UNIVERSAL ROBOTS
A Teradyne Robotics Company

UR15

Technical specification

UR15. Sharp. Compact. Outsized performance at arm's reach.

The UR15 is the most lightweight member of the UR Series surpassing the expectations for the most sought-after size representing a sweet spot within the collaborative robot market offering speed and dependability that easily fits in a variety of environments.

Updated May 2025.

UR15
General specification

Payload	15 kg (33.1 lbs) 17.5 kg (38.58 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
Power consumption (average)	
Maximum power	550 W
Moderate operating settings	350 W
Operating temperature range	Ambient temperature: 0-50°C (32-122°F)
Safety functions	20 configurable safety functions
In compliance with	EN ISO 13849-1 (PLd Category 3), EN ISO 10218-1 and UL 1740
Joint architecture	2-1-3

UR15 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	5 m/s	
Pose repeatability per ISO 9283	± 0.05 mm	

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

Features

IP Classification	IP65
Cleanroom classification ISO 14644-1	Class 4 at ≤ 80%
Velocity and payload	
Noise	< 67 dB(A)
Status identification	Light ring at robot base
Arm mounting	Any orientation
I/O Ports at tool flange	
Digital In	2
Digital Out	2
Analog In	2 or 1 RS-485
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	40.7 kg (89.73 lbs)
Humidity	≤ 90% RH (non-condensing)

Contact

Universal Robots A/S
Energivej 51
5260 Odense
Denmark

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

3-Postion Enabling Teach Pendant
Features

IP classification	IP54
Humidity	≤ 90% RH (non-condensing)
Display resolution	1280 x 800 pixels

Physical

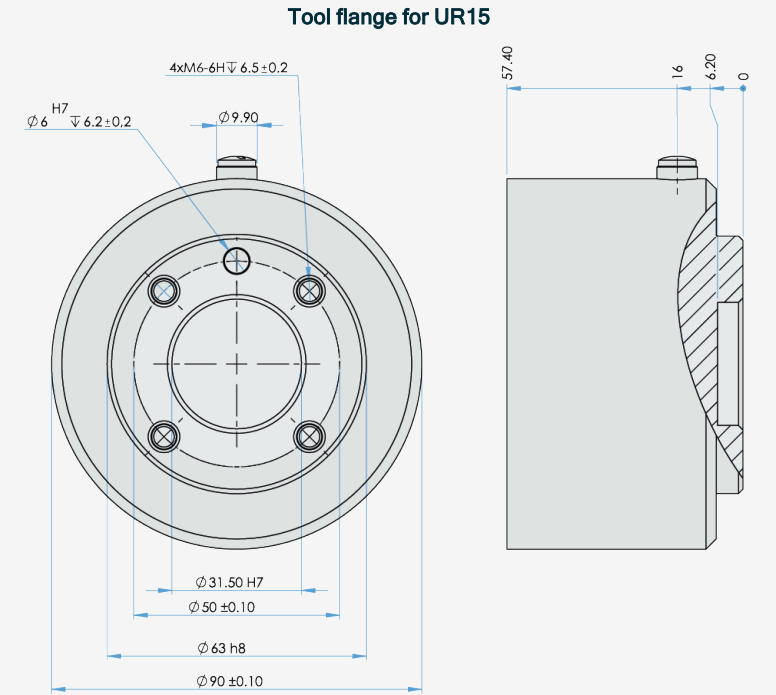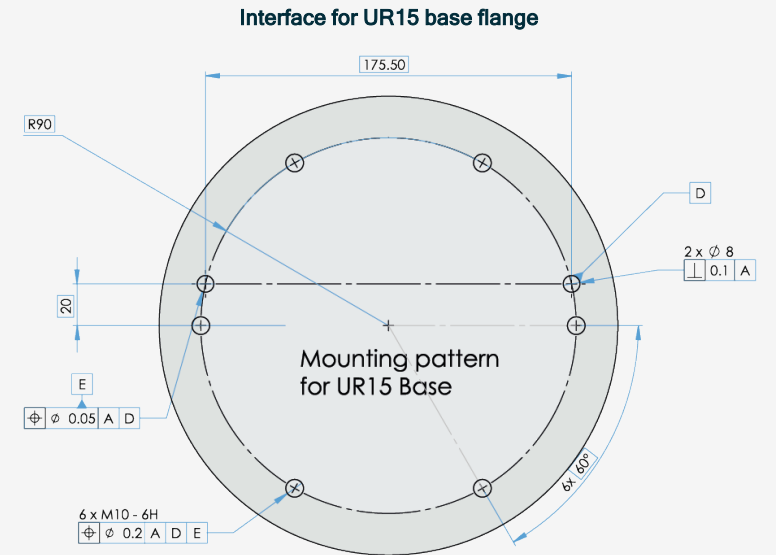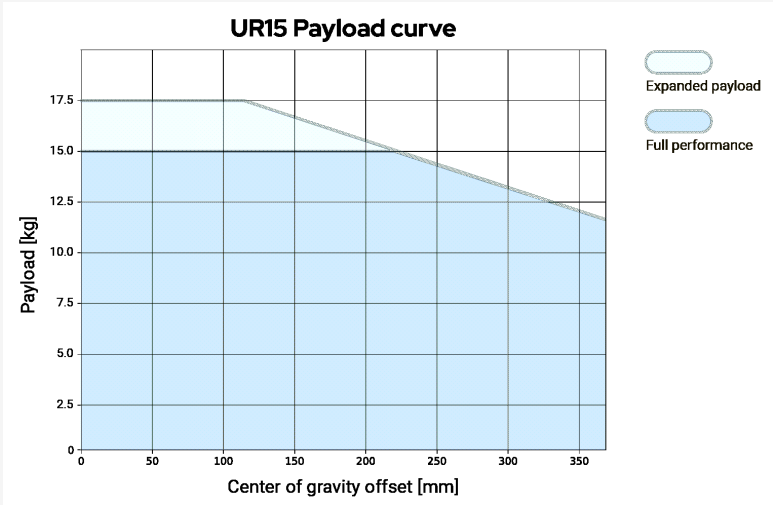| Materials	Plastic
Teach pendant size (W x H x D)	300 mm x 231 mm x 50 mm (11.8 in x 9.1 in x 1.97 in)
Weight	1.8 kg (3.961 lbs) including 1 m of teach pendant cable
Cable length	4.5 m (177.17 in)

