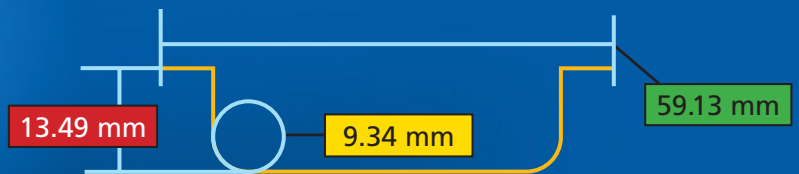




# Affordable, High Resolution Laser Profile Sensors

Easy to use CrossCheck "shape tools" measure radius/diameter, height, width, angle, and location. Master Profile Comparison provides Pass/Fail testing for contours, and makes small variations easily visible. All for less than the price of a single point laser sensor.

CrossCheck is ideal for OEMs who need a fully designed, calibrated, and environmentally sealed 3D laser machine vision solution.



## Real time shape measurements for:

**Process Control**

20.2 mm

Pultrusion  
Extrusion  
Calendering  
Roll Forming

**Part Inspection**

PASS

Forging  
Casting  
Machining  
Injection Molding

**Robotic Guidance**

Weld Seam  
Glue Bead  
Pick & Place  
Chassis Location

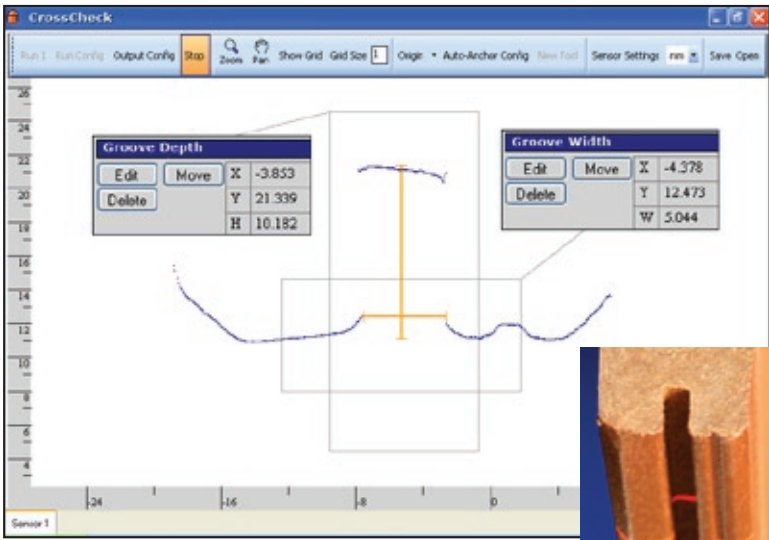
**Shape Check**

Crimp Validation  
Flush and Gap  
Embossing Depth  
Blade & Vane Rework

CrossCheck's affordability and simplicity bring profile measurement to the entire organization ...

- |             |     |                       |
|-------------|-----|-----------------------|
| R&D         | ▶▶▶ | reverse engineering   |
| Engineering | ▶▶▶ | design validation     |
| Production  | ▶▶▶ | monitor and control   |
| Quality     | ▶▶▶ | process studies       |
| Maintenance | ▶▶▶ | set up and adjustment |

**CrossCheck Software**



**Groove Width & Depth of Composite Deck Board**

**Simple, Innovative & Powerful Features:**

- ▶ Use Shape Tools to fit data to Circle, Rectangle, Vertex, Line, Gap, Bump, or Step Change.
- ▶ Output diameter, height, width, angle, and X,Y location to Screen, File, Ethernet, or Analog or Discrete I/O
- ▶ Auto-Anchor keeps Shape Tools and profile display stable, even when the part is moving from scan to scan.
- ▶ Master Profile feature compares actual profile to profile limits
- ▶ Light Tower accessory shows Pass / Fail on measurements or profile comparison.
- ▶ Graphical User Interface makes setup quick and easy, and for advanced users, the included source code allows GUI customization and direct communication with Shape Tools.

**Specifications**

Short-Range Sensors					
Model Specific		CC3100-30	CC3100-50	CC3100-75	CC3100-100
Y-Axis	Height Range	30 mm	50 mm	75 mm	100 mm
	Height Resolution	0.003 mm	0.005 mm	0.0075 mm	0.010 mm
	Height Accuracy	0.015 mm	0.025 mm	0.0375 mm	0.050 mm
X-Axis	Mid Width Range	30 mm	50 mm	75 mm	92 mm
	Near / Far Width Range	25 mm / 35 mm	42 mm / 58 mm	62.5 mm / 87.5 mm	70 mm / 116 mm
	Width Resolution	0.010 mm	0.015 mm	0.025 mm	0.030 mm
	Width Accuracy	0.030 mm	0.050 mm	0.075 mm	0.100 mm
Weight		0.40 kg (0.88 lbs.)			

