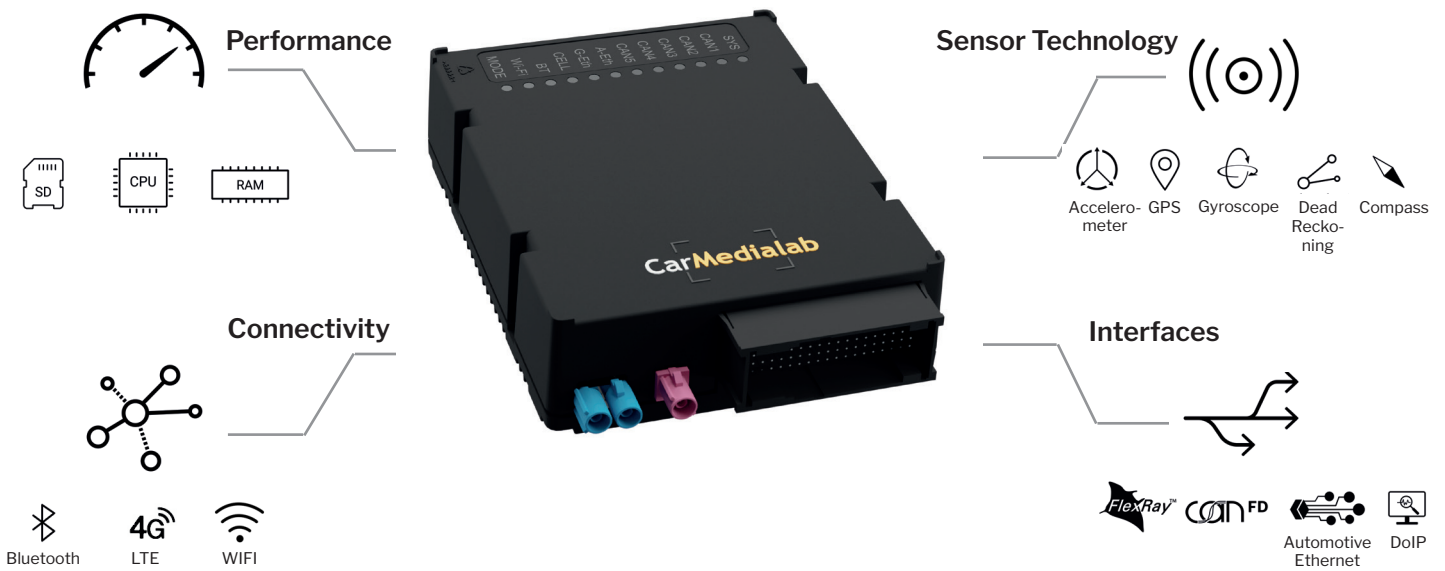


Flea 4

Platform for Automotive Engineering

The Flea 4 is an advanced and progressively devised telematics platform with excellent performance, designed to meet the latest increasingly demanding requirements. With its up-to-date interfaces, more efficient communication and more extensive sensor technology, the Flea 4 offers a broad basis for new and exciting use cases.

Flea 4 develops and expands the familiar functionality of the successful Flea 3 platform: diagnostics, measuring and statistics.



USE CASES

PREPARING NEW
TELEMATICS OPTIONS

QUALITY ASSURANCE

TEST VEHICLE PROTOCOL

CUSTOMER BEHAVIOR
ANALYSIS

AUTOMATED
DEVELOPMENT
DOCUMENTATION

Flea 4

Platform for Automotive Engineering

		Flea 4	Flea 4+
System	Processor	2 ARM Cortex-A 53 at 1.2 GHz (64 Bit)	4 ARM Cortex-A53 at 1.2 GHz (64 Bit) 2 ARM Cortex-R5 at 500 MHz
	RAM	1 GB LPDDR4 RAM	
	System Memory	4 GB eMMC 4 ... 32 GB, Internal Micro SD (optional) 16 MB NOR	
	Sensors	3 D Gyroscope 3 D Accelerometer 3 D Magnetometer (Compass)	
	OS	Embedded Linux (Yocto Based)	
	Power Supply	12 / 24 V	
	Operating Temperature	-40°C ... +85°C	
	Dimensions	152 mm x 107 mm x 36 mm incl. Main Connector	
	Wakeup Options	Ignition, CAN (Activity), RTC, Modem Ring	
	Connectivity	Cellular	LTE CAT4 (150 MBit / s ↓ 50 / Mbit / s ↑) EMEA Region Bands 1, 3, 5, 7, 8, 20 HSDPA Category 24, HSUPA Category 6 MIMO 2 x 2 / RX Diversity 3G / 2G, Quadband Fallback
WI-FI (optional)		802.11 a / b / g / n (2.4 / 5 GHz)	
Ethernet		10 / 100 / 1000BASE-TX	
Bluetooth		BT / BLE 4.2	
Interfaces		CAN	5 x CAN-FD
	Automotive Ethernet	1 x Automotive Ethernet (100BASE-T1)	
	DolP	1 x DolP ISO 13400 (10 BASE-TX)	
	FlexRay (optional)	1 x FlexRay A / B Channels	
Positioning	GPS / QZSS	72-Channel with Dead Reckoning and Internal Sensors GPS, GLONASS, BeiDou, Galileo Position Accuracy 2.5 m CEP with SBAS 1.5 m CEP Frequency of Time 0.25 Hz ... 10 MHz Number on Concurrent GNSS: 3	
Connectors	ELO-54	5 x CAN-FD 1 x Automotive Ethernet (100BASE-T1) 1 x DolP ISO 13400 (100BASE-TX) 1 x FlexRay A / B Channels 3 x Analog Input (0-60 V) 2 x Digital Output (Open Drain) 1 x Digital Output (High Side Switch) 1 x I2C 2 x RS232	
	USB	USB-C 2.0 (Host or Client / OTG)	
	Antenna	2 x 2G / 3G / 4G Antenna Fakra 1 x GPS Antenna Fakra	
	Power Supply	Overvoltage Protection	36 V
	Standby	< 0.5 mA @ 12 V	
	Hibernation (Warm Start)	< 10 mA @ 12 V	
	Working	< 500 mA @ 12 V	