

INNOVIZPRO

High-Performance Solid-State LiDAR
SOP

Available Now



InnovizPro offers outstanding performance and value for automotive, mapping, and other applications. It creates a dense 3D point cloud that enables exceptional perception.

InnovizPro offers high pixel density with uniform vertical field of view with no gaps, to detect targets from 20cm to an outstanding 600 meters maximum range! The sensor's advanced design ensures reliability and resilience to sunlight and weather conditions.

KEY PERFORMANCE METRICS

0.2°x0.45°
Angular Resolution (HxV)

20cm to 600m
Detection Range

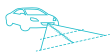
73°x20°
Field of View (HxV)

10 FPS
Frame Rate

IP67
Ingress Protection

73x66x165mm
Dimensions (HxWxD)

UNIQUE FEATURES



Superior detection at extremely close and long distances



No Gaps Between Pixels



Equally Distributed vFOV



Resilient to Sunlight & Weather Conditions

MARKET APPLICATIONS



Shuttles



Smart Cities



Mapping



UAVs



Security



Industrial

OPTICAL PERFORMANCE

		@10% reflectivity	@50% reflectivity
Range	100klux	60m	100m
	15klux	80m	145m
Minimum range*		0.2m	
Maximum range		600m	
Range accuracy**		3cm @1 σ distribution, <5cm bias	
Field of view		73°x20° (HxV)	
Angular resolution		0.2°x0.45° (HxV)	
Frame rate		10 FPS	
Reflection preference		Strongest, first or last	

LASER

Laser product class	Class 1, Eye-safe (IEC-60825-1)
Wavelength	905nm

OUTPUT

Points returned per second	178k
Connection	100BASE-T / 1000BASE-T Ethernet
Outputs (UDP)	Per reflection: Distance, Ambient IR, Confidence, Reflectivity Per frame: Blockage map
Time stamp	1 μ sec resolution, GPS synchronized

CONTROL INTERFACE

Command and control	TCP/IP
Time synchronization	PPS plus \$GPRMC message inputs through dedicated connector pins
UDP routing protocols	Broadcast, Unicast or Multicast
Features	Web Server for cross-platform control and monitoring
	InnovizPlayer point cloud viewer, recording and playback tool
	Windows, Linux, ROS and Python drivers; Upgradeable device software

MECHANICAL / ELECTRICAL

Power consumption	38W (maximum), 35W (nominal)
Operating voltage	9-32V (regulated)
Dimensions (HxWxD)	73x66x165mm
Weight	950g
Mounting	4 threaded mounting holes, 2 alignment pins

OPERATIONAL

Temperature	Operating: -20°C-55°C (4°F-131°F)	Storage: -40°C-85°C (-40°F-185°F)
Ingress protection	IP67	
Shock and vibration	300m/s ² , 6ms, half-sine, 3,000 shocks/axis; 500m/s ² , 6ms, half-sine, 10 shocks/axis	
Certifications	FCC, CE, KCC, CCC (exempt), DENAN/PSE, RoHS, WEEE, REACH	
Data connector	HDMI	
Power connector	Male M8 (4-position, A-coding)	
Indication LED	3 colors	
Interface box	HDMI, RJ45 (Ethernet), USB Type-C (to power a GPS device), DB15 (PPS, \$GPRMC, and sync)	

Specifications subject to change without notice

* At room temperature for 50% reflectivity target

** At room temperature for 50% reflectivity target at 50m distance