UNIVERSAL ROBOTS
A Teradyne Robotics Company

November 2026

# g-Series







## Robot Arm Specification

| | UR10g-1750 | UR17g-1300 | UR18g-950 |
|---|---|---|---|
| Maximum Payload | 10 kg / 22 lbs | 17.5 kg / 38.58 lbs | 18 kg / 39.7 lbs |
| Reach | 1750 mm / 68.9 in | 1300 mm / 51.18 in | 950 mm / 37.4 in |
| Degrees of freedom | | 6 rotating joints | |
| Maximum power consumption | 615 W | 550 W | 570 W |
| Operating temperature range | | 0-50 °C / 32-122 °F<br>Reduced performance from 35 °C and up. | |
| Safety functions | | 23 configurable safety functions | |
| In compliance with | | **European requirements:**<br>TÜV Rheinland EN ISO 13849-1<br>TÜV Rheinland EN ISO 10218-1<br>RoHS<br>See Declaration of Incorporation<br>**North American requirements:**<br>TÜV Rheinland cTÜVus<br>UL 1740<br>**Korean requirements:**<br>KC Mark (EMC)<br>KCs Mark (Safety) | |

## Performance

| **Force-torque sensing at tool flange** | **Force, x-y-z** | **Torque, x-y-z** | **Force, x-y-z** | **Torque, x-y-z** | **Force, x-y-z** | **Torque, x-y-z** |
|---|---|---|---|---|---|---|
| Range | ± 150.0 N | ± 10.0 Nm | ± 150.0 N | ± 10.0 Nm | ± 150.0 N | ± 10.0 Nm |
| Precision | ± 7.5 N | ± 0.2 Nm | ± 7.5 N | ± 0.2 Nm | ± 7.5 N | ± 0.2 Nm |
| Accuracy | ± 8.3 N | ± 0.5 Nm | ± 8.3 N | ± 0.5 Nm | ± 8.3 N | ± 0.5 Nm |

## Movement

| | | | | | | |
|---|---|---|---|---|---|---|
| Maximum TCP speed | 5 m/s | | 5 m/s | | 4 m/s | |
| Pose Repeatability per ISO 9283 | ± 0.08 mm | | ± 0.05 mm | | ± 0.05 mm | |
| **Axis movement** | **Working range** | **Maximum speed** | **Working range** | **Maximum speed** | **Working range** | **Maximum speed** |
| Base | ± 360° | ± 180°/s | ± 360° | ± 180°/s | ± 360° | ± 180°/s |
| Shoulder | ± 360° | ± 180°/s | ± 360° | ± 180°/s | ± 360° | ± 180°/s |
| Elbow | ± 360° | ± 240°/s | ± 360° | ± 240°/s | ± 360° | ± 240°/s |
| Wrist 1 | ± 360° | ± 300°/s | ± 360° | ± 300°/s | ± 360° | ± 300°/s |
| Wrist 2 | ± 360° | ± 300°/s | ± 360° | ± 300°/s | ± 360° | ± 300°/s |
| Wrist 3 | ± 360° | ± 300°/s | ± 360° | ± 300°/s | ± 360° | ± 300°/s |

## Features

| | | | |
|---|---|---|---|
| Noise level | < 55 dB(A) | < 55 dB(A) | < 55 dB(A) |
| Arm mounting | | Any orientation | |
| Digital In | 2 or 1 x safety input | 2 or 1 x safety input | 2 or 1 x safety input |
| Digital Out | 2 | 2 | 2 |
| Analog In | 2 or 1 x RS-485 | 2 or 1 x RS-485 | 2 or 1 x RS-485 |
| Tool I/O power supply voltage | | 12 or 24 Vdc | |
| Tool I/O power supply | 2 A (dual pin)<br>1 A (single pin) | 2 A (dual pin)<br>1 A (single pin) | 2 A (dual pin)<br>1 A (single pin) |

## Physical

| | | | |
|---|---|---|---|
| Footprint | Ø204 mm / Ø8.03 in | Ø204 mm / Ø8.03 in | Ø204 mm / Ø8.03 in |
| Robot materials | | Aluminium, plastic, steel | |
| Tool flange | | ISO 9409-1-50-4-M6 | |
| Connector type | | M8-8 A-coded 8 pin female (IEC 61076-2-104) | |
| Weight including cable | 47.3 kg / 104.3 lbs | 43.4 kg / 95.7 lbs | 42 kg / 92.6 lbs |
| Humidity | | ≤ 90% RH (non-condensing) | |


g-Series - Technical Specifications

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## Control Box Specification

