UR3e technical details

Performance

Power consumption	Approx. 100 W u	ising a typical program
Collaboration operation	incl. elbow mon	justable safety functions itoring. according to ISO 10218
Certifications	EN ISO 13849-1, EN ISO 10218-1	, Cat.3, PL d, and
F/T Sensor - Force, x-y-z	F/T Sensor - Torque, x-y-z	
Range 30 N	Range	10 Nm
Resolution 1.0 N	Resolution	0.02 Nm
Accuracy 3.5 N	Accuracy	0.10 Nm
Ambient temperature range	0-50°C*	
Humidity	90% RH (non-co	ndensing)
Humidity	90% RH (non-co	ndensing)

Specification

Payload	3 kg / 6.6 lbs
Reach	500 mm / 19.7 in
Degrees of freedom	6 rotating joints DOF
Programming	Polyscope graphical user interface on 12 inch touchscreen with mounting

Movement

Pose Repeatability	+/- 0.03 mm, wit	th payload, per ISO 9283
Axis movement robot arm	Working range	Maximum speed
Base	± 360°	±180°/Sec.
Shoulder	± 360°	±180°/Sec.
Elbow	± 360°	±180°/Sec.
Wrist 1	± 360°	±360°/Sec.
Wrist 2	± 360°	±360°/Sec.
Wrist 3	Infinite	±360°/Sec.
Typical TCP speed		1 m/Sec./ 39.4 in/Sec.

Features

IP classification	IP54
ISO Class Cleanroom	5
Noise	Less than 60 dB(A)
Robot mounting	Any Orientation
I/O Ports	Digital in2Digital out2Analog in2Analog out0UART interface (9.6k-5Mbps)
I/O power supply in tool	12V/24V 600mA continuous, 2A for shorter periods
Physical	
Footprint	Ø 128 mm
Materials	Aluminium, Plastic, Steel
Tool (end-effector) connector type	M8 M8 8-pin

6 m / 236 in

11.2 kg / 24.7 lbs



Control box

Features

- outur oo	
IP classification	IP44
ISO Class Cleanroom	6
Ambient temperature range	0-50°C
I/O Ports	Digital in 16 Digital out 16 Analog in 2 Analog out 2 500 Hz control, 4 separated high speed quadrature digital inputs
I/O Power supply	24V 2A
Communication	Control frequency: 500 Hz ModbusTCP: 500 Hz signal frequency ProfiNet and EthernetIP: 500 Hz signal frequency USB ports: 1 USB 2.0, 1 USB 3.0
Power source	100-240 VAC, 47-440Hz
Humidity	90% RH (non-condensing)
Physical	
Control box size (WxHxD)	475 mm x 423 mm x 268 mm 18.7 in x 16.7 in x 10.6 in
Weight	Max 13 kg / 28.7 lbs

Teach pendant

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

Steel

Physical

Materials

Materials	Plastic
Weight including 1m of TP cable	1.6 kg / 3.5 lbs
Cable length	4.5 m / 177.17 in



* The robot can work in a temperature range of 0-50°C at a high continuous joint speed, ambient temperature is reduced

Cable length robot arm

Weight including cable