

Inputs/Output		
Analog	3 inputs, individually jumper selectable 4-20 mA / 0-10Vdc / 0-5 Vdc	5 to 24 V available to power analog sensors.
Digital	3 discrete individually jumper configurable between dry contact and voltage 1 wake-up (exception-based reporting/notification)	Event driven notifications Pulse counting High-low level switches
Serial Port	RS-485	Master/Slave functionality Read up to 41- 16 Bit registers
Digital Out	1 open drain output	36 V, 1 A max applications Custom programmed

Other Key Attributes		
Flash Memory	16 MB	Data Logging, Configuration Files
Antenna	Internal Flexible, 1.4 dBi	
Microprocessor	ARM Cortex-M4	
Encryption	AES 128	
Radio Technology	LoRa/LoRaWAN 1.0.4	
Radio Range	Up to 10 miles Line of Sight	
Radio Frequency	915 MHz US Channel Plan	Other LoRa channel plans (EU 868, AU 915) available by special order

Power		
Battery	1-D size lithium thionyl chloride user replaceable primary battery provided. <ul style="list-style-type: none"> 3.6 Volt nominal 4000 mA pulse current 13.0 Ah capacity	Typical monitoring requirements (one reading per hour, with three 4-20mA pressure sensors attached) result in a calculated 2 + year battery life.
Sleep Mode Power Demand	40 uA	
Wake Mode Power Demand	Up to 250 mA during transmission period.	

Default Configuration		
	Parameter	Default Setting
	Network Type	Public LoRaWan
	Adaptive Data Rate	On
	Frequency Sub Band	2
	Transmission Receipt Ack	On
	Analog Sensor Voltage*	12 Volts

	Cycle Time*	30 Minutes
	Sensor Settling Time*	1 seconds
	# of Resend Attempts*	1
	Resend Delay*	5 seconds
	Failed Transmissions prior to Rejoin*	1
User Configuration	“*” Indicates OTA user configurable items. FSB can be changed using local configuration. Modbus RTU tag and Analog gain/offset calibration also configurable	Over the Air Locally via USB to RS 232 connection
Custom Configuration	Customized routines for pulse counting, exception reporting, endpoint analytics, polling of multiple Modbus tags.	

Approvals/Certifications

FCC/IC	Operates in the ISM (unlicensed band). FCC ID: AU792U13A16857 IC Identifier: 125A-0054
	UL-62368-1, Third Edition CSA C22.2 No. 62368-1, Third Edition Annex Y

Enclosure

Entry Points	3 - Cable Glands (accept 0.105 to 0.315-inch diameter cable)	
Operating Temperature	-35° to 80° C, -31° to 176° F	
Weather	IP 66, NEMA 4X	
VoBo GP-1 Dimensions	7.6" x 4.6" x 3.1" (approx.)	
Mounting	3 mounting holes on either side of enclosure for direct fastening	Pole mount brackets and magnetic mounts available