



GeoWAN Analog Interface Node



The 4-channel Analog Interface Node

extends GeoWAN connectivity to a wide range of analog instruments, supporting 4–20 mA, 0–10 V, and thermistor inputs.

It uses an integrated long range radio transceiver to report its measurements through Senceive's GeoWAN wireless communications network to a GeoWAN Gateway.

Key Features

- Four concurrently configurable analog channels (mix of current/voltage/thermistor).
- Per-channel selectable sensor excitation: 5V / 12V / 24V
- Internal, user-serviceable batteries enabling multi-year autonomy
- Waterproof to IP66/67
- Versatile mounting options
- NFC compatibility, enabling on the spot adjustments to the node

Successfully applied in many applications, including:

- Understanding water levels in standpipes and reservoirs with vented pressure transducers
- Monitoring movements and displacement across surface cracks or joints with electrical crackmeters
- Settlement gauges for monitoring vertical displacement in embankments, tunnels or other civil structures
- Measuring pore water pressure with piezometers
- Structural monitoring utilising bi-axial tilt sensors to measure angular changes

GeoWAN Analog Interface Node



Physical Specifications

Parameter	Value
Dimensions (excluding antenna and bracket)	246 x 137 x 88 mm
Dimensions (including antenna and bracket)	246 x 303 x 106 mm
Total Mass	836 g without batteries 1090 g with 2 batteries 1346 g with 4 batteries
Housing Material	Polycarbonate
Protection	IP66 and IP67
Mounting Options	Pole mount, wall mount
Operating Temperature Range	-40°C to +85°C

Internal Batteries

Parameter	Value
Battery Type	Primary lithium-thionyl chloride (Li-SOCl2) with Hybrid Pulse Capacitor (HPC)
Nominal Voltage	3.6 V
Nominal Capacity	19 Ah
Cable and Connector	75 mm 22AWG UL1007 onto JST-PAP-02V-S
User Serviceable	Yes
Quantity	2 or 4 required
Battery Life (based on 4 batteries)	
Reporting Rate 30 mins 6 hr	>5 years >8 years



GeoWAN Analog Interface Node

GeoWAN Radio Specifications

Parameter	Value
Communication Type	Star Topology
Frequency Band (868 variant)	863 MHz – 870 MHz ISM Band
Frequency Band (902 variant)	902 MHz – 928 MHz ISM Band
Maximum Transmit Power (868 variant)	14 dBm conducted
Maximum Transmit Power (902 variant)	14 dBm conducted
Maximum Antenna Gain	1.8 dBi
Range	Up to 15 km depending on the environment and fitted antenna Consult with Senceive for your application

Analog Sensor Interface

Parameter	Value
Connector	M12 Female 8-pole A-coded Screw clamp or crimp
Output voltage (DC)	5/12/24V
Output current	200mA @ 5V, 500mA @ 12V, 250mA @ 24V
Voltage Input	Range: 0-10V DC Accuracy: 0.1% FS
Current Loop	Range: 0-20mA Accuracy: 0.1% FS
Thermistor (NTC)	Type: 3kΩ NTC Resolution: 0.05°C Accuracy: ±0.2% Range: -40°C to +85°C

GeoWAN Analog Interface Node

Certifications

- CE, FCC

Ordering Information and Accessories



Model	Description
L3N1-AIN (868)	GeoWAN Analog Interface Node (excluding batteries) Europe
L3N1-AIN-S (868)	GeoWAN Analog Interface Node (including standard batteries) Europe
L3N1-AIN (902)	GeoWAN Analog Interface Node (excluding batteries) North America
L3N1-AIN-S (902)	GeoWAN Analog Interface Node (including standard batteries) North America
FS-DINAIN-SENCON	Sensor Connector for Digital & Analog Interface Sensor (1 per sensor)
FS-AIN-SENSPL	Sensor Connector splitter (required when connecting more than 2 sensors)
SP-C03168-2	Replacement batteries (2 pack)
FF-MP-DINAIN-PM	Pole Mount (with jubilee clip) for Digital & Analog Interface Sensor
FF-MP-DINAIN-WM	Wall Mount for Digital & Analog Interface Sensor
FF-MP-DINAIN-WMK	Magnetic Wall Mount for Digital & Analog Interface Sensor
FX-C-5M FX-C-2M FX-C-1M	N-type Antenna Extender (5 m) N-type Antenna Extender (2 m) N-type Antenna Extender (1 m)
FA-MK-CB	N-type Antenna Bracket for 6.35 screw/tie wrap/jubilee clip
FA-MK-CBM	N-type Antenna Bracket with magnets