



## Overview

The VIM-303 is a ground breaking 3D vision guidance system that controls robotic arms for pick and place applications.

VIM-303 combines a 3D camera, 2D camera, powerful vision processing, and robot guidance into one convenient package.

*Vision-in-Motion™* technology, developed by Visual Robotics, enables picking of moving objects without a conveyor encoder.

Global shutter stereo cameras, a 12MP color autofocus camera, pulsed LED illumination, active stereo IR projectors, Gigabit Ethernet with PoE, and powerful video processing with the Movidius Myriad X provide a high-performance industrial solution, designed for robotics.

VIM-303 comes with *QuickPick 303* an easy to use web interface. Novice operators can easily select between tasks and programming new tasks with Blockly is a breeze.

VIM-303 forms the core of a vision guided robotic workcell that can be constructed with off the shelf parts.

## Features

- Vision guided robot arm controller
- Integrated camera and processing
- Picks still and moving objects
- Intuitive web interface
- 3D active stereo camera
- 12MP 2D color autofocus camera
- Inspection and barcode reading
- Integrated illumination
- Power over Gigabit Ethernet
- Robot arm or fixed mounted



## Specifications

Stereo Cameras	
Resolution	1280 x 800 (1 Megapixel)
Frame Rate	60 FPS
Type	Monochrome Global Shutter
Focus	Fixed Focus 2.8mm f/2.8
Field of View	75° x 51°
Depth of Field	80mm - Infinity

Inspection Camera	
Resolution	4056 x 3040 (12 Megapixel)
Frame Rate	30 FPS
Type	Color Rolling Shutter
Focus	Auto Focus 4.52mm f/2.0
Field of View	69° x 54°
Depth of Field	80mm - Infinity

Illumination	
Diffuse LED Ring Light - 4 separate zones	
Pulsed LED Illumination	
Pulsed IR Active Stereo Texture Projector	

Performance	
Spatial Accuracy	< 1 mm
Depth Accuracy	< 1 mm
Max Object Speed	500 mm/s with Universal Robots
Supported Robots	Univesal Robot UR3, UR5, UR10

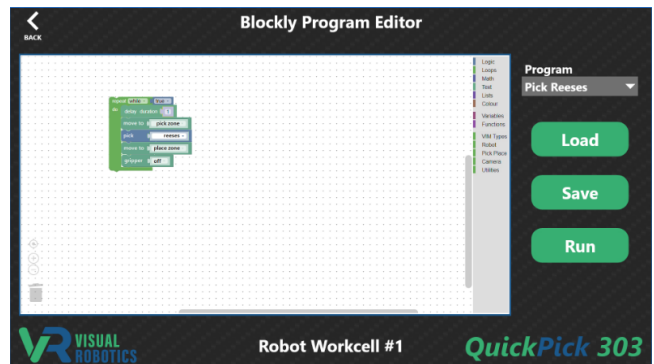
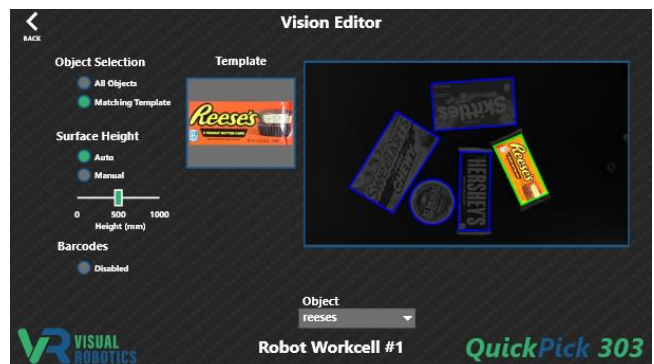
Mechanical	
Size	122.5 x 56.5 x 53.3 mm
Volume	370 cm <sup>3</sup>
Weight	500 grams
Connector	M12 Industrial Ethernet
Mounting	Rear or Tripod Mount

Electrical	
Interface	Gigabit Ethernet
Power	Power over Ethernet (PoE)
PoE Class	802.3at Type 2 Class 4
Power Consumption	< 15 Watts
Emissions	FCC Class B

