

Mini ConoPoint-9R

Laser displacement sensor

The Mini ConoPoint-9R is one of Optimet's new generation of point sensors for reflective and specular surfaces. Endowed with an especially small footprint and low weight, it's the optimal sensor for True profile measurement and 3D scanning of specular and transparent materials with up to 9,000 Hz. It's perfect for in-process QC inspection and glass scratch analysis.

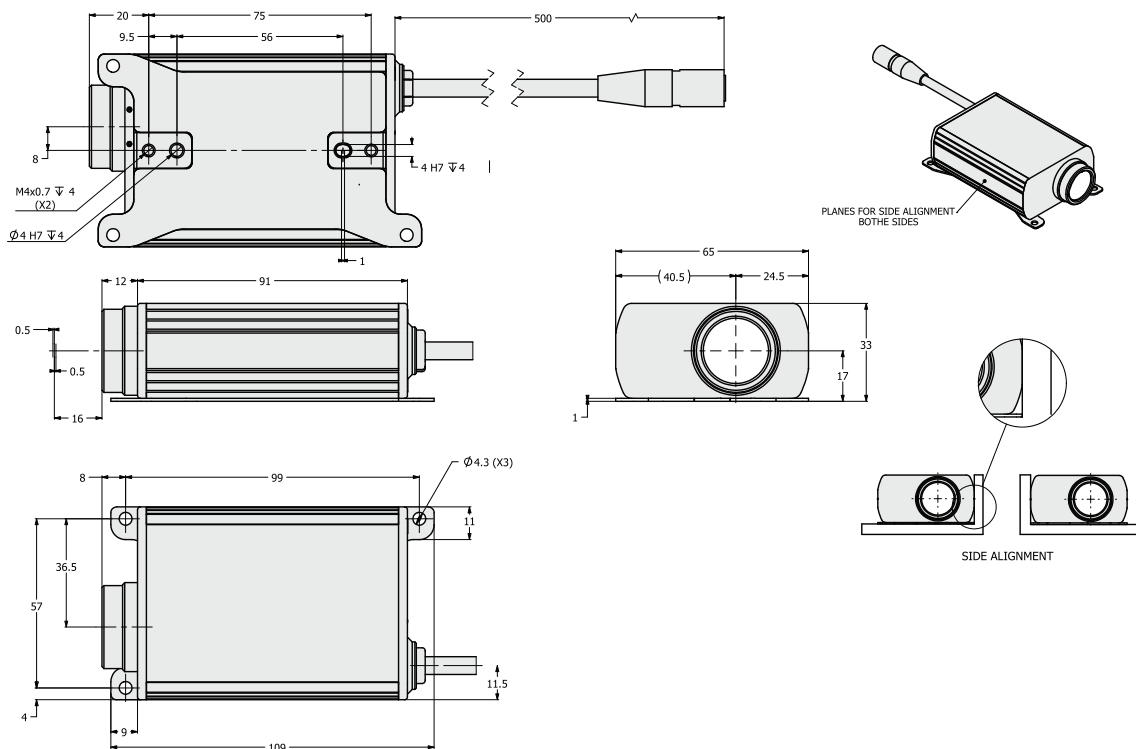
The Mini ConoPoint-9R can measure glass thickness and transparent coating layers by simultaneous reading of both top and bottom surface reflections.

The control unit is separated from the sensor which enables placing the small sensor at the most convenient location and on light weight CMM machinery



Features:

- Low weight and small footprint
- High precision and repeatability below 1µm
- True measurement rate of up to 9,000 point/second, with no averaging needed
- Built-in quality parameters allow efficient filtering
- Small spot size less than 3µm
- Objective 25mm lens
- Easy setup, user friendly software controls sensors parameters and range indicators



Technical specification

Objective lens type		25
P/N		3Z79025
Measurement range ⁽¹⁾	mm	1
Standoff ⁽²⁾	mm	16
Accuracy ⁽³⁾	µm	0.6
Linearity ⁽⁴⁾	±%	0.06
X laser spot size ⁽⁷⁾	µm	3
Angular coverage ⁽⁸⁾	°	6

Sensor general specifications

Measurement frequency	Hz	9,000
Dimensions (L x W x H)	mm	91 x 65 x 33
Weight	gr	390
Cable length (sensor to controller)	m	Pigtailed 0.5m, optional 5/20m
Indicators	Green LED – On when sensor's power is on	
Conformity	Vibration (IEC 600068-2-6), Shock(IEC 600068-2-7)	

Light source

Type	Red laser	
Laser safety class	Class 2, IEC 60825-1:2007 complies with 21CFR 1040.10 and 1040.11 Laser Notice No.50	

Environmental resistance

Operational temperature	°C	18 to 35
Temperature dependency ⁽¹⁰⁾	F.S./°C	≤0.03%
Permissible ambient light ⁽¹¹⁾	lx	Up to 15,000

Control unit general specifications

Dimensions (L x W x H)	mm	105 x 167 x 54
Weight	gr	630
Control signal	ROG – output, External trigger – input, Analog output (optional) ±4.5 V, OPS (Position Synchronization), +5V output (100mA)	
Operating voltage	V	24 ±10% (0.5A)
Indicators	Connect: Green LED – On when sensor head connected; Power : Green LED – On when power is on	
Communication	Ethernet 10/100 UDP	
Software development kit	C, C++, C#, Labview	