Control Box
Features

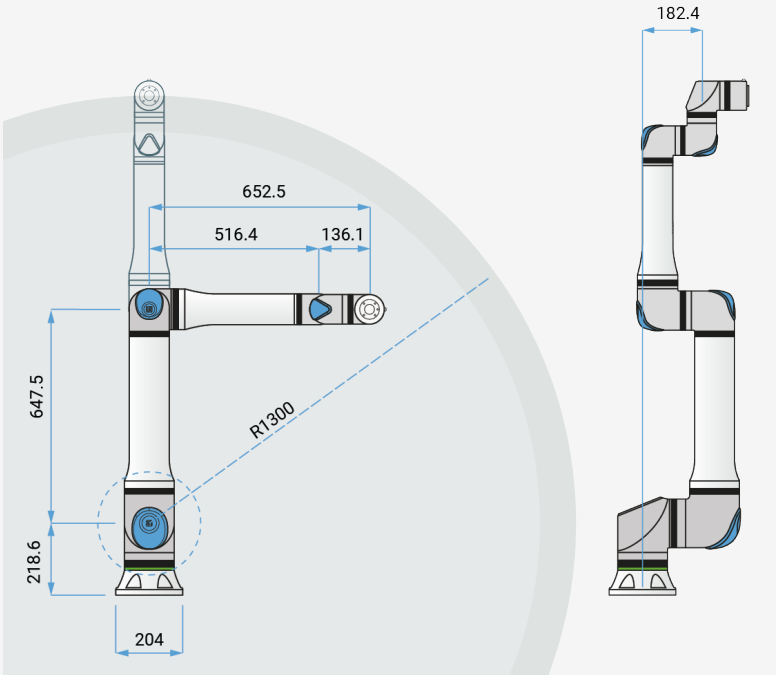| IP classification	IP44
Humidity	≤ 90% RH (non-condensing)
I/O Ports	
Digital In	16
Digital Out	16
Analog In	2
Analog Out	2
Quadrature digital inputs	4
I/O Power Supply	24V, 2A
Industrial protocols	Modbus TCP (Client/Server) Ethernet/IP Adapter PROFINET device, PROFIsafe ROS/ROS2
Hardware interfaces	Ethernet 1 Gb/s USB 2.0 USB 3.0 Mini DisplayPort Injection Moulding Machine Interface (SPI AN-146 & Euromap-67)*
Power Source	100-240VAC, 47-440 Hz

Only valid for OEM version.

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 controlbox is also available in an OEM version.

UR15 Payload curve

Payload [kg] vs Center of gravity offset [mm]

Expanded payload
Full performance

Interface for UR15 base flange

175.50
R90
Mounting pattern for UR15 Base
6 x M10 - 6H
2 x Ø 8

Tool flange for UR15

Dimensions and reach of UR15

652.5
516.4
136.1
647.5
218.6
204
R1300
182.4

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