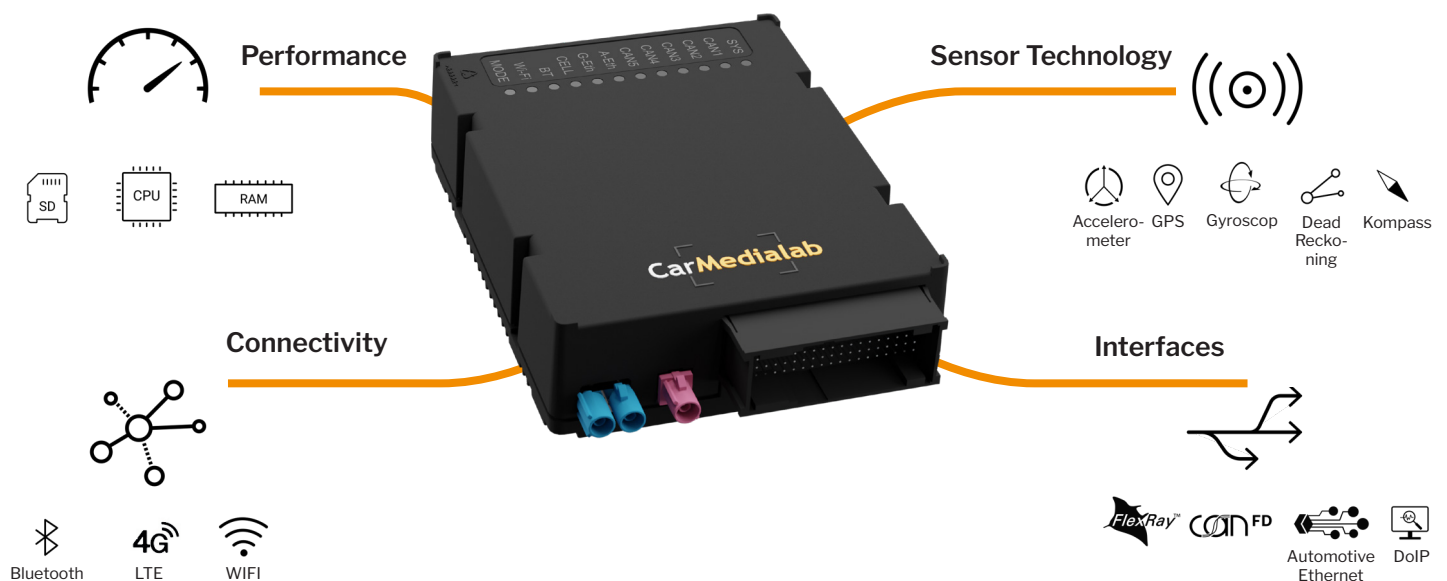


Flea 4+

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

Data sheet

Platform for Automotive Engineering

Flea 4+

Flea 4+		
System	Processor	4 ARM Cortex-A53 mit 1.2 GHz (64 Bit) 2 ARM Cortex-R5 mit 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-A Cat 6 module LTE-FDD (Mbps) 300 (DL)/50 (UL), LTE-TDD (Mbps) 226 (DL)/28 (UL) DC-HSPA+ (Mbps) 42 (DL)/5.76 (UL) , WCDMA (Kbps) 384 (DL)/384 (UL) EMEA Region Bands: LTE-FDD B1/B3/B5/B7/B8/B20/B28/B32, LTE-TDD B38/B40/B41 NA Region Bands: LTE-FDD B2/B4/B5/B7/B12/B13/B25/B26/B29/B30/B66, LTE-TDD B41
	Wi-Fi	802.11 a/b/g/n/ac (2.4/5 GHz)
	Ethernet	10 / 100 / 1000BASE-TX
	Bluetooth	BT / BLE 5.2
Interfaces	CAN	5 x CAN-FD
	Automotive Ethernet	1 x Automotive Ethernet (100BASE-T1)
	DoIP	1 x DoIP 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 of Concurrent GNSS: 3
Connectors	ELO-54	5 x CAN-FD 1 x Automotive Ethernet (100BASE-T1) 1 x DoIP ISO 13400 (100BASE-TX) 1 x FlexRay A / B Kanäle 3 x Analog Input (0-60 V) 1 x Digital Output (Open Drain) 2 x Digital Output (High Side Switch) 1 x RS485 2 x RS232
	USB	USB-C 3.0 (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
	Working	< 500 mA @ 12 V