



Meet the World's #1 Collaborative Robot

Empowering Change in the Way Work is Done

e-series



-  PACKAGING AND PALLETIZING
-  MACHINE TENDING
-  INDUSTRIAL ASSEMBLY
-  PICK AND PLACE
-  INJECTION MOLDING
-  GLUING, DISPENSING, WELDING
-
-  CERTIFIED PLUG AND PLAY PRODUCTS WITH UR+ ECOSYSTEM
-  FREE ONLINE TRAINING PROGRAM

Collaborative robots can work almost anywhere and automate almost anything



They free people up to do what they're good at: creating, collaborating, and doing something amazing.

Get an edge over your competitors with the e-Series' five key benefits

Easy Programming

87 minutes to turn anyone into a robot programmer

- Integrated Force Torque Sensor
- User friendly Teach Pendant
- Intuitive 3D interface
- Drag-and-drop functions

Fast Set-Up

The e-Series takes less than 60 minutes to unpack, mount, and program after completion of UR Academy Training

- Connects to a 110 VAC power outlet
- Intuitive user interface
- 20 industrial I/O connectors
- Ethernet connectivity
- Easy integration into almost any production set-up

Safe & Collaborative

Bridge the gap between man and machine

- Customizable stopping times + stopping distance
- Collision detection
- 17 safety functions, all EN ISO 13849-1, Cat. 3, PL. d. certified by TÜV NORD
- ISO 10218-1 Cat 3, PLd, certified by TÜV NORD

Flexible

Infinite ways of deployment and task automation

- Universal Robots+ offers plug-and-play cutting edge products
- Lightweight - easy to relocate
- Mounts in any orientation
- Ability to save programming and redeploy to new tasks

Fast Payback

34 days - our fastest recorded payback worldwide

- Advanced collaborative robots - available to companies of any size
- Fully upgradable software platform for a lasting and worthy investment



The power to automate
is in your hands

e-Series 3PE Teach Pendant

All e-Series cobots include the standard e-Series Teach Pendant, offering an intuitive user interface for easy programming with UR's powerful PolyScope software.

A 3-position enabling teach pendant is also available as a variant for all payloads of e-Series robots, and as a UR+ component. The 3PE device is mechanically and functionally integrated with the e-Series Teach Pendant – just Plug & Produce with any e-Series control box. Additionally, it is fully integrated into the PolyScope user interface to enable all robot motion, including Freedrive, in manual mode.

PolyScope - our intuitive programming interface

PolyScope offers users a high-level interface for very straightforward applications that any frontline operator can master. It also features a deep and complex programming environment for developers to pursue complex and experimental cobot applications.

Key Benefits

- Full mechanical 3PE device integration
- Full software integration - the 3PE Teach Pendant is natively supported in PolyScope
- Connects to the control box with the same connector as the standard e-Series teach pendant
- Can be mounted to any existing e-Series teach pendant brackets
- Includes two 3PE devices, allowing comfortable use with left or right hand
- Included in TÜV NORD certifications ISO 10218-1:2011 and ISO 13849-1:2015

Hardware Specifications

Width	300 mm (11.81 in)
Height	231 mm (9.09 in)
Thickness	50 mm (1.97 in)
Weight, including 1 meter of cable	1.8 kg (3.961 lbs)
IP Classification	IP54

Meet the e-Series family



UR3e
3 kg | 6.6 lb | Payload
500 mm | 19.7 in | Reach

UR5e
5 kg | 11 lb | Payload
850 mm | 33.5 in | Reach

UR16e
16 kg | 35.3 lbs | Payload
900 mm | 35.4 in | Reach

UR10e
12.5 kg | 27.5 lbs | Payload
1300 mm | 51.2 in | Reach

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)

COMING SOON!



