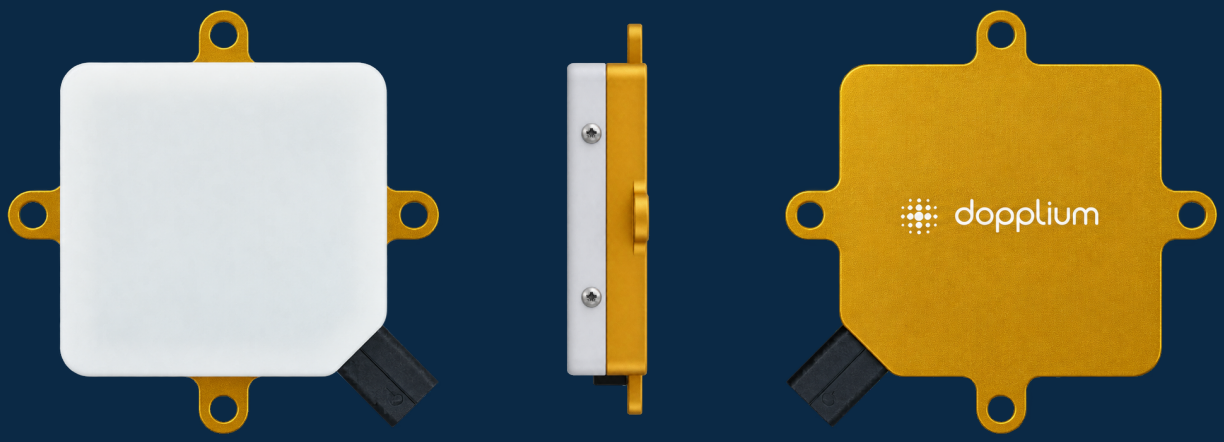
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PRODUCT DATASHEET

Dopplium Claro

77 GHz 4D radar platform



200 m	75 m	±70° × ±15°	4 TX / 4 RX
CAR DETECTION RANGE	PEOPLE DETECTION RANGE	FoV AZIMUTH × ELEVATION	TRANSMIT / RECEIVE

76-81 GHz FMCW MIMO radar | Automotive Ethernet, standard Ethernet with PoE from Q1 2027 | 12 V input

FROM DATA COLLECTION TO PERCEPTION

One compact sensor for radar development, prototyping and sensor fusion.

Built on the NXP SAF8544 radar SoC, Dopplium Claro combines a 4 TX / 4 RX transceiver with integrated patch antennas. Stream ADC samples, range-Doppler maps or point clouds over Automotive Ethernet, from calibration and signal processing through tracking and fusion.

NXP SAF8544 inside

4 TX / 4 RX with integrated patch antennas in a compact enclosed sensor.

Configurable data outputs

Choose ADC samples, range-Doppler maps or point clouds for your workflow.

Automotive Ethernet

High-throughput logging and real-time experiments, with a 12 V input.

Scalable prototypes

Build single-sensor prototypes or multi-sensor test setups.

MULTI-PLATFORM INTEGRATION

Boats | Cars | Drones | Industrial machines

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NXP Registered Partner

Performance and integration

RADAR PERFORMANCE

Technology
mmWave FMCW MIMO radar

Radar SoC
NXP SAF8544

Frequency band
76-81 GHz

Transceiver
4 TX / 4 RX; up to 4 × 4 MIMO

Spatial channels
12 azimuth; 4 elevation

Field of view
±70° azimuth × ±15° elevation

Detection ranges
200 m cars / 75 m people

HARDWARE AND INTEGRATION

Data outputs
ADC data / range-Doppler maps / point clouds

Interface
Automotive Ethernet; Ethernet with PoE (Q1 2027)

Input voltage
12 V

Enclosure dimensions
60 × 60 × 35 mm

Internal board footprint
50 × 50 mm

Antennas
Integrated patch antennas

Evaluation kit
Enclosed sensor

Software Defined Radar

Access ADC samples for calibration, range-Doppler maps for detection research, or on-chip point clouds for tracking and fusion. Advanced processing is available on request.

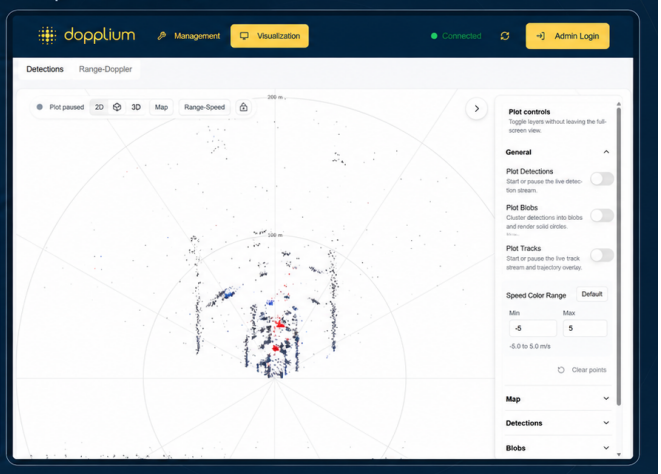
Range-Doppler maps

Range and radial velocity



Point clouds

Spatial detections



Designed & built in Europe

Radar hardware, firmware and software developed in-house in Delft, the Netherlands.

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