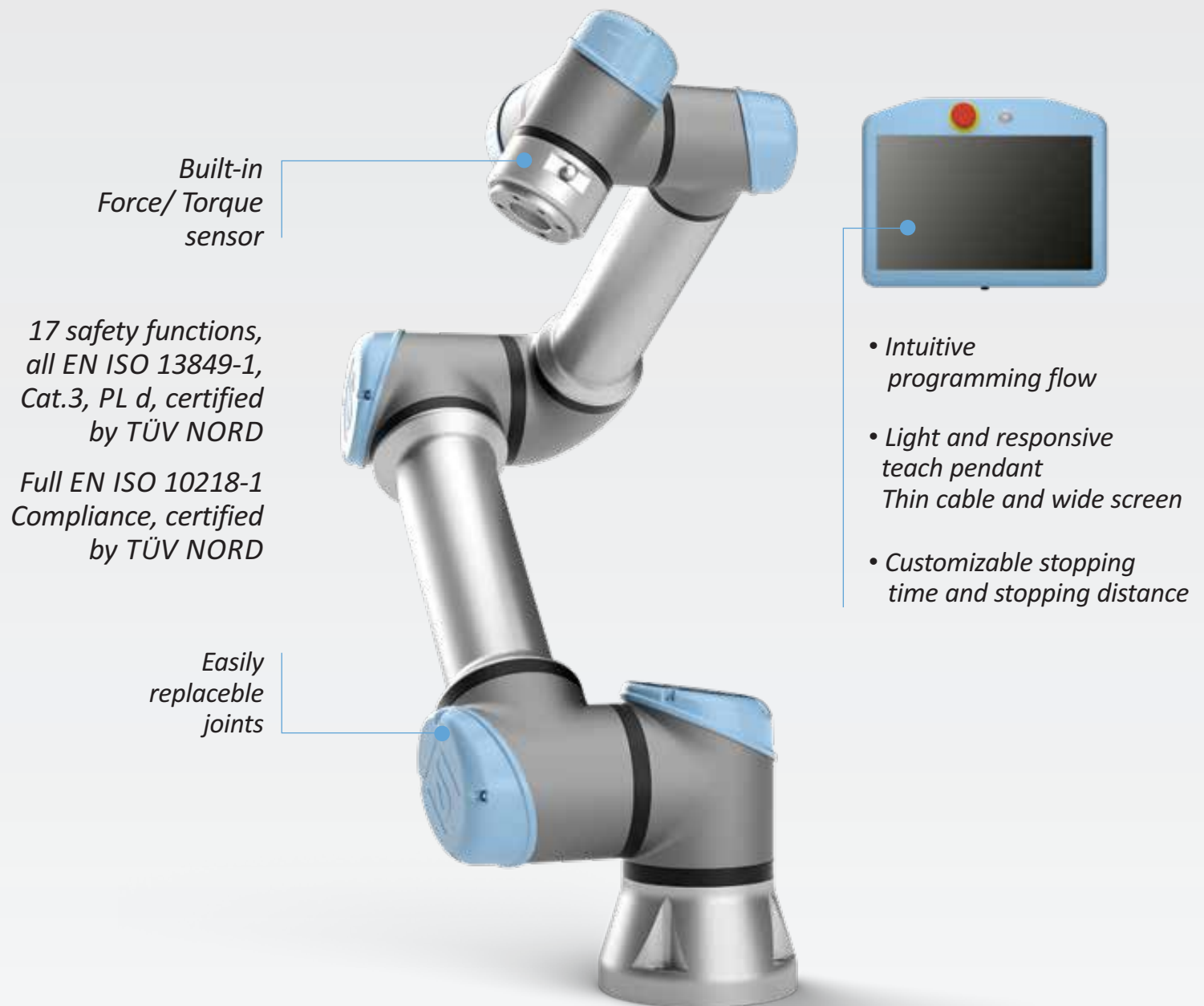


e-Series Universal Robots



*Built-in
Force/ Torque
sensor*

*17 safety functions,
all EN ISO 13849-1,
Cat.3, PL d, certified
by TÜV NORD*

*Full EN ISO 10218-1
Compliance, certified
by TÜV NORD*

*Easily
replaceable
joints*

- *Intuitive
programming flow*
- *Light and responsive
teach pendant
Thin cable and wide screen*
- *Customizable stopping
time and stopping distance*

