



EMBENTION

Enabling drones
to populate our skies



MEX 1.0

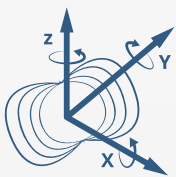
AVIONICS

MAGNETOMETER AND I/O EXPANSION MODULE

High performance magnetometer for
autonomous vehicle installation.

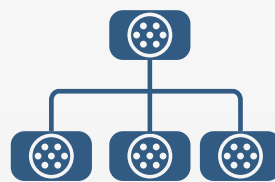
Includes I/O expansion capabilities and
advanced network management: CAN Bus
isolation, data concentrator, etc.

UAV & eVTOL AIRCRAFT COMPASS



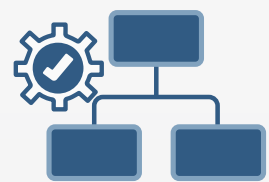
3- AXIS MAGNETOMETER

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.



VERONTE
AVIONICS



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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

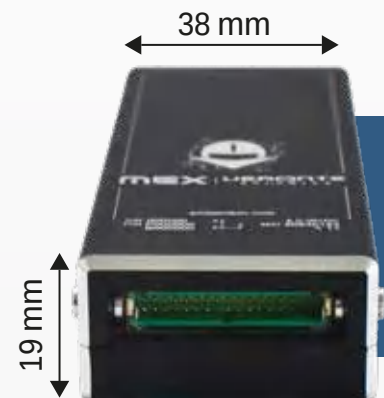
Technology	Magneto-inductive
Axis	3-Axis
Range	$\pm 1100 \mu\text{T}$
Noise	15 nT
Gain	75 μT
Linearity	0.5% (typical)
Sensitivity	13 nT
Max Sample Rate	147 Hz

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 – 35VDC Redundant power input
Power	3W



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