Long-Range Sensors				
Model Specific		CC3250-180	CC3330-325	CC3600-250
Y-Axis	Height Range	190 mm	300 mm	300 mm
	Height Resolution	0.019 mm	0.030 mm	0.030 mm
	Height Accuracy	0.095 mm	0.150 mm	0.150 mm
X-Axis	Mid Width Range	180 mm	330 mm	250 mm
	Near / Far Width Range	145 mm / 215 mm	260 mm / 340 mm	195 mm / 305 mm
	Width Resolution	0.060 mm	0.110 mm	0.083 mm
	Width Accuracy	0.180 mm	0.330 mm	0.250 mm
Weight		1.40 kg (3.08 lbs.)		0.80 kg (1.77 lbs.)

**Standard Package Includes:**  
 CrossCheck Laser Sensor (Short or Long Range)  
 Universal Mounting Plate  
 CrossCheck Industrial Sensor Controller  
 CrossCheck Software (Preinstalled)  
 Keyboard, Mouse and Cable  
*Note: Monitor is not included.*

**Optional Accessories**  
 Several accessories are available online.

*Go online for complete specifications on all components.*

General Specifications							
All Models							
Environment	Laser Class	685nm, 3R	Operating Humidity	5 ... 95 (no condensation)	Controller	Controller Power	18VDC to 28VDC (phoenix power plug) External AC Adapter: 90VAC to 264VAC, 47-63 Hz
	Profile Rate	30 fps	Shock (IEC 68-2-29)	15 g / 6ms		Controller to Sensor Interface	1394b (Firewire)
	Thermal Stability	< .03% / °C	Vibration (IEC 68-2-6)	5 g, 58...150 Hz		Host Connectivity	Gigabit Ethernet [Text via TCP/IP (Telnet)]
	Operating Temperature	5 - 45 °C	Enclosure Rating	IP-64		Weight	6 kg (13.22 lbs.)



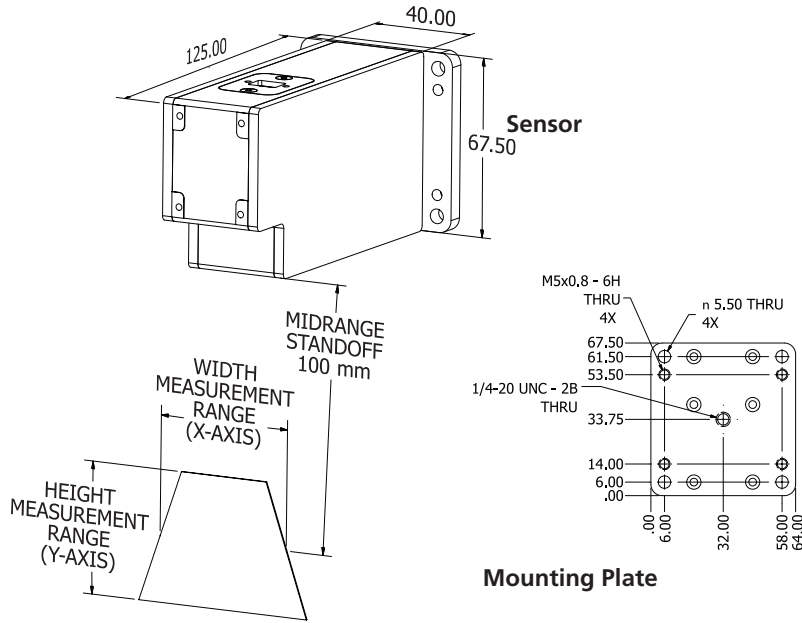
**Manufacturer**  
 www.BytewiseSensors.com  
 sensors@bytewise.com

**Contact**  
 Mike Snow, Product Manager  
 sensors@bytewise.com  
 678-807-8400

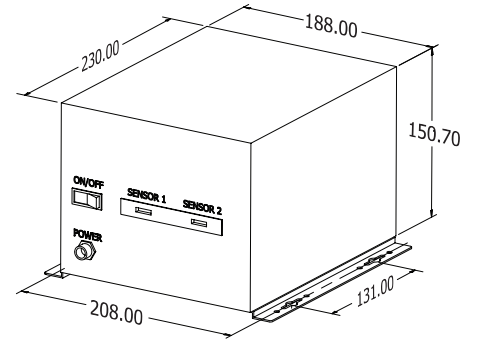
## Component Dimensions

See table on page 2 for detailed specifications.

