

Compact Industrial Sensor

HSC50yn

Some applications for an Industrial Sensor require a smaller footprint, a lighter weight or two output beams. These capabilities are met by the HSC50yn, which capitalizes on the new single fiber lighter weight umbilical, and a more compact design, to allow robot mounting. With proper attention to the configuration it can be used to inspect two points on the same object. In the case of small diameter tubing, this can even be used to measure 4 orthogonal points at the same time.

APPLICATIONS

- **Industrial process control:** commercial roofing; foam density; paint thickness; plastic extrusion; asphalt shingles
- **Nondestructive materials inspection:** aircraft; packaged goods; radome inspection; spacecraft; pipeline repairs
- **Converting applications:** paper coating; multilayer films; tire ply calendering
- $Y=4$ for 75mm lens and 5 for 150mm lens, $n=1$ for a Type 1 (HP) transmitter and 2 for a Type 2 (GP) transmitter.



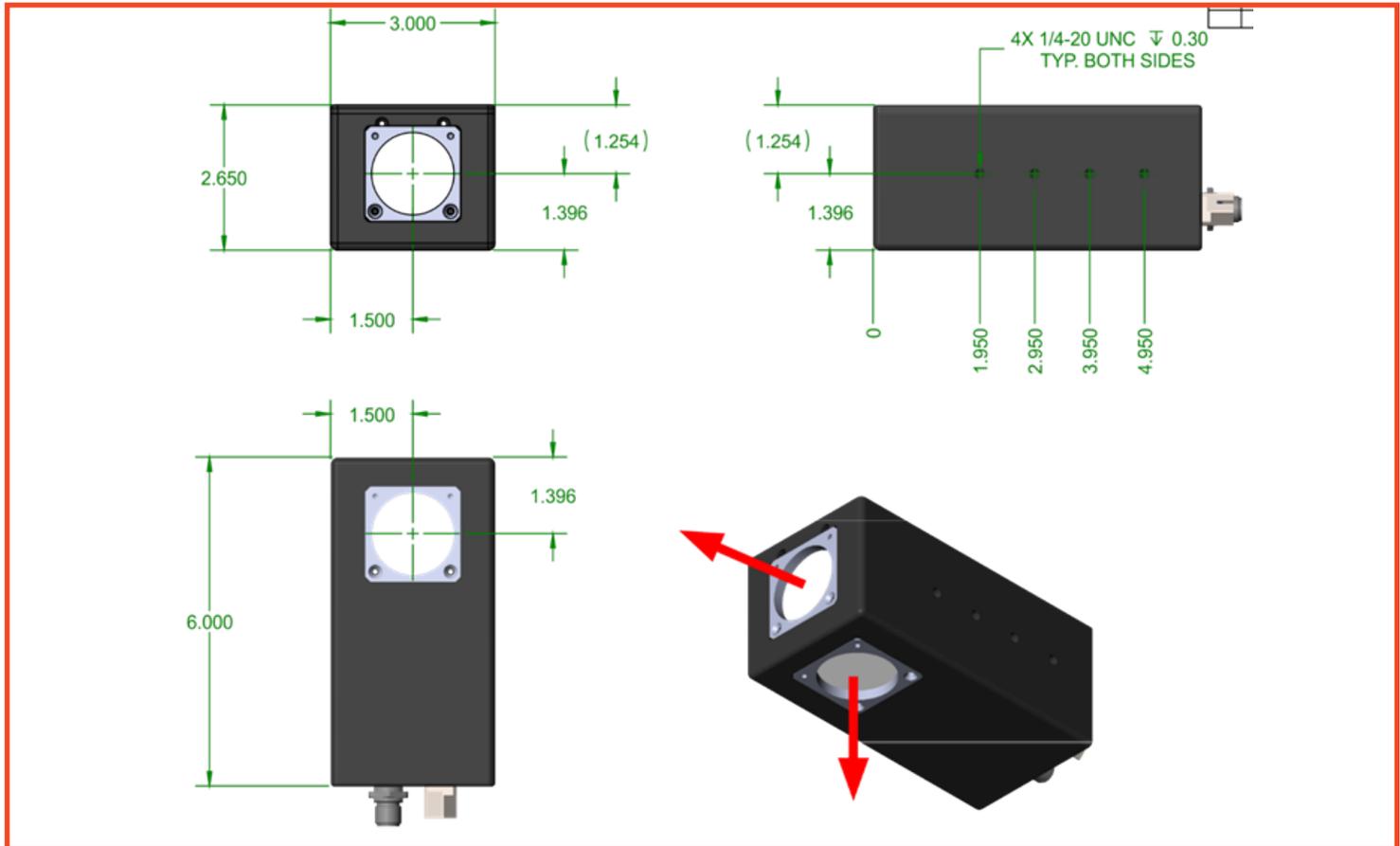
KEY FEATURES

- **Collinear Design**
- **Two Measurement Ports** (0° and 90°)
- **Potential** to use both ports at once
- **Fiber coupled** for ease of movement
- **Compact design allows** for ease of movement to confined locations
- **External connections** for ease of use
- **Single fiber umbilical** simplifies connection
- **Multiple** lenses available
- **Robust** mechanical design

BENEFITS

- **No need** for separate transmitter and receiver
- **Simple** orientation to target
- **Inexpensive** to replace if damaged
- **Extended** lifetime
- **Replace** multiple sensors
- **Compatible** with various motion options
- **Long umbilical life** in scanner or robot
- **Improve product quality** by optimizing production
- **Tolerant** to dirt and dust in the factory

Parameter	Specification	Units	Comments
Polarization Extinction Ratio	> 20:1		Horizontal
Available Lens Focal Length	25, 75, 150, coll.	mm	
Beam Diameter	40	mm	
Mounting Hardware	1/4 - 20		Threaded mounting holes
Operating Temperature Range	0 - 50	°C	20 - 90% RH non-condensing
Size (W x H x D)	76 x 67 x 152	mm	
Weight	1.1	kg	



ORDERING INFORMATION

Included

- Two HDPE lenses in mounts for each port (25, 75, or 150mm focal length)
- Blank cover for an unused port

Typical Configuration

- Terahertz Controller
- Umbilical (5, 10, or 30 m)
- T-Ray[®] Basic and T-Gauge[®] Software

Industry Leading Regulatory Compliance

The T-Ray[®] 5000 intelligent TCU has been certified by Underwriters Laboratories and has received the CE mark, is fully compliant with FDA CDRH laser safety regulations, and has been tested to meet FCC part 18 regulations.



2725 S. Industrial Highway, Suite 100

Ann Arbor, MI 48104

Phone: 734.926.4370

Email: terahertzsales@lunainc.com