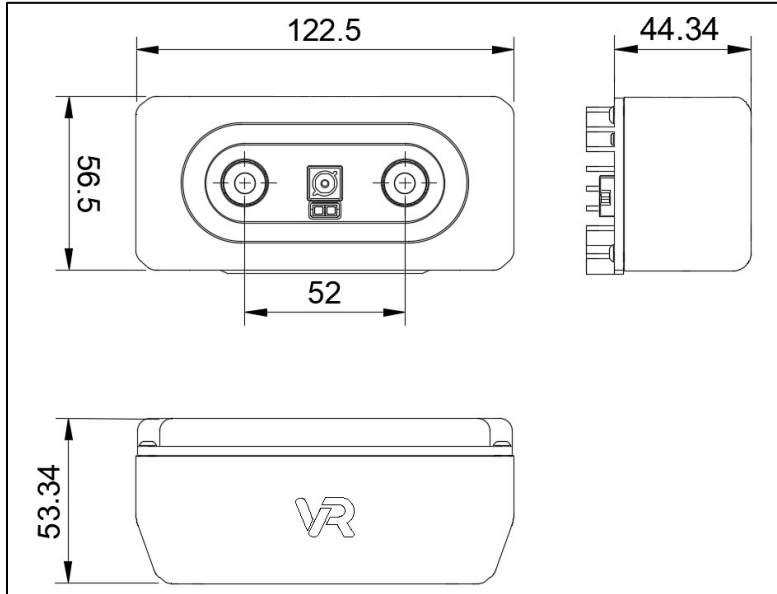
Software	
Interface	Web (http port 80)
Networking	DHCP and Static
Object Detection	Depth, Template Matching
Pick and Place	4 DOF (X, Y, Z, $\theta$ )
Programming	Blockly

## QuickPick 303

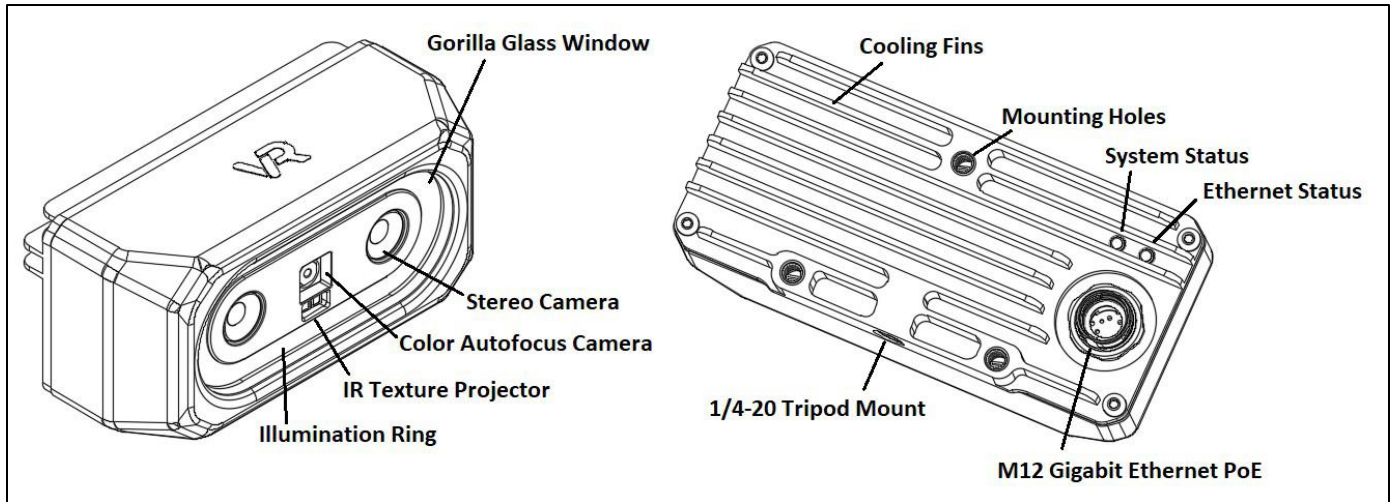
Easy to use web interface supporting operator level task selection, intuitive vision system configuration, and simple programming using Blockly.



## Dimensions



## Physical Layout



Accessories
Camera Mount for UR3, UR5, UR10
5m High Flex M12-RJ45 Gigabit Ethernet Cable
Suction Gripper Kit

5m Ethernet Cable



Camera Mount



Gripper Kit