

UR16e technical details



Specifications

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

Performance

Certifications	EN ISO 13849-1, PLd Category 3, and EN ISO 10218-1	
Force Sensing, Tool Flange	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
Power, consumption, maximum average	585 W	
Safety	17 configurable safety functions	

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° ± 180°/s
	Wrist 1	± 360° ± 180°/s
	Wrist 2	± 360° ± 180°/s
	Wrist 3	± 360° ± 180°/s
Typical TCP speed	1 m/s (39.4 in/s)	

Features

IP classification	IP54	
ISO 14644-1 Class Cleanroom	5	
Noise	Less than 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 190 mm
Materials	Aluminium, Plastic, Steel
Tool (end-effector) connector type	M8 M8 8-pin
Cable length robot arm	6 m (236 in)
Weight including cable	33.1 kg (73 lbs)
Operating temperature range	0-50°C
Humidity	90%RH (non-condensing)

Control box

Features

IP classification	IP44	
ISO 14644-1 Class Cleanroom	6	
Ambient temperature range	0-50°C	
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	
Communication	500 Hz Control frequency	
	Modbus TCP	
	PROFINET	
	Ethernet/IP	
	USB 2.0, USB 3.0	
Power source	100-240VAC, 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	12 kg (26.5 lbs)
Materials	Powder coated steel	

Teach pendant

Features

IP classification	IP54	
Humidity	90%RH (non-condensing)	
Display resolution	1280 x 800 pixels	
Physical	Materials	Plastic, PP
	Weight including 1m of TP cable	1.6 kg (3.5 lbs)
Cable length	4.5 m (177.17 in)	



LENEXA, KS
 8004 Reeder St.
 Lenexa, KS 66214
 913.440.4477

SPRINGFIELD, MO
 4319 S. National Ave.
 Springfield, MO 65810
 417.724.2231

ST. LOUIS, MO
 2021 Congressional Dr.
 St. Louis, MO 63146
 314.731.4444

BLOOMINGTON, IL
 1701 E. Empire St.
 Bloomington, IL 61704
 217.615.4440

www.hteautomation.com