



LOGIPIX MULTILANE 3D RADAR

The Logipix Multilane 3D Radar accurately measures the speed of several vehicles in multiple lanes. The device works together with the Logipix ONE cameras and the LNVR that runs the VCA application. The radar provides telegrams. Each of them stores the information up to seven vehicles at once that have different IDs. These telegrams are stored in each related image header. The IDs in the telegrams are matched with the VCA recognized objects in the image.

Monopulse, Fast FMCW, multilane 3D radar with sensor fused 20 MP image sensor.

KEY FEATURES

- Monopulse, Fast FMCW
- multilane 3D Radar
- Sensor fused with 20 MP image sensor
- Speed measurement up to 150 km/h
- Synchronized operation with Logipix ONE cameras
- IP67

SPECIFICATIONS

TECHNICAL SPECIFICATION

Part number	LPIX-RAD-01-F01
Description	Logipix monopulse, multilane 3D radar
Application	Logipix Traffic System
Transmit frequency	24.000 - 24.250GHz
Maximum transmit power	20 dBm (EIRP)
FCC and ETSI	300 / 440 compliant
Antenna beam horizontal	70° (+/- 35°) (typical)
Antenna beam vertical	11° (+/- 5.5°) (typical)
Readout period	24 ms
Modulation	FMCW
Length accuracy	0.5 m
Speed accuracy	0.5%
Velocity range	- 86 to + 86 m/s
Minimum absolute radial speed (Doppler radial motion detection limit)	0.1 m/s
Sensor fusion	Yes, LPIX20-ONE-DNI-0X camera

TECHNICAL SPECIFICATION

Part number	LPIX-RAD-01-F02
Description	Logipix monopulse, Fast FMCW, multilane 3D radar
Application	Logipix Traffic System
Transmit frequency	76-77 GHz
Maximum transmit peak power	26 dBm (EIRP)
FCC and ETSI	300 / 440 compliant
Antenna beam horizontal	70° (+/- 35°) (typical)
Antenna beam vertical	11° (+/- 5.5°) (typical)
Readout period	50 ms
Modulation	FMCW
Length accuracy	+/- 0.25 m
Speed accuracy	3 km/h up to 100 km/h; 3% above 100 km/h
Velocity range	- 41 to + 41 m/s
Minimum absolute radial speed (Doppler radial motion detection limit)	0.1 m/s
Sensor fusion	Yes, LPIX20-ONE-DNI-0X camera

ELECTRICAL AND ENVIRONMENTAL SPECIFICATION

Supply voltage	5 V powered from Logipix camera USB
Power Consumption	2 W
Interface	5 V USB 2.0
Operating temperature	- 20 °C to + 60 °C (- 4 °F to + 140 °F)
Storage temperature	- 30 °C to + 100 °C (- 22 °F to + 212 °F)
Degree of protection	IP67

MECHANICAL SPECIFICATION

Mounting	4x M4 holes at the back side
	82 x 82 mm in square
Dimension (lwh)	105 x 105 x 42 mm

RELATED COMPONENTS**Logipix cameras**

Part number	Description
LPIX20-ONE-DNI-XX	Logipix One 20 Megapixel, 1" IP camera with ABF and 3 optical filters D/N/IR
LPIX14-ONE-DNI-XX	Logipix One 14 Megapixel, 1" WDR IP camera with ABF and 3 optical filters D/N/IR

Logipix NVR

Part number	Description
LNVR4-1-1-O-02	Logipix Outdoor NVR for 1 pc of Logipix ONE camera
LNVR4-2-2-O-02	Logipix Outdoor NVR for 2 pcs of Logipix ONE cameras
LNVR4-4-4-O-02	Logipix Outdoor NVR for 4 pcs of Logipix ONE cameras

Logipix IR Flash

Part number	Description
LPIX-IR-F-01	Logipix Varifocal 100W IR Flash for LPIX20-ONE-DNI-01
LPIX-LR-F-02	Logipix IR Laser flash, varifocal, 500W pulsed, 5W thermal in IP65 metal case with Wiper and Washer

Software

Part number	Description
SDB08-CC+	Logipix Control Center Professional
SDB08-CCU	Logipix Control Center Ultimate
VMC-01	Traffic Violation Management Client

APPLICATION AREAS

Logipix Multilane 3D Radar is the essential device for speeding detection in the Logipix Traffic Violation Management and Safe and Smart City solutions.

- **Traffic Violation Management solution**
- **Safe and Smart City solution**