



## UR8 Long

### Technical specification

Long Reach. Lean Footprint. No compromise.

The UR8 Long offers a 1750 mm reach and an 8 kg payload in a compact, lightweight design. Ideal for welding, pick & place and quality inspection, it excels in applications requiring precise linear motion and high-speed acceleration. With advanced joint architecture and accurate torque control, it's the perfect cobot for tasks demanding both reach and precision.

Today, more than 100,000 UR collaborative industrial robots have been delivered to customers across industries and around the world. The newest series of UR cobots brings unparalleled performance, adaptability and user experience.

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#### Features

|                                 |                                  |
|---------------------------------|----------------------------------|
| IP Classification               | IP65                             |
| Noise                           | < 67 dB(A)                       |
| Status identification           | Light ring at robot base         |
| Arm mounting                    | Any orientation                  |
| <b>I/O Ports at tool flange</b> |                                  |
| Digital In                      | 2                                |
| Digital Out                     | 2                                |
| Analog In                       | 2                                |
| Power supply voltage            | 12/24 V                          |
| Power supply                    | 2 A (Dual pin), 1 A (Single pin) |

#### Physical

|                          |                           |
|--------------------------|---------------------------|
| Footprint                | Ø204 mm                   |
| Materials                | Aluminum, plastic, steel  |
| Tool flange              | ISO 9409-1-50-4-M6        |
| Connector type           | M8 8-pin female           |
| Cable length (robot arm) | 6 m (236 in)              |
| Weight without cable     | 44.7 kg (98.5 lbs)        |
| Humidity                 | ≤ 90% RH (non-condensing) |

#### Contact

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### 3-Postion Enabling 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<br>(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                      |
| 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

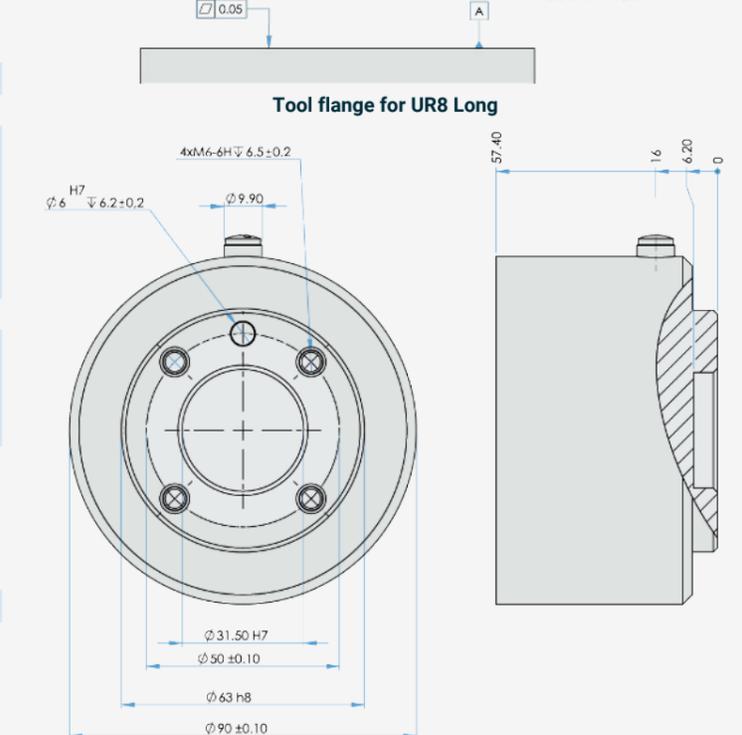
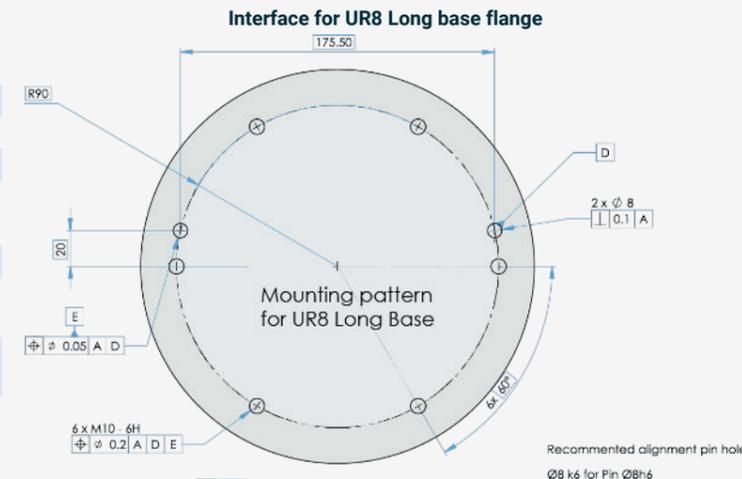
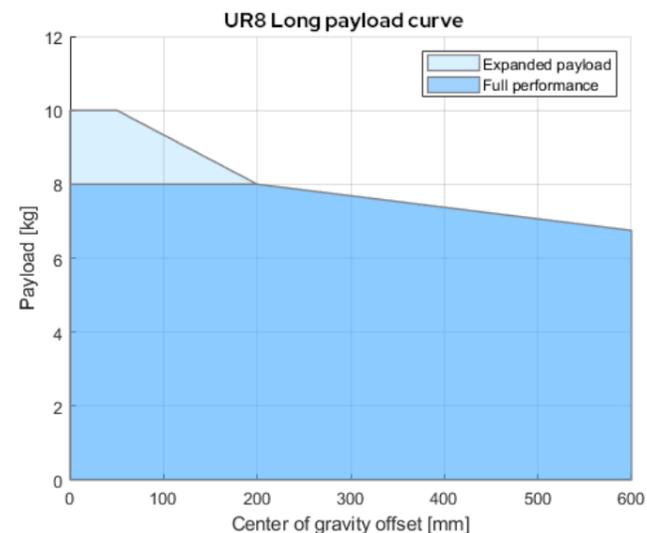
100-240 VAC, 50-60 Hz