### All Short-Range Sensors



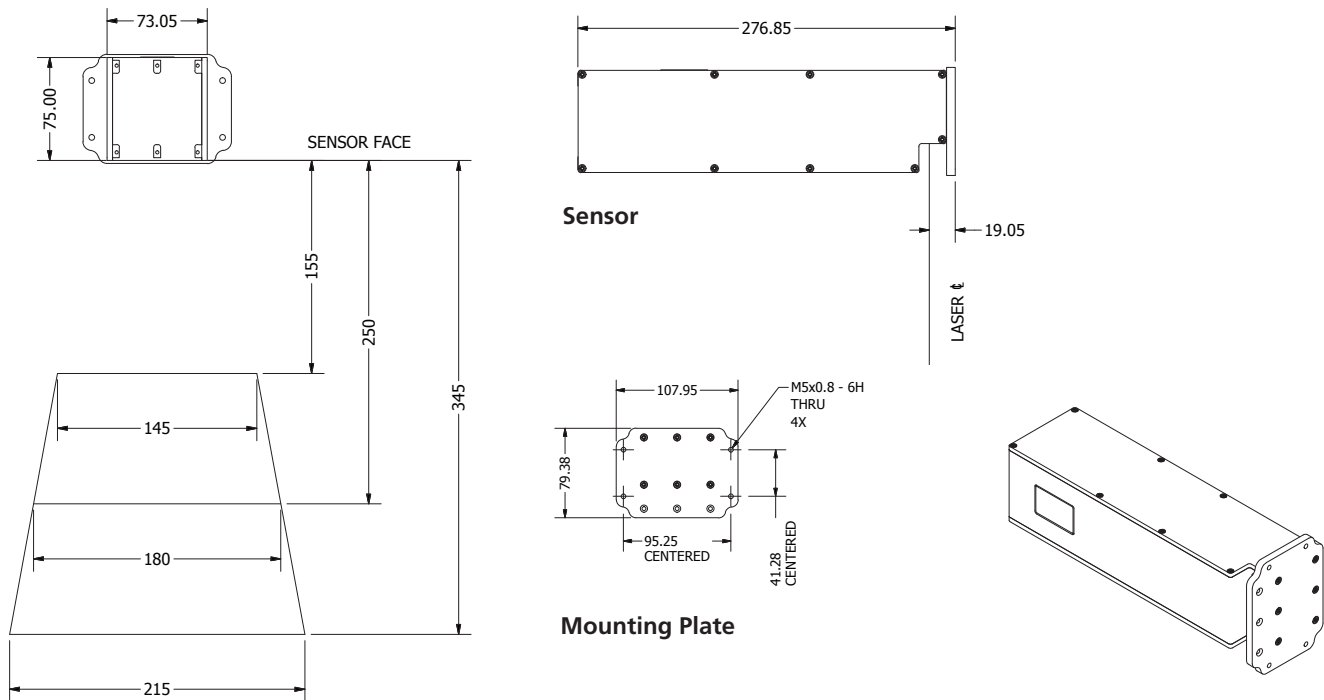
### Controller



### Controller

Same for short and long range sensors

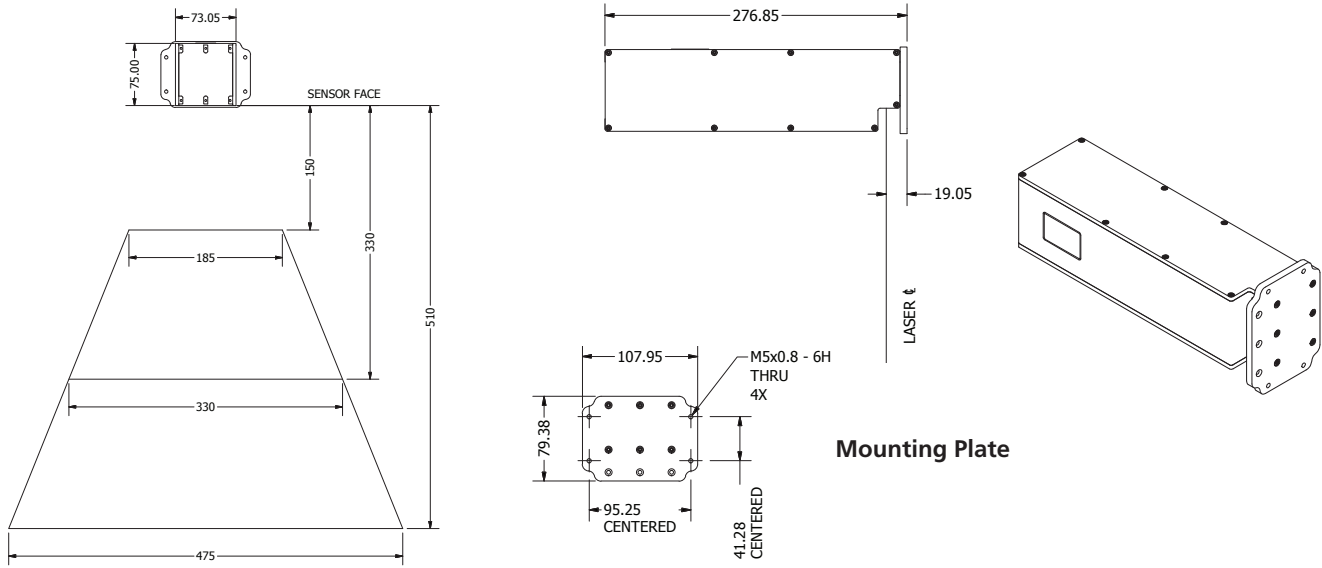
### CC3250-180 Long-Range Sensor



## Component Dimensions

See table on page 2 for detailed specifications.

### CC3330-325 Long-Range Sensor



### CC3600-250 Long-Range Sensor

