



POSITIONING POWER

Unleash the positioning power of VASCO - the latest GNSS hardware from Carlson Software. With the capability to provide precision global positioning and heading with up to 5 mm accuracy it proves itself as the perfect vehicle/machine mountable GNSS solution for positioning and heading.

Equipped with WIFI and Radio connectivity options the VASCO allows for high fidelity in even the most remote operations and paired with Septentrio, the leader in Anti-Jamming and Spoofing.

GAMA RTK

The implementation of Gama in the VASCO allows parallel processing with independent RTK engines, providing increased certainty, faster performance, and ultimately, superior results. The VASCO with GAMA makes true global positioning precision a reality.

septentrio

The industry leader for Anti-Jamming and Spoofing technology. The Septentrio board on the VASCO provides certainty and reliability for any situation



GNSS Subsystem

Receiver Type:	High Precision GNSS, triple module solution with synchronized reference clock and PPS signals
Channels:	1340+

Communications

Bluetooth:	Bluetooth 2.1 + EDR and BLE 5.2
Wi-Fi:	Dual band 2.4 GHz, 802.11 ac/a/b/g/n
Cellular Radio:	Integrated cell modem, Worldwide network coverage, LTE Cat 4, Modules used for different regions (N. America, S. America, APAC, EMEA, ASIA). 2 antennas fitted ext.
UHF Radio:	Fully configurable, with TX and RX capability for Rover and base station models
WebUI:	To upgrade software, manage settings, data download, via smartphone, tablet or other electronic device, configure advanced radio settings

Connector Ports

Ethernet 1:	4 pin, M12 connector, D-Code 100/10 Mbps
Ethernet 2:	4 pin, M12 connector, D-Code 100/10 Mbps
Power:	3 pin, M12 connector, A-Code Power input
CAN 1:	5 pin, M12 connector, A-Code Native NXP Flex CAN, galvanic isolation <500V. Supports classic CAN at all classic baud rates. Termination resistor switchable
CAN 2:	5 pin, M12 connector, A-Code Native NXP Flex CAN, galvanic isolation <500V. Supports classic CAN at all classic baud rates. Termination resistor switchable
Serial:	12 pin, M12 connector, A-Code RS232, RS422, PPS, 5V power output. Multi-peripheral connector, for optional external modules
Wi-Fi / BT:	SMA connector For external Wi-Fi/BT antenna
UHF:	TNC connector For external UHF antenna
Cell 1:	SMA connector For external main cellular antenna
Cell 2:	SMA connector For external auxiliary cellular antenna
GNSS1:	TNC connector For main external GNSS antenna
GNSS2:	TNC connector For secondary external GNSS antenna
GNSS3:	TNC connector For third external GNSS antenna

CPU System

CPU Module:	SOM based on NXP iMX8, 4x Cortex A35, 1.2GHz, 4GB DDR3, 32GB eMMC. Integrated WiFi/BT module
OS:	Based on Variscite Linux kernel

Physical

Weight:	1.8 Kg (without mounting fixtures)
Dimensions:	180 x 200 x 50 mm
Material:	Anodized aluminum housing, nitrile rubber, steel screws

Environmental

Operating Temperature:	-40°C ~ +70°C
Storage Temperature:	-40°C ~ +85°C
Protection:	IP67. Protected from temporary immersion to a depth of 1 m
Shock Resistance:	Random 20-150Hz 1.6g acceleration Meet standard BS EN 60068
Impact:	IK10, 20J impact energy, IEC 62262
Unprotected Drop:	Drop from 1.5 m onto concrete- operational
Humidity:	Up to 100%

Power

Input Voltage:	10 to 30 V DC
Power Consum.:	65W max 10W internal nominal, 40W allowance for externally connected
CAN External:	24V 30W Single, isolated 24V supply shared between CAN ports, can be individually enabled, and disabled by software
Serial Port Out:	5V .2A For powering external low power devices, can be enabled and disabled
GNSS Port Out:	5V .1A Antenna Bias

