

Helix_{evo}

Built for the Plant Floor

Perceptron's Helix_{evo} sensor produces pristine point clouds on the multitude of materials used in today's manufacturing. Best-in-class scan acquisition provides accurate feature extraction along with the scan quality required for form analysis. Whether the root cause of your quality challenge comes from your assembly process or stamping process, Helix_{evo} provides real-time data you need for quick resolution.



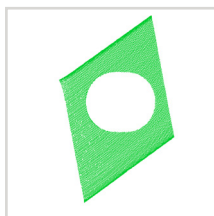
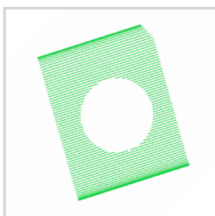
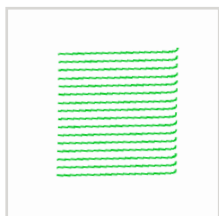
3D Scanning Sensor Optimized for In-Line Measurement

The Helix_{evo} sensor family utilizes the latest optical and laser technologies to provide pristine measurement data on the most demanding materials, such as machined steel, aluminum, carbon fiber, sheet metal, and painted surfaces. With its IP67 rating (dust tight, immune to temporary water immersion), the rugged sensor housing offers reliable protection against the adverse conditions of an industrial production line.

Helix_{evo} is built for the plant floor.

Key features and benefits:

- By pairing a high resolution camera with a green laser, Perceptron has achieved an unparalleled signal-to-noise ratio for its Helix_{evo} sensor family that is superior to other sensors on the market. The very thin laser line enables reliable measurement of threaded holes, studs, hemmed edges, and other complex features.
- Available in multiple standoffs, 200mm to 1400mm, for application and layout flexibility.
- Robot or structure mounting options to fit cycle time and measurement requirements.
- Single cable connectivity via Power over Ethernet (PoE) simplifies robot dress package setup and system maintenance.
- Optimized acquisition speed and ability to capture multiple features from one position.
- Large working volumes to handle to handle part positioning variation.
- Factory calibrated and rectified so each sensor arrives ready to measure.



Sensor Specifications

Sensor Type	Depth of Field (mm)	Field of View at Standoff (mm)		Length (mm)	Weight (kg)
		X	Y		
X200	175	150	140	170	1.73
X300	300	195	201	216	2.00
X400	225	200	200	245	2.18
X800	225	220	180	407	3.19
X1100	225	210	175	528	3.95
X1400	225	210	165	649	4.73

Operating Temp.
Communications
Laser

10 - 45 °C
PoE Class 4
Green
520nm wavelength

Safety

Class 2M or 3R
IEC 60825-1:2014

Certification
Protection

CE
IP67

Visit www.perceptron.com for more information about Perceptron, our product portfolio and our sensor technology.

Perceptron | Rev. E