



UR20

Technical Specification

The UR20, the first of our next-generation high performance cobots, has been redesigned from the ground up to provide up to 30% more speed and torque, advanced motion control capabilities, and first-class user experience.

UR cobots bring incredible versatility and unparalleled ease of use to your applications. The UR20 is no exception - its 20 kg payload and 1750 mm reach make it an ideal match for applications ranging from palletizing to machine loading.

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Preliminary Specification. Subject to change.

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Specification

Payload	20 kg (44,1 lbs) at full CoG offset and in the entire workspace
Reach	1750 mm (68,9 in)
Degrees of freedom	6 rotating joints
Programming	12 inch touchscreen with PolyScope graphical user interface
Power consumption (average)	
Maximum power	750 W
Moderate operating settings	500 W
Safety	17 configurable safety functions
Certifications	EN ISO 13849-1, PLd Category 3, and EN ISO 10218-1

Performance

Force Sensing, Tool Flange	Force, x-y-z	Torque, x-y-z
Reach	200 N	20,0 Nm
Precision	5,5 N	0,2 Nm
Accuracy	10 N	1 Nm

Movement

Pose Repeatability per ISO 9283	± 0,05 mm	
Axis movement	Working range	Maximum speed
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	IP54
ISO 14644-1 class cleanroom	5
Noise	> 65 dB(A)
Robot mounting	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 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
Cable lenght (robot arm)	6 m (236 in)
Weight including cable	64 kg (141,1 lbs)
Operating temperature range***	0-50°C (32-122°F)
Humidity	90% RH (non-condensing)

Contact

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