

7th Axis for Universal Robots

ST-RB-13031

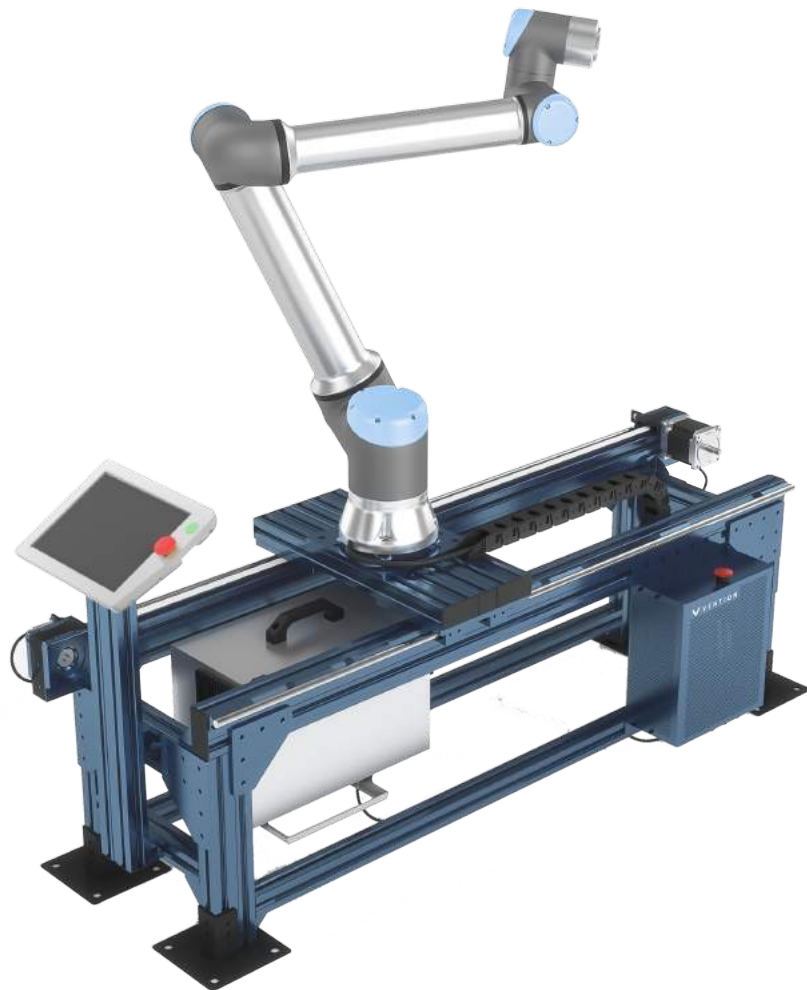
TECHNICAL SPECIFICATIONS

Vention's 7th axis extends the range of any Universal Robots and can be easily customized to your needs. Range extension applications can now be designed and commissioned in just a few days, leveraging the entire Vention ecosystem.

The 7th axis for Universal Robots incorporates MachineMotion™, Vention's plug & play control technology, and is compatible with the UR controller.

Features

- Fully customizable for a broad range of applications (i.e., length, height, mounting orientation, multi-axis)
- Based on Vention's linear motion technology powered by Thomson
- Ready to deploy, with kit including all required sensors and wires
- Ships in 5–7 days, with pre-assembled linear axes
- Automated with MachineMotion™ plug & play controller, compatible with the UR controller



Specifications

Compatibility	UR3, UR5, UR10
Motion	Horizontal [or Vertical]
Gantry Orientation	Vertical [or Horizontal]
Available Travel	360 to 2070 mm
Max Speed	1.6 m/s
Repeatability	± 0.25 mm
Max Linear Force	300N @ 0 RPM
Gantry Load Capacity	440 kg

VENTION PRODUCTS FOR 7TH AXIS

Linear Motion Components

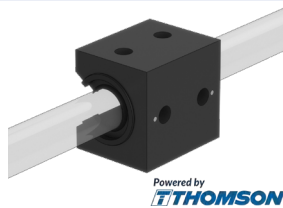
Timing Belt Actuator
MO-LM-016-XXXX



16mm Shaft for
Linear Bearings
MO-LM-014-XXXX



16mm Linear Bearing
with Housing
MO-LM-010-0001



MachineMotion™

1-Output MachineMotion
Controller
CE-CL-005-0001



- Linux single-board computer
- USB and ethernet connectivity
- Hardware G-Code interpreter
- Javascript & Python control APIs
- Compatible with Universal Robots controller
- Up to 3 outputs available

Plug & Play Automation Components

NEMA 34
Stepper Motors
MO-SM-XXX-XXXX



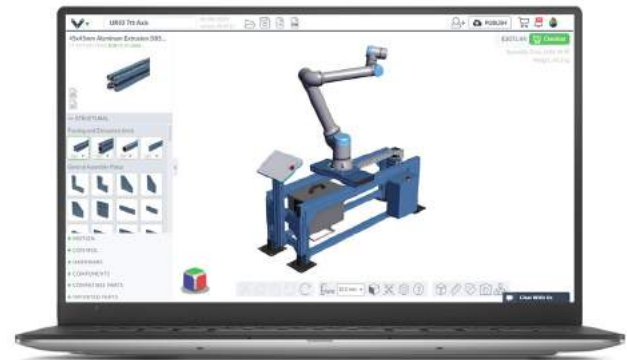
M18 Inductive
Proximity Sensor
CE-SN-004-0001



Hollow Shaft Optical Rotary
Encoder (Optional)
CE-SN-002-0001



MachineBuilder™



- Easily customize and order a 7th axis in minutes using Vention's free cloud MachineBuilder™
- This design can be accessed at www.vention.io/designs/13031