

VCU Pro Onboard Unit Datasheet

Vehicle Connectivity Gateway



OPENMATICS

VCU Pro Onboard Unit

VCU Pro 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 is a professional and robust vehicle gateway. Two independent processors ensure both a safe and secure connection to the vehicle network and also provide a universal communication capability.

Dimensions
200 x 122 x 40 mm

Temperature Range
-40 to +85 °C

Power Supply
9 – 36 V DC



Cellular Antenna Connectors 2x
WLAN/Bluetooth Antenna Connectors 2x
GNSS

Power supply and signal interface

CPU	ARM® 1 GHz	Automotive Connector	MOLEX (48 pins)
RAM	1 GB	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 Onboard Unit

Communication and Interfaces 2x CAN 2.0B 2x CAN FD 4x Analog IN 4x Digital OUT 1x Ethernet 100 BaseT 2x Ethernet BrdrR WiFi 802.11 a/b/g/n Bluetooth 4.2 1x RS232 1x LIN 1x K-Line 1x embedded SIM + 2x plastic SIM (accessible) Cellular - LTE Cat4 (EMEA + Asia/Pasific version)	Processors and modules ARM Cortex A8 (1GHz) Infineon Aurix Microcontroller (200MHz, 472 KB RAM) HSM (Hardware Security Module) for cloud communication secure key storage Second HSM for diagnostic key sessions GTM (Generic Timer Module)	Mechanical Material: Aluminum / Plastic Waterproof housing Operating temperature from -40°C to +75°C Protection level: IP5K5
GNSS uBlox NEO-M8L with Dead Reckoning	Sensor Network 3 Axis Accelerometer 3 Axis Gyro	Memory 1 GB RAM 8 GB eMMC Flash
	Power Supply Nominal Voltage: 9–36 V DC	Approvals E-Mark ISO16750 Fire safety
	System Linux Operating System Fail-safe OTA update	Certification CE FCC (components)

