

UR3e technical details

Specifications

| | |
|--------------------|---|
| Payload | 3 kg (6.6 lbs) |
| Reach | 500 mm (19.7 in) |
| Degrees of freedom | 6 rotating joints |
| Programming | 12 inch touchscreen with polyscope graphical user interface |

Performance

| | | |
|--|--|---------------|
| Power, Consumption, Maximum Average | 300 W | |
| Power, Consumption, Typical with moderate operating settings (approximate) | 100 W | |
| Safety | 17 configurable safety functions | |
| 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 | 30.0 N | 10.0 Nm |
| Precision | 2.0 N | 0.1 Nm |
| Accuracy | 3.5 N | 0.1 Nm |

Movement

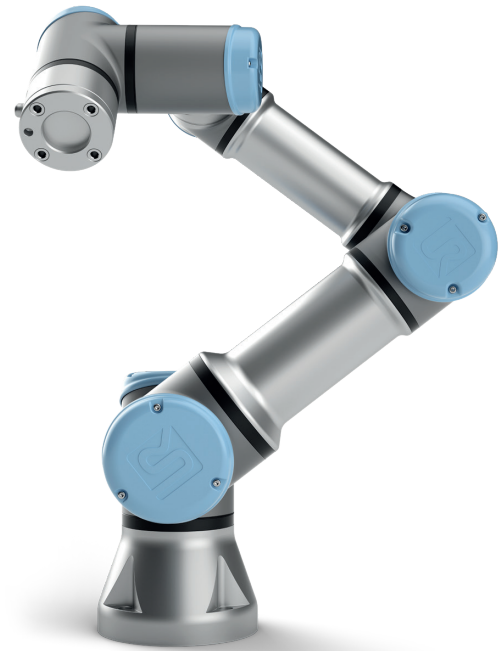
| | | |
|---------------------------------|-------------------|---------------|
| Pose Repeatability per ISO 9283 | ± 0.03 mm | |
| Axis movement | Working range | Maximum speed |
| Base | ± 360° | ± 180°/s |
| Shoulder | ± 360° | ± 180°/s |
| Elbow | ± 360° | ± 180°/s |
| Wrist 1 | ± 360° | ± 360°/s |
| Wrist 2 | ± 360° | ± 360°/s |
| Wrist 3 | Infinite | ± 360°/s |
| Typical TCP speed | 1 m/s (39.4 in/s) | |

Features

| | |
|-------------------------------|--------------------|
| IP classification | IP54 |
| ISO 14644-1 Class Cleanroom | 5 |
| Noise | Less than 60 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 | 600 mA |

Physical

| | |
|------------------------------------|---------------------------|
| Footprint | Ø 128 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 | 11.2 kg (24.7 lbs) |
| Operating Temperature Range | 0-50°C |
| Humidity | 90%RH (non-condensing) |



Control box

Features

| | |
|-----------------------------|---|
| IP classification | IP44 |
| ISO 14644-1 Class Cleanroom | 6 |
| Operating 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 (17,7 in) |