Base	± 360°            ± 120°/s
Shoulder	± 360°            ± 120°/s
Elbow	± 360°            ± 180°/s
Wrist 1	± 360°            ± 180°/s
Wrist 2	± 360°            ± 180°/s
Wrist 3	± 360°            ± 180°/s

#### Features

IP classification	IP54
Cleanroom classification	Class 5 at ≤ 40%* ISO 14644-1    Class 8 at 80%* *velocity and payload
Noise	< 65 dB(A)
Robot 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 190 mm
Materials	Aluminum, plastic, steel
Tool flange interface	M8 8-pin female, EN ISO-9409-1-50-4-M6
Connector type	M8 8-pin female
Cable length (robot arm)	6 m (236 in)
Weight including cable	33,1 kg (73 lbs)
Humidity	≤ 90% RH (non-condensing)

#### Contact

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### 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

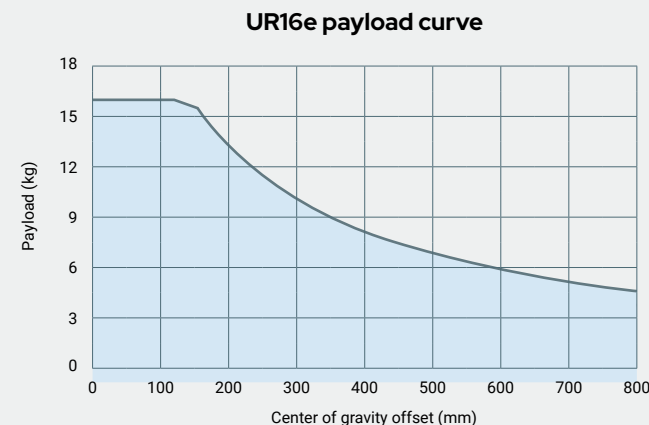
#### Features

IP Classification	IP44
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
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
<b>I/O Power Supply</b>	24V, 2A
Industrial Protocols	Modbus-TCP (Client/Sever) Ethernet/IP Adapter PROFINET device/PROFIsafe ROS/ROS2
<b>Hardware Interfaces</b>	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

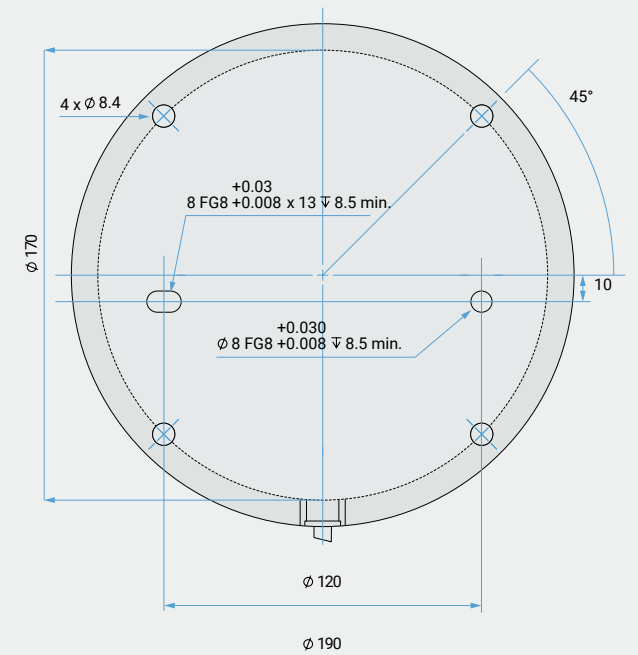
#### Physical

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



#### Interface for UR16e base flange



#### Tool flange for UR16e