UR20

20 kg | 44.1 lbs | payload
1750 mm | 68.9 in | reach
64 kg | 141.1 lbs | weight
245 mm | footprint

UR3e

UR5e

UR10e

UR16e

Specifications

Payload	3 kg (6.6 lbs)	5 kg (11 lbs)	12.5 kg (27.5 lbs)	16 kg (35.3 lbs)
Reach	500 mm (19.7 in)	850 mm (33.5 in)	1300 mm (51.2 in)	900 mm (35.4 in)
Degrees of freedom	6 rotating joints			
Programming	12 inch touchscreen with polyscope graphical user interface			

Performance

Power, consumption, maximum average	300 W	570 W	615 W	585 W
Safety	17 configurable safety functions			
Certifications	EN ISO 13849-1, PLd Category 3, and EN ISO 10218-1			

Force Sensing, Tool Flange Range	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
Precision	30.0 N	10.0 Nm	50.0 N	10.0 Nm	100.0 N	10.0 Nm	160.0 N	10.0 Nm
Accuracy	2.0 N	0.1 Nm	3.5 N	0.2 Nm	5.0 N	0.2 Nm	5.0 N	0.2 Nm
	3.5 N	0.1 Nm	4.0 N	0.3 Nm	5.5 N	0.5 Nm	5.5 N	0.5 Nm

Movement

Pose Repeatability per ISO 9283	± 0.03 mm		± 0.03 mm		± 0.05 mm		± 0.05 mm	
Axis movement	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed
Base	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 120°/s	± 360°	± 120°/s
Shoulder	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 120°/s	± 360°	± 120°/s
Elbow	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s
Wrist 1	± 360°	± 360°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s
Wrist 2	± 360°	± 360°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s
Wrist 3	Infinite	± 360°/s	± 360°	± 180°/s	± 360°	± 180°/s	± 360°	± 180°/s

Typical TCP speed	1 m/s (39.4 in/s)			
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Features

IP classification	IP54			
ISO 14644-1 Class Clean-room	5			
Noise	Less than 60 dB(A)	Less than 65 dB(A)	Less than 65 dB(A)	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	600 mA	1.5 A (Dual pin) 1 A (Single pin)	2 A (Dual pin) 1 A (Single pin)	2 A (Dual pin) 1 A (Single pin)

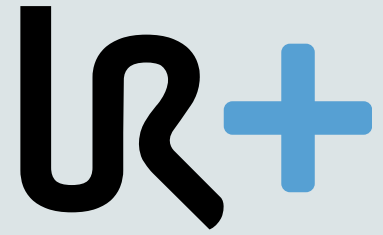
Physical

Footprint	Ø 128 mm	Ø 149 mm	Ø 190 mm	Ø 190mm
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)	20.6 kg (45.4 lbs)	33.5 kg (73.9 lbs)	33.1 kg (73 lbs)
Operating temperature range	0-50°C			
Humidity	90%RH (non-condensing)			

* The robot can work in a temperature range of 0-50°C at a high continuous joint speed, ambient temperature is reduced.

CERTIFIED UR+

Application Kits to Plug-and-Produce



The industry's largest ecosystem of 300+ partners and growing making 400+ UR integrated solutions

Here are just 4 examples



Palletizing

Ease-of-use is redefined with the Robotiq Palletizing Solution. Open the box, and the hardware and software is already connected and ready to install. Plan your program in just three steps, directly on the robot control device



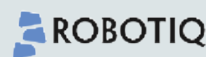
Automated Inspection

Gocator line profile sensors use a projected laser line to perform high-resolution scanning, measurement and control for automated quality inspection, material optimization, and factory automation applications at inline production speed.



Part Feeding

The Asycube separate and orient parts on a surface by intelligent vibration. A vision system is then used to locate the parts and give the coordinates to the robot for picking.



Screwdriving

The Robotiq Screwdriving Solution, composed of the Robotiq Screwdriver and Robotiq Screw Feeder, is a robotic peripheral designed for industrial applications. Its design makes it a unique tool for fastening components together autonomously.



Service Offerings

UR's next generation services include 3 tiers, providing operators exactly what they require.



