



# MEX 1.0

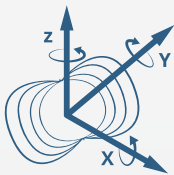
# AVIONICS

## MAGNETOMETER AND I/O EXPANSION MODULE

High performance magnetometer for autonomous vehicle installation.

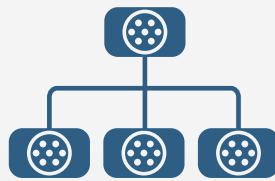
Includes I/O expansion capabilities and advanced network management: CAN Bus isolation, data concentrator, etc.

## UAV & eVTOL AIRCRAFT COMPASS



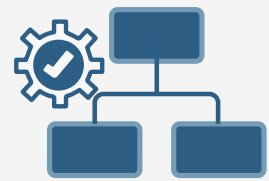
### 3- AXIS MAGNETOMETER

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 isoaltion
Wire Optimization	Long distances   Protection   Robust bus
Device Interface	Sensors, actuators, ESC, ADS-B, Payload, etc.

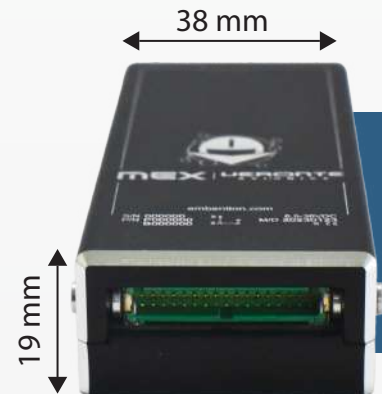


## I/O EXTENSION & DATA INTERFACES

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	$\pm 1100 \mu\text{T}$
Noise	15 nT
Gain	75 $\mu\text{T}$
Linearity	0.5% (typical)
Sensitivity	13 nT
Max Sample Rate	147 Hz



## 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	100g   50g OEM

## POWER

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



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