### Features

| | CB7 Core (PolyScope X) | CB7 Core Compact AC (PolyScope X) |
|---|---|---|
| Robot types | g-Series robot arms | g-Series robot arms |
| Software compatibility | PolyScope X | PolyScope X |
| IP Classification | IP54 | N/A |
| Operating temperature range | 0-50 °C / 32-122 °F | 0-50 °C / 32-122 °F |
| **I/O Ports** | | |
| Digital In | 16 | 16 |
| Digital Out | 16 | 16 |
| Analog In | 2 | 2 |
| Analog Out | 2 | 2 |
| Quadrature Digital inputs | 4 | 4 |
| I/O Power supply | 24V, 4A | 24V, 4A |
| Industrial protocols | Modbus TCP (Client/Server)<br>Ethernet/IP Adapter<br>PROFINET device/PROFIsafe | Modbus TCP (Client/Server)<br>Ethernet/IP Adapter<br>PROFINET device/PROFIsafe |
| Hardware interfaces | 3x Ethernet RJ-45, 1000BASE-T<br>USB 2.0, USB 3.0, USB Type C<br>ethTP (Teach Pendant port) | 3x Ethernet RJ-45, 1000BASE-T<br>USB 2.0, USB 3.0, USB Type C<br>ethTP (Teach Pendant port) |

### Physical

| | | |
|---|---|---|
| Control Box size (W x H x D) | 393 x 284 x 201 mm / 15.5 x 11.2 x 7.9 in | 387 x 158 x 201 mm / 15.2 x 6.2 x 7.9 in |
| Weight | 12.4 kg / 27.3 lbs | 8.5 kg / 18.7 lbs |
| Power supply output | C14, 100-240 VAC, 50-60 Hz | C14, 100-240 VAC, 50-60 Hz |
| Materials | Aluminium, plastic, steel | Aluminium, plastic, steel |
| Humidity | ≤ 90% RH (non-condensing) | ≤ 90% RH (non-condensing) |



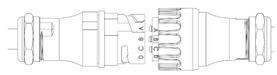
## Teach Pendant Specification

### Features

| | |
|---|---|
| Robot types | g-Series (standard) |
| IP Classification | EN ISO 10218-1<br>EN ISO 13849-1 |
| Humidity | ≤ 90% RH (non-condensing) |
| Display resolution | 1920 x 1080 pixels (11.6") |
| Freedrive | 2x user-configurable buttons |

### Physical

| | |
|---|---|
| Materials | Aluminium, PC/ASA plastic |
| Teach Pendant size (W x H x D) | 302 mm x 241 mm x 25 mm |
| Weight (including 1 m Teach Pendant cable) | 1.415 kg / 3.12 lbs |
| Cable length (Teach Pendant) | 5 m / 12 m |



## Long and short cable options

Robot Cable g

Robot Cable g CHAIN

| Power cable | Material | Color | Length | Diameter | Gross Weight | g-Series | g-Series robot arms |
|---|---|---|---|---|---|---|---|
| 700-3xx-xx | PVC | Black | 6 m / 236.22 in | Country specific | 0.75 kg / 1.7 lbs | ● | ● |

### Robot Cable g

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 200145 | PVC | Black | 1 m / 39.37 in | 12.1 mm / 0.48 in | 0.4 kg / 1 lbs | ○ | ○ |
| 200146 | PVC | Black | 2 m / 78.74 in | 12.1 mm / 0.48 in | 0.6 kg / 1.3 lbs | ○ | ○ |
| 165100 | PVC | Black | 6 m / 236.22 in | 12.1 mm / 0.48 in | 2 kg / 4.4 lbs | ● | - |
| 165101 | PVC | Black | 12 m / 472.44 in | 12.1 mm / 0.48 in | 3.25 kg / 7.17 lbs | ○ | - |

### Robot Cable g CHAIN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 166100 | PVC | Blue | 6 m / 236.22 in | 13.4 mm / 0.53 in | 2.3 kg / 5.07 lbs | ○ | - |
| 166101 | PVC | Blue | 12 m / 472.44 in | 13.4 mm / 0.53 in | 4.5 kg / 9.92 lbs | ○ | - |
| 200113 | PVC | Blue | 6 m / 236.22 in | 14.6 mm / 0.57 in | 2.3 kg / 5.07 lbs | - | ● |
| 200114 | PVC | Blue | 12 m / 472.44 in | 14.6 mm / 0.57 in | 4.5 kg / 9.92 lbs | - | ○ |

○ Optional - Not applicable

## What's in the box?

Select the setup that fits you

| | | | |
|---|---|---|---|
| **Robot** | **g-Series**<br>☐ UR10g-1750<br>☐ UR17g-1300<br>☐ UR18g-950 | **Teach Pendant** | ☐ 5 m<br>☐ 12 m |
| **Software** | PolyScope X | **Cable** | ☐ 6 m<br>☐ 12 m |
| **Control Box** | ☐ CB7 Core<br>☐ CB7 Core Compact<br>☐ CB7 Core Compact 0.55m | **UR Care Service Plan** | ☐ UR Care Plus<br>☐ UR Care Premium<br>☐ UR Care Customized |

## Contact


| | |
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g-Series - Technical Specifications