



Overview

Product name	iQ-Hexalign-G
Principle	A component of the motorized iQ-Teststand: solution with six degrees of freedom to align a camera correctly to the test chart

Features

Geared Hexapod

Active axes	X, Y, Z, θ_x , θ_y , θ_z
Motor type	DC gear motor
Velocity	X, Y, Z: max. 2.5 mm/s, typ. 2 mm/s θ_x , θ_y , θ_z : max. 30 mrad/s, 20 mrad/s
Accuracy/Moving resolution	0.017 μm (single-actuator design resolution)
Repeatability	X, Y: $\pm 0.5 \mu\text{m}$ Z: $\pm 0.4 \mu\text{m}$ θ_x , θ_y : $\pm 7 \mu\text{rad}$ θ_z : $\pm 12 \mu\text{rad}$
Travel range:	X, Y: $\pm 50 \text{ mm}$ Z: $\pm 25 \text{ mm}$ θ_x , θ_y : $\pm 15 \text{ degrees}$ θ_z : $\pm 30 \text{ degrees}$
Min. incremental motion:	X, Y: $1 \mu\text{m}$ Z: $0.5 \mu\text{m}$ θ_x , θ_y , θ_z : $5 \mu\text{rad}$
Backlash	X, Y: $3 \mu\text{m}$ Z: $0.2 \mu\text{m}$ θ_x , θ_y : $20 \mu\text{rad}$ θ_z : $30 \mu\text{rad}$
Specialties	Combinable with the iQ-Bench-M and iQ-Rotation The required cables and mountings for camera control will be implemented



	individually.
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API (Software)

System requirements	PC with Windows 7 operating system (or higher) USB port
Functions	Control all axes Define speed of movement Set up sequences
API (C++)	iQ-Drive API

General description hardware

Power supply/consumption	100 - 240 V, 50/60 Hz, 250 W
Ports	1 x Ethernet port for connection of Controller Unit to PC 1 x port for power supply (Controller Unit)
Dimension [W x H x D]	348 x 328 x 348 mm (Hexapod) 320 x 150 x 103 mm (control unit) 170 x 85 x 42,5 mm (power adaptor)
Weight	12 kg (Hexapod) 2.8 kg (Control Unit)
Connection to iQ-Bench	Yes (firmly fixed to iQ-Bench if iQ-Bench is ordered with iQ-Hexalign)
Connection to camera	Quick-release plate with 1/4" and 3/8" UNC screw
Operating conditions	5 to 40 °C

Requirements of the device under test (DUT)

Max. DUT height/depth	Not limited (refer to max. DUT weight)
Max. DUT weight	30 kg (base plate horizontal) 10 kg (any orientation)
Holding force, de-energized	100 N (base plate horizontal) 25 N (any orientation)