# UNIVERSAL ROBOTS
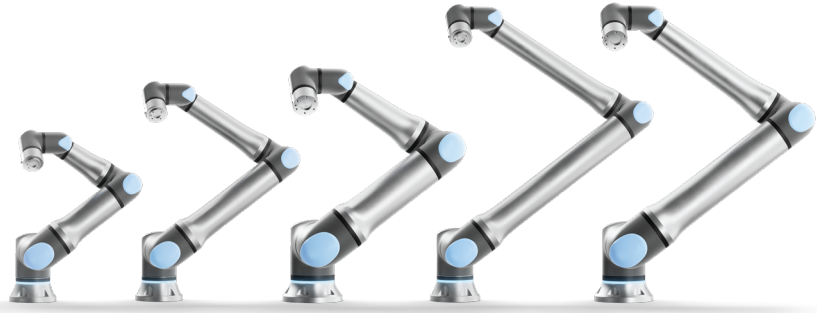
# Automate with UR Series

## *Rugged. Powerful. Practical.*

UR Series delivers industrial-grade performance with collaborative simplicity. Designed for harsh conditions and cleanroom compliance, it combines speed, strength and flexibility with easy deployment and maintenance—making automation practical for high-performance applications.

## Why Universal Robots?

### Proven Brand & Ecosystem

- ✓ 20+ years of industry leadership and 100k+ robots deployed
- ✓ A robust ecosystem of UR-compatible solutions and accessories

### Safe by Design

- ✓ Ultralight weight design and force-torque sensing enables safe, flexible automation in space-limited and co-working environments
- ✓ International standard compliance ensures faster deployment and built-in safety that protects your people and your assets

### Scalable Software

- ✓ Low learning curve + high capability ceiling allow you to start simple and scale to advanced
- ✓ PolyScope included out of the box + lifetime upgrades provides predictable Total Cost of Ownership and access to the latest software

### Flexibility & ROI

- ✓ Deployable by 1-2 people without major infrastructure changes
- ✓ Lightweight design and intuitive programming allow fast changeovers for new tasks or lines
- ✓ Lifetime PolyScope upgrades, built-in protocols, and no hidden fees

## Why the UR Series?

### Rugged Reliability

- ✓ Enclosed joints for durability
- ✓ 50%-part reduction delivers improved reliability and serviceability
- ✓ IP65: dust tight and low-pressure water jet protection
- ✓ Cleanroom class 4: suitable for food, pharma, and electronics applications requiring strict contamination control

### Industrial Capability

- ✓ Payload up to 35kg with expanded payload specifications for enhanced performance
- ✓ Fast performance with 4-5m/s Tool Center Point speeds
- ✓ Enhanced algorithms for heavy payload performance

### Collaborative Simplicity

- ✓ 1–2 person installation and reduced infrastructure requirements
- ✓ Reduced power consumption compared to traditional industrial robots
- ✓ Collaborative-capable: industrial performance with collaborative features
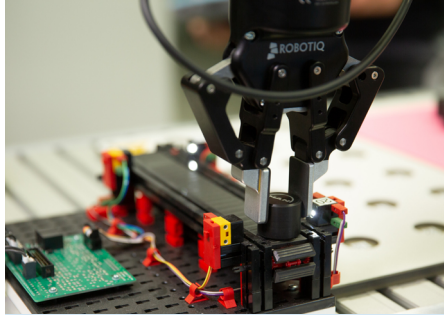
# UR Series Industries and Applications

## Metals & Fabrication Industries

**Dirty jobs demand rugged automation.**

UR Series thrives in harsh conditions with IP65 protection and enclosed joints – ideal for welding and machine tending applications.

## Electronics Manufacturing

**Compliance in clean environments.**

Cleanroom Class 4 compliance makes UR Series perfect for material handling and assembly tasks in contamination-sensitive production.

## End of Line Packaging

**Heavy lifting made practical.**

Extended payload specs and washdown-ready design enable palletizing and packaging without costly enclosures.

# Meet the UR Series Family

## *Specification Highlights*

| | UR8 Long | | UR15 | | UR18 | | UR20 | | UR30 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Payload | 8 kg (17.6 lbs) | | 15 kg (33.1 lbs) | | 18 kg (39.7 lbs) | | 20 kg (44.1 lbs) | | 30 kg (66.1 lbs) | |
| Reach | 1750 mm (68.9 in) | | 1300 mm (51.18 in) | | 950 mm (37.4 in) | | 1750 mm (68.9 in) | | 1300 mm (51.18 in) | |
| Footprint | Ø204 mm | | Ø204 mm | | Ø204 mm | | Ø245 mm | | Ø245 mm | |
| Maximum TCP speed | 5 m/s | | 5 m/s | | 4 m/s | | 5 m/s | | 4 m/s | |
| Pose Repeatability per ISO 9283 | ± 0.08 mm | | ± 0.05 mm | | ± 0.05 mm | | ± 0.1 mm | | ± 0.1 mm | |
| **Force sensing, tool flange/torque sensor** | Force, x-y-z | Torque, x-y-z | Force, x-y-z | Torque, x-y-z | 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 | ± 200.0 N | ± 20.0 Nm | ± 200.0 N | ± 20.0 Nm |
| Precision | ± 7.5 N | ± 0.2 Nm | ± 7.5 N | ± 0.2 Nm | ± 7.5 N | ± 0.2 Nm | ± 5.5 N | ± 0.2 Nm | ± 5.5 N | ± 0.2 Nm |
| Accuracy | ± 8.3 N | ± 0.5 Nm | ± 8.3 N | ± 0.5 Nm | ± 8.3 N | ± 0.5 Nm | ± 10.0 N | ± 0.1 Nm | ± 10.0 N | ± 0.1 Nm |
| Safety functions | 17 configurable safety functions | | | | | | | | | |
| In compliance with | EN ISO 13849-1 (PLd category 3) and EN ISO 10218-1 | | | | | | | | | |
| IP Classification | IP65 | | | | | | | | | |
| **Power consumption (average)** | | | | | | | | | | |
| Maximum power | 615 W | | 550 W | | 570 W | | 750 W | | 750 W | |
| Moderate operating settings | 350 W | | 350 W | | 350 W | | 500 W | | 300 W | |