

Measurements in millimeters

## Specification

Degrees of Freedom		3 rotating joints, 1 linear axis; 4 DOF
Reach		407.8 mm / 16 in
Envelope		$h = 350 \text{ mm}$ , $r = 407.8 \text{ mm}$
Payload		1.5 kg / 3 kg
Repeatability		0.1 mm
Range of Motion	Wrist joint	infinite
	Elbow joint	$\pm 300 \text{ deg}$
	Shoulder joint	$\pm 360 \text{ deg}$
	Z joint	$\pm 350 \text{ mm}$
Resolution	Wrist joint	13.5 arcmin
	Elbow joint	66.3 arcsec / 0.06 mm linear distance
	Shoulder joint	48.3 arcsec / 0.05 mm linear distance
	Z joint	0.01 mm
Max operation speed	Wrist joint	360 deg / 0.1 s
	Elbow joint	360 deg / 0.73 s
	Shoulder joint	360 deg / 1 s
	Z joint	100 mm / 0.6 s
Mounting Type		Tabletop, AGV, ceiling, etc.
Footprint		inscribes 230 x 150 mm
Temperature Range		0 - 50 C at average speed
Materials		Aluminum, Steel, Plastic
Tool Connection		M3 x 6
I/O power supply		AC100-240V
Communication	Socket-based API	through WiFi, Ethernet
	Serial-based API	through USB, optionally I2C, SPI or CAN
Control Box Size		270 x 270 x 200 mm
Programming	3D user interface runs on computers, tablets, and cellphones	
	Straightforward API allows entry-level developer to have full control of the robot	
	Supports C, C++, Javascript, Java, .NET etc.	
	Vision integration option with no programming required	
Warranty		12 month to unlimited
Service		Integration, programming, maintenance, and onsite training available

Visit us online at [nowing.com](http://nowing.com)  
Email us at [future@nowing.com](mailto:future@nowing.com)

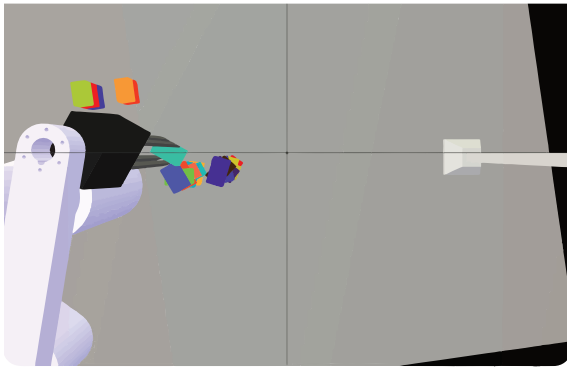
**Start a new age of people-centered production**

**Expand the scope of human activities**

## Vision

### NOWING Sight

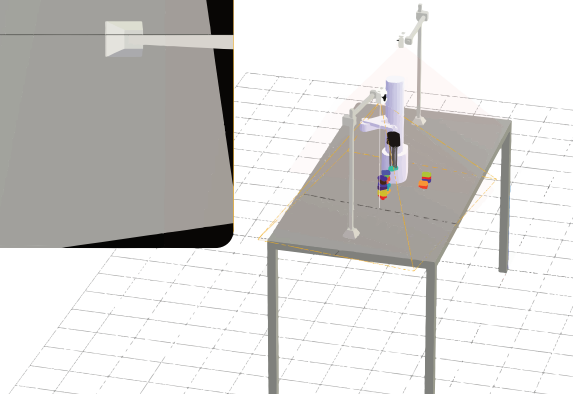
- \* Native image processing
- \* HDMI output for real-time monitoring
- \* Transfer of images and machine vision algorithms by USB or WiFi
- \* No programming & zero setup after inserting the detection algorithm
- \* 2D and 3D vision options
- \* On-demand machine learning algorithms



## Software

### NOWING Factory

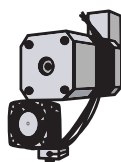
- \* 3D online control interface
- \* Vision integration: maps reality into virtual environment, calculates action commands to send back to reality
- \* Control your robot using preferred method: G-code entry, free drive mode, 3D virtual control, & intelligent motion planning
- \* Customizable interface and simple API
- \* Supports C, C++, Javascript, Java, Net, etc.



## Grippers

Custom grippers: pneumatic, mechanical,

3D printerheads and hookups, engraving, welding



## Support

NOWING 12 month to unlimited warranty

Integration, programming and maintenance

Routine hardware upgrades

Visit us online at [nowing.com](http://nowing.com)  
Email us at [future@nowing.com](mailto:future@nowing.com)