



MEX 1.0

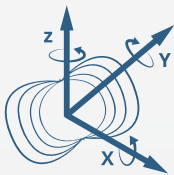
AVIONICS

MAGNETOMETER AND I/O EXPANSION MODULE

High performance magnetometer for autonomous vehicle installation.

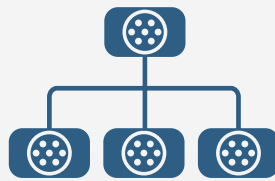
Includes I/O expansion capabilities and advanced network management: CAN Bus isolation, data concentrator, etc.

UAV & eVTOL AIRCRAFT COMPASS



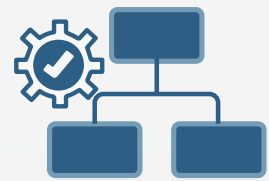
3- AXIS MAGNETOMETER

Outstanding stable performance over time and temperature.



I/O EXPANSION MODULE

Permits to extend the number of I/O ports in Veronte Autopilot.



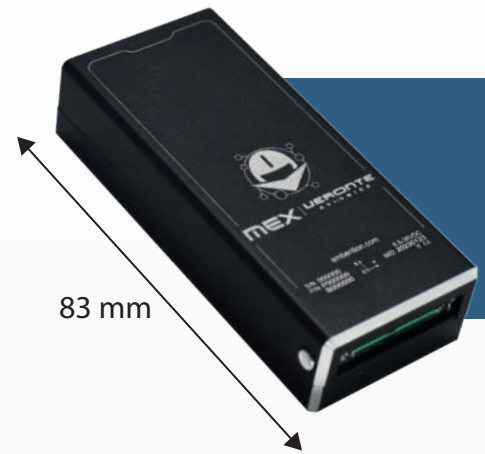
CAN BUS MANAGEMENT

CAN Bus isolator, data concentrator and sub-network management.



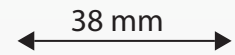
MAIN FEATURES

Magnetometer	3-Axis HMR 2300 drop-in replacement
I/O Expander	Extend the number of I/O
Data Concentrator	CAN Bus to serial, digital input, analog, etc.
Network	Message filtering Sub-network generation
Bus protection	Failure detection Babbling idiot failure
Bus Isolation	Device isolation
Wire Optimization	Long distances Protection Robust bus
Device Interface	Sensors, actuators, ESC, ADS-B, Payload, etc.



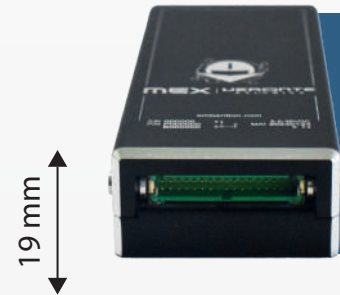
I/O EXTENSION & DATA INTERFACES

Buses	2x CAN Bus 2x RS232 1x RS485 1x I2C
Digital I/O	4x 5VDC PWM 2x 5VDC ECAP 1x EQEP
Analog I/O	2x5V 1x12V 1x36V
CAN Bus	Dual redundant Galvanic isolation
Terminal resistor	Software configurable



MAGNETOMETER SENSOR

Technology	Magneto-inductive
Axis	3-Axis
Range	$\pm 800 \mu\text{T}$
Noise	15 nT
Gain	75 LSB/ μT
Linearity	0.5% (typical)
Sensitivity	13 nT
Hysteresis	15nT



ROBUST CONSTRUCTION

Circuit protections	ESD, Overtemperature, short Circuit
Power protection	Reverse polarity protection
Connector	34 Pin Latch Robust to vibrations
Material	Anodized aluminium
Temperature range	-40 to 60°C
Weight	69g 17g OEM

POWER

Power Input	6 - 36VDC Redundant power input
Power	3W



24 AUG

[P003959] Veronte Avionics: MEX 1.0
[P006141] Veronte Avionics: MEX OEM 1.0