\*Only valid for OEM version.

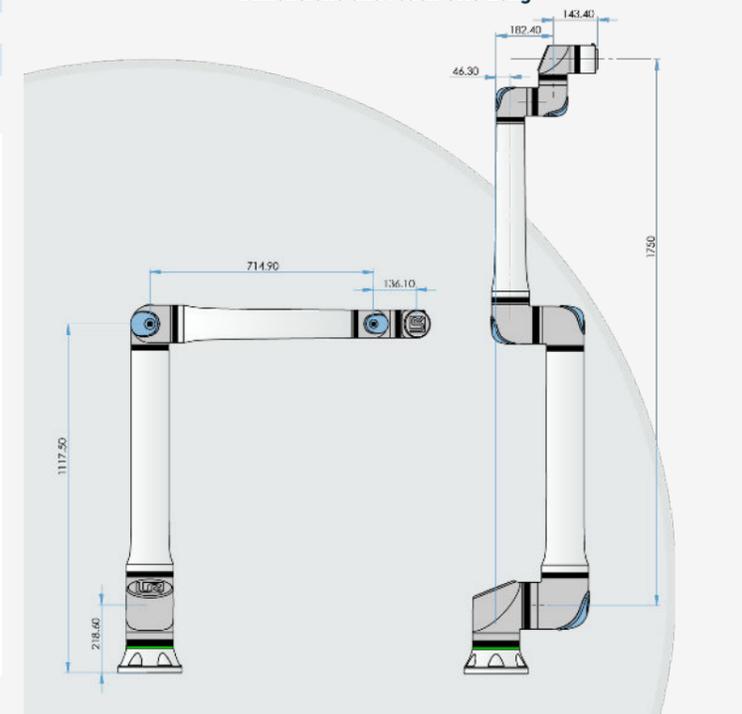
#### Physical

|                              |   |
|------------------------------|---|
| Control Box Size (W x H x D) | 460 mm x 449 mm x 254 mm<br>(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.



#### Dimensions and reach UR8 Long



UNLESS OTHERWISE SPECIFIED:

Dimensions are in millimeters. Tolerance ± 0,1 mm ± 0,5°

### UR8 Long

#### General specification

|                                    |   |
|------------------------------------|---|
| Payload                            | 8 kg (17.6 lbs)<br>10 kg (22 lbs) with boundary conditions according to the manual. |
| Reach                              | 1750 mm (68.9 in)   |
| Degrees of freedom                 | 6 rotating joints   |
| Programming                        | 12 inch touchscreen with PolyScope graphical user interface                         |
| <b>Power consumption (average)</b> |   |
| Maximum power                      | 615 W   |
| Moderate operating settings        | 350 W   |
| Operating temperature range        | Ambient temperature:<br>0-50°C (32-122°F)   |
| Safety functions                   | 17 configurable safety functions  |
| In compliance with                 | EN ISO 13849-1 (PLd Category 3),<br>EN ISO 10218-1 and UL 1740                      |
| Joint architecture                 | 2-1-3   |

### UR8 Long Robot Arm

#### Performance

| Force sensing, tool flange/torque sensor | Force, x-y-z | Torque, x-y-z |
|--|--------------|---------------|
| Range                                    | ± 150.0 N    | ± 10.0 Nm     |
| Precision                                | ± 7.5 N      | ± 0.2 Nm      |
| Accuracy                                 | ± 8.3 N      | ± 0.5 Nm      |

#### Movement

|                                 |   |
|---------------------------------|---|
| Max TCP speed                   | 6 m/s   |
| Pose repeatability per ISO 9283 | ± 0.08 mm / ± 0.081 mm per ISO 9283<br>± 0.0031 in / ± 0.0031 in per ISO 9283 |

| Axis movement | Working range | Maximum speed |
|---------------|---------------|---------------|
| Base          | ± 360°        | ± 180°/s      |
| Shoulder      | ± 360°        | ± 180°/s      |
| Elbow         | ± 360°        | ± 240°/s      |
| Wrist 1       | ± 360°        | ± 300°/s      |
| Wrist 2       | ± 360°        | ± 300°/s      |
| Wrist 3       | ± 360°        | ± 300°/s      |