



Physical

Size	4.5" x 4" x 2.4" (maximum)
Weight	< 2 lbs
Install/Mounting	4 holes for bulkhead mounting with the screws or bolts

Environmental

Operating Temp.	-20°C to 60°C (LiPo battery discharging), 0°C to 45°C (LiPo battery charging)
Storage Temp.	-20°C to 60°C LiPo battery storage limits
Humidity	5-98% RH (non-condensing)
Water Intrusion	IP67
Vibration	Vibration per MIL-STD-202 Method 201
Shock	Drop per SAE J1211 & MIL-STD-202, Method 203
Salt Fog	48 hours per ASTM B117-73
Chemical Resistance	ISO 16750-5 Mounting Code B

Electrical

Input Voltage	8 to 32 VDC
Current Consumption	Running (100mA, Sleep (5mA), Hibernation (internal battery)
Internal Battery	5000mAh LiPo (5yr back-up)
Reverse Polarity Protection	Yes
Under/Over Voltage Protection	0 to 36 VDC indefinitely
Voltage Transient Protection (Load Dump)	160 VDC Positive per MIL-DTL-10986G, 4.4.16 160 VDC Negative per MIL-DTL-10986G, 4.4.17

Wireless

Cellular Modem	CATM1 (LTE) with 2G fallback
GPS	GNSS, GPS/GLONASS with SBAS
WiFi	802.11b/g/n
Bluetooth	BLE 5.0
Antennas	internal
Data Retention	2 weeks w/o network connection with auto backfill

Interface (Inputs & Outputs)

System Connector	12 pin Deutsch DT06-12SA (Integrated)
Inputs	6x Software Configurable, each Capable of the Following: - Switched (active high & low) - PWM (input capture) - Analog (0-32 VDC) Resistive (0-12000Ω)
Outputs	2x Configurable - Sinking 100mA (ground/open) - Sourcing 100mA (battery/open)
CAN	2x CAN Autobaud (J1939, NMEA2K, SmartCraft)
Accelerometer	Impact detection, pitch and roll, flip/capsize event capture
Diagnostic LED's	Yes (power, cellular, gps, WiFi/BLE, fault, CAN1, CAN2)

System

Reporting Rate	Configurable (at-rest, in motion, hibernation)
Reprogramming	Firmware and Config. over-the-air
Regulatory Compliance	RoHS, REACH, FCC, CE, RCM (ACMA), PTCRB

Optional Hardware

Satellite Communication	Iridium Edge SBD (requires 3 inputs pins)
I/O Expander/Digital Switching Module	< 2 lbs
Battery Disconnect Module	Heavy Duty Marine Grade Battery Switch (200A)