

RAIO SAMPLE TECHNICAL DATASHEET

GUIDANCE

Degrees of Freedom	2.5D (x y Rz) 3.5D (x y z Rz) - optional 6 DOF (x y z Rx Ry Rz) - optional
Volume of View (VOV) - $\delta x \delta y \delta z$ (Lens, standoff and illumination dependent)	8'x4'x2' down to 2"x2"x1"
Resolution* x	+/- 1 mm @ 8'x4'x2' VOV +/- 0.1 mm @2"x2"x1"
Resolution* y	+/- 1 mm @ 8'x4'x2' VOV +/- 0.1 mm @2"x2"x1"
Resolution* z	+/- 1 mm @ 8'x4'x2' VOV +/- 0.1 mm @2"x2"x1"
Resolution* Rx	+/- 0.2 degrees
Resolution* Ry	+/- 0.2 degrees
Resolution* Rz	+/- 0.1 degrees
Calibration	NOT NEEDED
Max number of Objects to teach	99
Emulation mode	Yes
Illumination Control	Yes
Object Frame to Robot Frame Correlation	Automatic
Focus	Active Feedback

LOGGING & GRAPH

Image Logging	Yes
Data Logging	Yes
Communication History	Yes
Data Graph	Yes
User Log Book	Yes

ROBOT COMMUNICATION

TCP/IP

RAIO SAMPLE TECHNICAL DATASHEET

ROBOT BUILT-IN DRIVER

Comau - Kawasaki - ABB - Fanuc - Kuka - Motoman - Nachi

ACCESS

Using laptop with Sensor Finder Software or Remote Desktop

Direct using monitor, mouse & keyboard (not for robot mounted applications)

MECHANICAL

Dimension	68.5 mm x 127 mm x 65.5 mm
Tube Dimension	Variable depending on Lens
IP rating	IP67
Ethernet Connection	8 pin M12 A Code
Power Connector	4 pin via adaptor or 19 pin
C-Mount Lens	

ILLUMINATION

High intensity IR ring light	Powered by the RAIO unit
High intensity bar lights	Relayed via digital output D0 to D3
M12 Connection	

ENVIRONMENTAL & ELECTRICAL

Input voltage	24V
Power consumption	13 W
Operating temperature	0° to 50° C
Vibration	Operating, 5 Grms, 5-500 Hz, 3 axes
Certification	IP67 SENSOR With Lens Cover and CAPS. Lights IP Rating may vary depending on type and model.

* Assumes rigid and repeatable object

** Laptop not included