

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 Custom programming required to poll multiple tags
Digital Out	1 open drain output	24 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	
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.  • 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	on
Parameter	Default Setting
Network Type	Public LoRaWan
Adaptive Data Rate	On
Frequency Sub Band	2
Transmission Receipt Ack	On

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	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	1
	Rejoin*	
User Configuration	"*" Indicates OTA user	Over the Air
	configurable items. FSB can be	Locally via USB to RS 232
	changed using local	connection
	configuration. Modbus RTU tag	
	and Analog gain/offset	
	calibration also configurable	
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:125A-0054	
	IC Identifier: AU792U13A16857	
	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	-40° to 80° C, -40° to 176° F	All components are rated to this
		range.
Weather	IP 66, NEMA 4X	Enclosure, cable glands built to
		this standard or better.
VoBo GP-1 Dimensions	7.6" x 4.6" x 3.1" (approx.)	
Mounting	3 mounting holes on either side	Pole mount brackets and
	of enclosure for direct fastening	magnetic mounts available

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