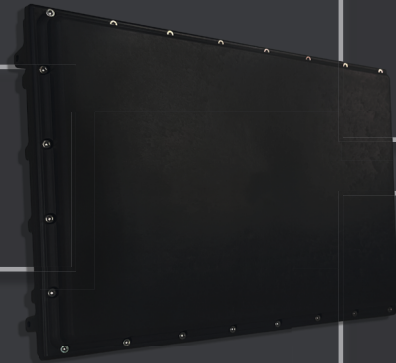


TRUGRD[®] Premium Line

TRUGRD[®]

3D/UHD+ SENSOR
Range of up to 300m | 984ft



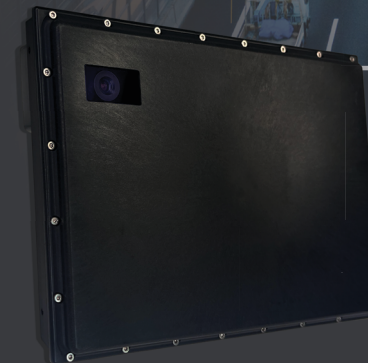
TRUGRD[®] LITE

3D/UHD+ SENSOR
Range of up to 122m | 400ft

TRUGRD[®] LR

3D/UHD+ SENSOR
Range of up to 500m | 1640ft

Traffic Management Sensors



TRUGRD[®] STREAM

3D/UHD+ SENSOR
combined with video

OPTIMIZING TRAFFIC FLOW

- ✓ 3D/UHD+ resolution
- ✓ Fail-safe features
- ✓ Multi-lane, multi-object detection
- ✓ Detects moving and stopped traffic
- ✓ Reliable tracking of pedestrians and cyclists (VRUs)
- ✓ Works in all weather conditions

RECOMMENDED FOR:



SMART CITIES



INTERSECTION MANAGEMENT



HIGHWAY MANAGEMENT



STATIONARY ENFORCEMENT



BRIDGE MONITORING



RED-LIGHT ENFORCEMENT



TUNNEL MONITORING

	TRUGRD [®]	TRUGRD [®] Stream	TRUGRD [®] LR	TRUGRD [®] Lite
CAMERA MODULE		Color camera with IR cut filter and supreme low light performance		
Resolution, Frame Rate		1920 x 1080 px, up to 30 fps		
Video Codec		H.265, H.264, MJPEG		

PERFORMANCE

Operating Frequency ¹	24.0 ... 24.25 GHz	24.0...24.25 GHz	24.0...24.25 GHz
Resolution	3D measurement with UHD+ resolution	3D measurement with UHD+ resolution	3D measurement with UHD+ resolution
Detection Range Pedestrian	125 m 410 ft	229 m 751 ft	90 m 295 ft
Detection Range Passenger Car	260 m 853 ft	500 m 1640 ft	122 m 400 ft
Detection Range min ... max	1.5 ... 300 m 4.9 ... 984 ft	3 m...510 m 10 ft...1673 ft	122 m 400 ft
Range Separation	2 m 6.6 ft	4.8 m 15.74 ft	2 m 6.6 ft
Range Accuracy	± 0.25 m ± 0.82 ft	± 0.5 m ± 1.64 ft	±0.25 m ±0.82 ft
Speed min ... max	-320 ... +320 km/h -199 ... +199 mph	-210...+210 km/h -130...+130 mph	-210...+210 km/h -134...+134 mph
Speed Separation	0.23 m/s	0.24 m/s	0.23 m/s
Speed Accuracy	< ± 0.1 m/s	< ± 0.1 m/s	< ±0.1m/s
Number of Lanes	Up to 12 lanes	Up to 8 lanes	Up to 6 lanes
Field of View Azimuth	-55° ... +55°	-20...+20°	-55...+55°
Field of View Elevation	-10° ... +10°	-9...+9°	-10...+10°
Angle Separation Azimuth	< 6°	< 2.5°	< 6°
Angle Accuracy Azimuth	< 0.5°	< 0.25°	< 0.5°

MECHANICAL

Weight	1290 g 45.5 oz	1575 g 55.5 oz	1290 g 45.5 oz	1290 g 45.5 oz
Dimensions	213 x 155 x 32 mm 8.4 x 6.1 x 1.3 in + connector	213 x 155 x 32 mm 8.4 x 6.1 x 1.3 in + camera module	213 x 155 x 32 mm 8.4 x 6.1 x 1.3 in + connector	213 x 155 x 32 mm 8.4 x 6.1 x 1.3 in + connector

GENERAL

Update Cycle Time	50 ² ms	50 ² ms	100 ms	100 ms
Operating Voltage / Power Consumption	7 ... 32 V / 9.5 W	7 ... 32 V / 11 W	7...32V / 9.5 W	7...32V / 9.5 W
Operating Temperature	-40 ... +80°C or -40 ... +176°F	-40 ... +74°C or -40 ... +165°F	-40...+80°C -40...+176°F	-40...+80°C -40...+176°F
Interfaces	RS485 full duplex; Ethernet 10/100; 1x CAN V2.0b (passive)	Ethernet ³	RS485 full duplex; Ethernet 10/100; 1xCAN V2.0b (passive)	RS485 full duplex; Ethernet 10/100; 1xCAN V2.0b (passive)
Connector	Hirose LF10 series	Hirose LF10 series	Hirose LF10 series	Hirose LF10 series
IP	67	67	67	67

¹ In certain regions, frequency intervall starts at 24.05 GHz.

² Depending on the application - Speed Enforcement 50 ms; Intersection and Highway Management 100 ms.

³ Necessary for video output.

