

# Automation. Optimized.

Introducing the new UR3 collaborative robot, a true power tool perfect for small-format precision tasks.

UR3



**UNIVERSAL ROBOTS**

# The next step in collaborative robot technology

- > Easy programming
- > Fast set up
- > Flexible deployment
- > Collaborative and safe
- > Fastest payback in the industry

Universal Robots ushers in a new era of industrial automation. Meet the lightest 6-axis table-top robot offering unrivaled flexibility and positioning accuracy in a compact form. The UR3 is perfectly suited for automated precision tasks where people and robots work side-by-side.

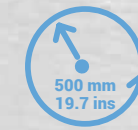
With none of the traditional added costs associated with robot programming, set-up, and dedicated shielded work cells. UR3 delivers the fastest return in the industry for your automation investment.

**195** DAYS | AVERAGE  
PAYBACK  
PERIOD

## Applications

- > Assembly
- > Soldering
- > Gluing
- > Screwing
- > Painting
- > Pick and place
- > Operating hand tools
- > Laboratory work
- > Fume hood tasks
- > Polishing
- > Moulding

## Radius



## Payload



## Rotation



## Benefits

- > Infinite rotation on end joint
- > Ensure consistent product quality
- > Optimize production process
- > Your "third-hand helper"



See the UR3 in action



### 1 Small in size, not ability

Meet high-precision production needs with the UR3's payload of 3 kg (6.6 lbs) and reach of 500 mm (19.7 in). The UR3 uses the same technology as our larger robots – just in a smaller package which gives endless opportunities for using the robot in confined spaces. Weighing in at only 11 kg (24.3 lbs), the robot arm can be easily moved to new projects as needed.



### 2 Built with safety in mind

The UR3 is force sensitive and can be set to stop immediately when it encounters a force as low as 50 Newton. This allows the robot to be used without expensive safety guarding (after prior risk assessment).



### 3 Improve product quality

It requires superhuman abilities to dose exactly the same quantity of glue constantly. However, UR3 can maintain consistent pressure at all times. Ensure uniform quality, reduce production costs and optimize your operation.



### 4 Infinite rotation

Simply mount a bit holder on the end joint of the UR3 robot arm, which can rotate infinitely, and avoid adding expensive tooling in the assembly process. The robot picks up screws, mounts them, and tightens them applying the correct torque.

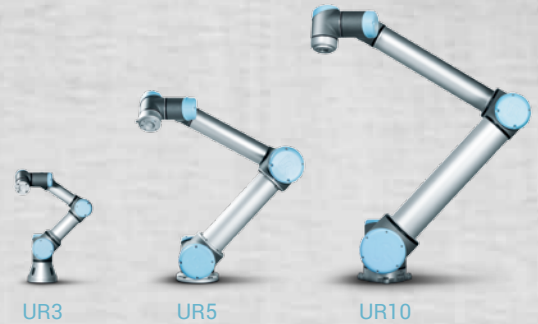


## UR3 Technical Specifications

6-axis robot arm with a working radius of 500 mm / 19.7 in

<b>Weight:</b>	11 kg / 24.3 lbs		
<b>Payload:</b>	3 kg / 6.6 lbs		
<b>Reach:</b>	500 mm / 19.7 in		
<b>Joint ranges:</b>	+/- 360° Infinite rotation on end joint		
<b>Speed:</b>	All wrist joints: 360 degrees/sec. Other joints: 180 degrees/sec. Tool: Typical 1 m/s. / 39.4 in/s.		
<b>Repeatability:</b>	+/- 0.1 mm / +/- 0.0039 in (4 mils)		
<b>Footprint:</b>	Ø118 mm / 4.6 in		
<b>Degrees of freedom:</b>	6 rotating joints		
<b>Control box size (WxHxD):</b>	475 mm x 423 mm x 268 mm / 18.7 x 16.7 x 10.6 in		
<b>I/O ports:</b>		Controlbox	Tool conn.
	Digital in	16	2
	Digital out	16	2
	Analog in	2	2
	Analog out	2	-
<b>I/O power supply:</b>	24 V 2A in control box and 12 V/24 V 600 mA in tool		
<b>Communication:</b>	TCP/IP 100 Mbit: IEEE 802.3u, 100BASE-TX Ethernet socket & Modbus TCP		
<b>Programming:</b>	Polyscope graphical user interface on 12 inch touchscreen with mounting		
<b>Noise:</b>	Comparatively noiseless		
<b>IP classification:</b>	IP64		
<b>Power consumption:</b>	Approx. 100 watts using a typical program		
<b>Collaboration operation:</b>	15 advanced adjustable safety functions		
<b>Materials:</b>	Aluminum, PP plastic		
<b>Temperature:</b>	The robot can work in a temperature range of 0-50°C*		
<b>Power supply:</b>	100-240 VAC, 50-60 Hz		
<b>Cabling:</b>	Cable between robot and control box (6 m / 236 in) Cable between touch screen and control box (4.5 m / 177 in)		

\*) At high continuous joint speed, ambient temperature is reduced.



## A complete range of collaborative robots

With the UR3, Universal Robots adds an innovative, compact option to the UR product family. The same collaborative safety and usability benefits pioneered in the UR5 and UR10 robots are now available for workbench and table-top settings. The compact UR3 offers an affordable "third-hand helper" that allows a single worker to accomplish what traditionally would be a two-person task. There is a whole host of options to use the UR3 as an automated power tool where lack of space is a challenge.

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