



Overview

Product name	iQ-Robot
Principle	A compact collaborative robot for automated positioning and alignment of the device under test (DUT) with illumination and measurement devices

Features

Robot Arm

Degrees of freedom	Six rotating joints
Reach	500 mm
Joint ranges	Unlimited for wrist 3, $\pm 360^\circ$ for other joints (see "Joints of the robot")
Speed	Base, shoulder, and elbow joints: max 180°/s Wrist 1, 2, 3 joints: max 360°/s (see "Joints of the robot")
Repeatability	± 0.1 mm
Service life	35,000 h

Software iQ-Automator (not included)

System requirements	<ul style="list-style-type: none"> • PC with Windows 7 operating system (or higher) • USB port • Ethernet port or WiFi
Functions	<ul style="list-style-type: none"> • Creating workflows for automated testing sequences • Positioning and aligning the device under test • Controlling connected illumination and measurement devices • Capturing images and transferring them to the PC



General description hardware

Power supply/consumption	100 - 240 VAC, 50-60 Hz / approx. 100 W
Communication	TCP/IP 100 Mbit: IEEE 802.3u, 100BASE-TX Ethernet socket & Modbus TCP
Control box dimensions [W x H x D]	475 x 423 x 268 mm
Weight	Approx. 12 kg
Footprint	Ø 128 mm
Max. payload	3 kg
Operating conditions	0 - 50 °C
IP classification	IP54
Cabling	A cable between the robot and the control box (6m) A cable between the touchscreen and control box (4.5 m)
Scope of delivery	<ul style="list-style-type: none"> • Robot arm • Control box with a touchscreen tablet • Mounting bracket for the control box • Mounting bracket for the touchscreen tablet • Key for opening the control box • Power supply cable • Tool cable • Stylus pen with laser • Cable guide chain for robotic applications • iQ-Mobilemount • iQ-Trigger-T • Tripod mount adapter • iQ-Bench mount adapter plate

Requirements on the device under test (DUT)

Max. weight	0.9 kg (when using iQ-Mobilemount and iQ-Trigger-T)
Max. height	175 mm (when using iQ-Mobilemount)
Max. depth	15 mm (when using iQ-Mobilemount)

Joints of the robot

A	Base
B	Shoulder
C	Elbow
D, E, F	Wrists 1, 2, 3

