

4-20mA Wireless Sensor Infrastructure (WSI)

Data you want, when you want it...

GSS has added 4-20mA support to its existing wireless-mesh sensor offerings. The 4-20mA feature offers connectivity for single and multi-channel devices to existing GSS wireless-mesh networks. Sensors can be remotely managed and monitored at programmed intervals and trigger alert notifications for out-of-bound readings.

Features

- Supports Up to 3 X 4-20ma Cabled Devices, Including Strain Gauges, Tilt Meters, Piezometers and Extensometers and More.
- Part of an Integrated Wireless Solution*¹
- Easy Installation and Removal – Technical Skills Not Required
- Totally Sealed; Magnetic Power Switch
- Remotely Managed and Configured
- Configurable Heartbeat Message (With Data)
- Alert Management Functionality
- Up to 100 Sensors Per Wireless Mesh Network
- Highly Secure & Reliable Network and Data Transfer with 128bit AES Encryption
- Deep Network Can Span Kilometers
- Extreme Low Power Battery Operation Providing Years of Trouble Free Operation
- Powered by Replaceable Lithium Primary

Applications

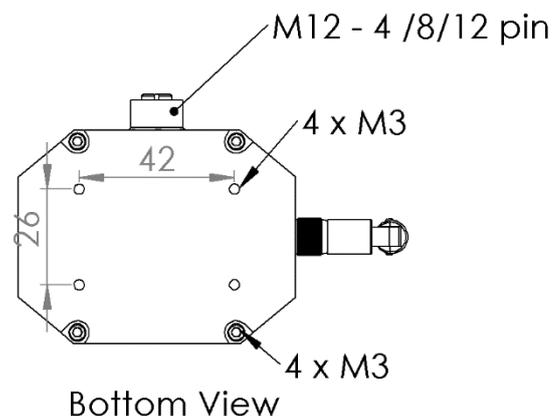
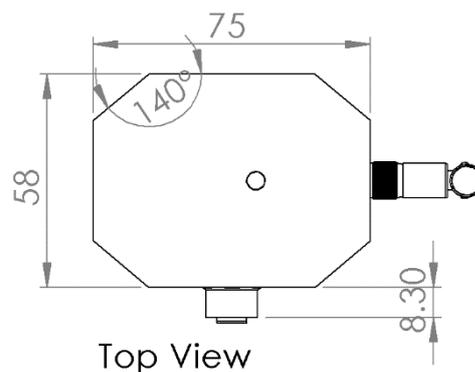
- Structural Health Monitoring (Buildings, Bridges, Tunnels)
- Airport Runways, Construction Sites, Railways, Pipelines
- Natural Slopes / Cut Slope Monitoring
- Barrier Impact Detection
- Foundation Monitoring

*1 Requires Management Node

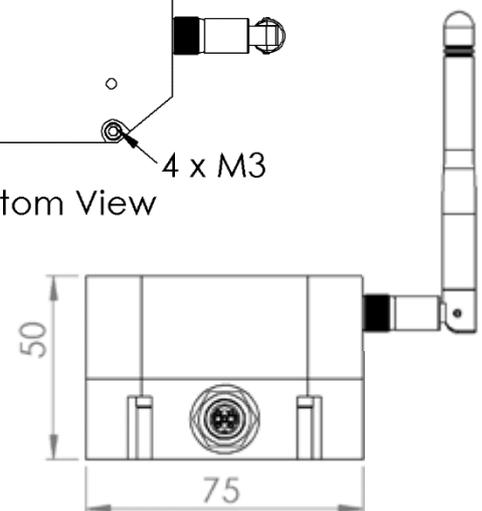
*2 Requires External Solar Panel



Dimensions



Side View



Contact us :

SOUTH
Target your success



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4-20mA Wireless Sensor Infrastructure (WSI)

General Specifications			
Part Number	GSS-420-WI-4A: 4-20mA Wireless Infrastructure		
Data Outputs	Raw: 4-20ma Tilt: degrees	Strain: μ strain Pressure: mbar	Extensometer: mm
Operating Parameters			
Communication			
Standards	2.4 GHz 6LoWPAN and 802.15.4e standards		
Range	100m to 300m line of sight with internal / external antenna		
Reliability	>99.999%		
Upload Rate	~3.2Kb/s		
Security	Secure Mesh with 128-bit AES Encryption. NIST Certified Security		
Power & Environmental			
Power Consumption	Idle: < 100 μ A Receiving: ~ 4.5mA	Transmitting: ~ 9.7mA	
Internal Battery Life (19Ah Lithium)	As much as 10 years depending on Heartbeat and Sampling Rates		
With Solar Cell (8volt 40ma)	Battery Life can be extended further with 8-hours/day sunlight		
Operating Temperature	-10 °C TO +85 °C (Lithium battery)		
MTBF	1.1 Million Hours (Telcordia Method I, GF/30C) 0.4 Million Hours (Telcordia Method I, GM/35C)		
Regulatory Compliance	ROHS CE	Korea: CRM LT9 Eterna Japan: 208-130008	IC: 5853A Eterna2 FCC: SJC Eterna2
Physical			
Dimensions of Base Unit	L:75mm x W:58mm H:50mm		
Weight	~200grams		
Options	Alternative material for extreme environments Larger battery compartment for heavy usage Mounting flange for fixing to structure and easy sensor installation		
Interface			
Internal Connectors	2-pin 1.25mm Battery connector MMCX Antenna Connector		
External Connectors	SMA RPA Male antenna connector (IP68) Optional Solar Power unit connector (IP68) M12-4/8/12 or 17 pin connector for sensor attachment (IP68)		
Software			
Management Console	GSS Management Console (PC, MAC, Android iOS)		
Text and Email Alerts	Supports text message and email alerts		

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