UR CARE
Access **support** and **resources** necessary for success.

SUPPORT

- ✓ myUR Ticket Management
- ✓ UR Academy
- ✓ Customer Success Management

UR INSIGHT
Achieve **visibility** by collecting and analyzing data about your cobot.

VISIBILITY

- ✓ myUR Monitoring
- ✓ Notifications
- ✓ Dashboard
- ✓ Log Report

SUPPORT

- ✓ myUR Ticket Management
- ✓ UR Academy
- ✓ Customer Success Management

UR PERFORMANCE
Leverage **expertise** to verify your cobot configuration and optimize productivity, and longevity.

OPTIMIZE

- ✓ Annual Cobot Performance Check
- ✓ Extend warranty*

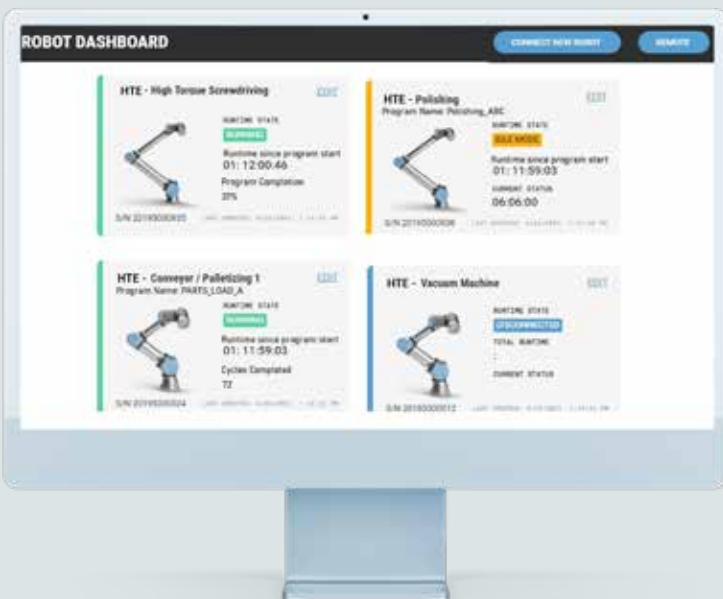
VISIBILITY

- ✓ myUR Monitoring
- ✓ Notifications
- ✓ Dashboard
- ✓ Log Report

SUPPORT

- ✓ myUR Ticket Management
- ✓ UR Academy
- ✓ Customer Success Management

*Requires Annual Cobot Performance Check
*Recertification required if Cobot is out of warranty



With UR INSIGHT connect the robot for visibility and analysis of daily activities.

myUR Monitoring - Track cycle times and cycle counts in real time from a smart device.

Notifications - Receive notification for robot stops, alarms and application-specific events while at the office or on the road.

Dashboard - Monitor multiple robot workcells on one dashboard and access the dashboard from any networked computer.

Log Report - Diagnose production inefficiencies and gain a deeper understanding through exportable/downloadable log reports.



Certified Core Training

KEY TAKE-AWAYS FROM THIS 2-DAY COURSE

1. Manage the robot safely, understanding safety concepts
2. Build and optimize programs for several typical applications such as pick and place, palletizing, polishing or dispensing
3. Connect and handle peripheral equipment, such as sensors, grippers or conveyor belts
4. Know the online tools and resources available to help with application programming



UNIVERSAL ROBOTS ACADEMY
Authorized Training Center



COURSE DESCRIPTION

After the 2-day course, you will have hands-on experience with a UR robot. You will have programmed the robot several times to perform common tasks, including the operation of common peripherals (conveyors, sensors, grippers). You will be able to optimize a pick and place flow, perform palletization, understand safety concepts, and know the additional resources available to you, both online and through other training courses. You will be ready to return to your own robot and create pick and place, palletization, and other common application programs on your own.

You must complete the Online Core Training before signing up for the In-Class Core Training.

Training is held at HTE Automation’s Universal Robots Authorized Training Center unless other arrangements are made.

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