

VCU Pro IDM Onboard Unit Datasheet

Vehicle Connectivity Gateway



REV 2.02

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VCU Pro IDM Onboard Unit

VCU Pro IDM is the advanced on-board unit from the Vehicle Connectivity Unit series. With 4 CAN interfaces (2 standard CAN and 2 CAN FD), 4 analog inputs and 4 digital outputs VCU Pro IDM is a professional and robust gateway. Two independent processors ensure both a safe and secure connection to the vehicle network and also provide a universal communication capability.



CPU	ARM® 1 GHz	Automotive Connector	MOLEX (48 pins)
RAM	512 MB	Antenna Connectors	SMA Female
Memory	8 GB Flash		
Sensors	3-axis Accelerometer 3-axis Gyro	Mounting Option	Screws
GNSS	GPS, Glonass, BeiDou, Galileo		

VCU Pro IDM Onboard Unit

Communication and Interfaces	Processors and modules	Mechanical
2× CAN 2.0B	ARM Cortex A8 (1GHz)	Environmental conditions according to EN50155: Cold operating and non-operating; Dry, damp heat and cyclic
2× CAN FD	Infineon Aurix Microcontroller (200MHz, 472 KB RAM)	Vibration and shock acc. EN61373
4× Analog IN	HSM (Hardware Security Module) for cloud communication secure key storage	Material: Aluminum / Plastic Waterproof housing
4× Digital OUT	Second HSM for diagnostic key sessions	Operating temperature from -40°C to +70°C acc. DIN EN 50155 Class TX
1× Ethernet 100 BaseT	GTM (Generic Timer Module)	Protection level: IP55 (IP69K optional)
2× Ethernet BrdrR		
WiFi 802.11 a/b/g/n		
Bluetooth 4.2		
1× RS232		
1× RS232 / RS485		
1× LIN		
1× K-Line		
1× embedded SIM + 1× plastic SIM (accessible)		
Cellular – LTE Cat4 (Global)		
GNSS	Sensor Network	Memory
uBlox NEO-M9V with UDR and ADR (Dead Reckoning)	3-axis Accelerometer	512 MB RAM
	3-axis Gyro	8 GB eMMC Flash
	Power Supply	Approvals
	Nominal Voltage: 9–36 V DC	E-Mark
	System	ISO16750
	Linux Operating System	Fire protection DIN EN 45545-2
	Fail-safe OTA update	
		Certification
		CE
		FCC (components)