Optimize with human-robot collaboration

Productivity•Adaptability•Reliability



UNIVERSAL ROBOTS

Technical Specifications	UR3e	UR5e	UR10e
Weight	11.2 kg	20.6 kg	33.5 kg
Payload	3 kg	5 kg	10 kg
Reach (mm)	500 mm	850 mm	1300 mm
F/T Sensor Force XYZ			
Range	10 N	50 N	100 N
Resolution	1 N	2.5 N	2 N
Accuracy	3.5 N	4 N	5.5 N
F/T Sensor Torque XYZ			
Range	10 Nm		
Resolution	0.02 Nm	0.04 Nm	0.02 Nm
Accuracy	0.1 Nm	0.3 Nm	0.6 Nm
Joint Ranges	+/-360°; Infinite rotation on end joint	+/-360°	
Speed	All wrist joints: 360°/sec. Tool: Typical 1 m/s. / 39.4 in/s. Other joints: 180°/sec.	All joints: 180°/sec. Tool: Typical 1 m/s. / 39.4 in/s.	Base & Shoulder: 120°/sec. Elbow, Wrist 1, Wrist 2, Wrist 3: 180°/sec Tool: Typical 1m/s. .39.4 in/s
Repeatability	± 0.03 mm		± 0.05 mm
Footprint	Ø128 mm	Ø149 mm	Ø190 mm
Degrees of Freedom	6 Rotating Joints		
Control box size (WxHxD)	475 mm x 423 mm x 268 mm		
I/O Ports (WxHxD)		Control box	Tool Conn
	Digital in	16	2
	Digital out	16	2
	Analog in	2	2
	Analog out	2	-
I/O power supply (WxHxD)	24V 2A in control box and 12V / 24V 600mA in tool		
Communication	TCP/IP 100 Mbit: IEEE 802.3u, 100BASE-TX Ethernet socket & Modbus TCP in control box and RS485 in tool		
Programming	Polyscope graphical user interface on 12" touchscreen with mounting		
Noise	Comparatively noiseless		
IP Classification	IP54		
Power Consumption	Approx. 100 watts	Approx. 200 watts	Approx. 350 watts
Collaboration Operation	All 17 advanced adjustable safety functions incl. elbow monitoring certified to Cat.3, PL d. Remote Control according to ISO 10218 Certifications by TUV Nord EN ISO 13849-1, Cat.3, PL d, and full EN ISO 10218-1		
Materials	Aluminium, Plastic, Steel		
Temperature	The robot can work in a temperature range of 0-50° C*		
Power Supply	100-240 VAC, 50-60 Hz		
Cabling	Cable between robot and control box (6 m)		
* At high continuous joint speed, ambient temperature is reduced			

Unique Features of URe and its benefits

The e-Series cobots exemplify productivity, adaptability and reliability. Equipped with intuitive programming and versatile use, the e-Series is able to complement production regardless of the industry, company size or product nature.

Built with the future in mind, the e-Series is designed to grow in capability taking on new tasks and finding new uses. The e-Series can trailblaze into the future and take robotic automation beyond what can be done today.

Easy Programming The intuitive 3D-interface allows to become a robot programmer even without prior experience. A user friendly and intuitive teach pendant allow operators to program a cobot by moving its arms to the desired waypoints, simply using drag-and-drop functions on a touchscreen tablet. Even the most complex tasks can be taught to the cobot with Universal Robots' Integrated Force Torque Sensor. Highly sensitive to even the slightest movements, the sensor enables the cobots to be programmed with precision for tasks where accuracy is of paramount importance.

Fast Set-up Reduce robot deployment time from weeks to hours. The cobots do not require special electrical installations and can be connected to any regular power outlet. An intuitive user interface enables easy set-up, installation and integration into the production line.

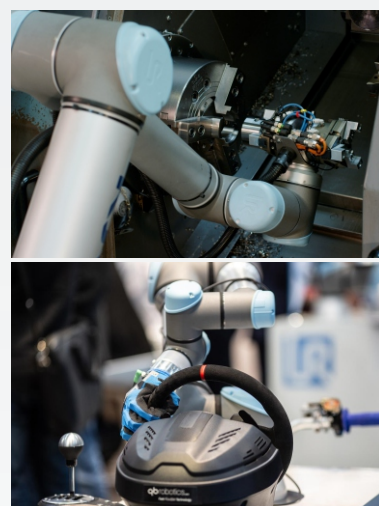
Universal Robots+ products ensure hassle-free integration to maximize productivity by plug and produce. The robots also come with 32 industrial I/O connectors (24 volt) and Ethernet connectivity.

Flexible Explore the possibilities of robotic deployment with the cobots - lightweight, space saving and easy to re-deploy to multiple applications without changing production layouts. They can be moved between tasks quickly and can reuse programs for recurrent tasks, giving the flexibility to automate multiple manual tasks within one production facility with just one cobot. The e-Series' is supported by a range of end-effectors and software to meet every configuration and application need.

Safe & Collaborative The cobots are able to take over strenuous tasks in dangerous or dull environments. With the safety features, you can fuse the best of human ingenuity with robot competency for accelerated productivity and growth.

Fast Payback Universal Robots brings all the advantages of advanced robotic automation and collaborative robots without any of the traditional added costs associated with robot programming, set-up and safety guarding. Robotic automation is now an option for small and medium enterprises, small batch production runs and other set-ups where traditional solutions may be too expensive.

URe-Series



Machine Building Components
Assembly Line & Workplaces
Material Handling Solutions
Robotic Solutions
Special Purpose Machines

ALSTRUT
POSSIBILITIES UNLIMITED

Alstrut India Private Limited
267 Kilpauk Garden Road
Chennai 600 010, India

+91-44-4294-9000

ur@alstrut.com

www.alstrut.com

