



Remote Monitoring for Business



CELLULAR

Cellular Gateways

General Description

Don't have an existing network connection where you need it most? ALTA 2G Cellular Gateways allow your ALTA Wireless Sensors to communicate with the iMonnit Online Wireless Sensor Monitoring and Notification System via cellular transmission. They are the perfect solution for remote locations, or where an existing Internet connection is not an option.

The ALTA Cellular Gateways are based on the latest Dual-band CDMA or 2G wireless protocols and come integrated with Monnit's wireless access point network for use with ALTA Wireless Sensors.

The ALTA 2G Cellular Gateway is an advanced all wireless M2M gateway that enables fast time-to-market solutions for a wide range of M2M and partner applications as well. The ALTA 2G Cellular Gateway is specifically designed to respond to the increasing market need for global technology that accommodates a variety of vertical M2M application segments and remote wireless sensor management solutions.

Example Applications

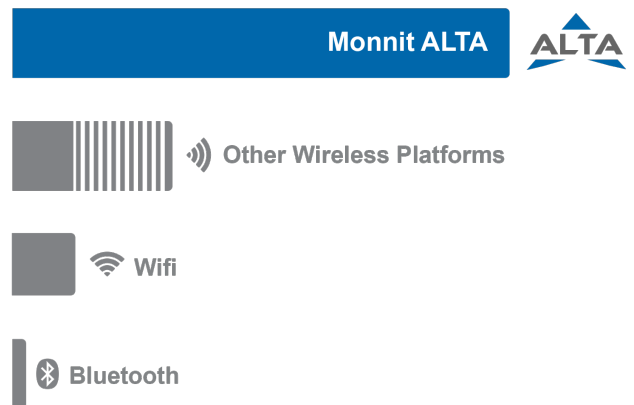
- Remote Location Monitoring
- Shipping and Transportation
- Agricultural Monitoring
- Vacant Property Management
- Vacation Home Property Management
- Construction Site Monitoring
- Data Center Monitoring

ALTA Cellular Gateway Features

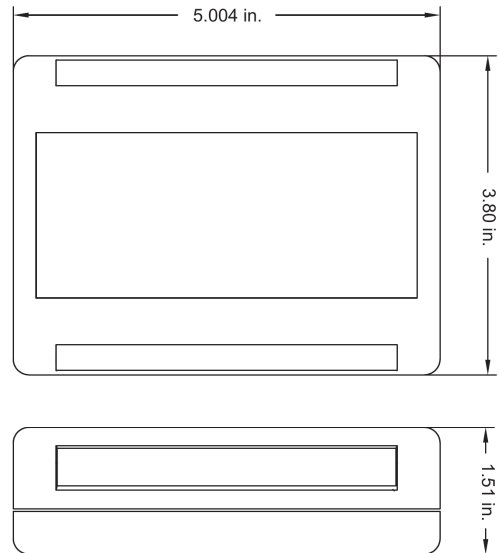
- Wireless range of 1,200+ feet through 12+ walls *
- Frequency Hopping Spread Spectrum (FHSS)
- Improved interference immunity
- Encrypt-RF® Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- 50,000 sensor message memory
- Over-the-air updates (future-proof)
- True plug and play, no hassles for Internet configuration
- No PC required for operation
- Low-cost cellular service packages
- Local status LEDs with transmission and online status indicators
- AC power supply
- Optional 24-hour battery backup in the event of a power outage


*Actual range may vary depending on environment.

Wireless Range Comparison



ALTA 2G Cellular Gateways



ALTA 2G Cellular Gateway Specifications		
Cellular		
2G Cellular Technology	2G/GSM/GPRS (North America) Frequency Range: 850/900/1800/1900 MHz	2G/GSM/GPRS (International) Frequency Range: 850/900/1800/1900 MHz
Antenna	Connector: SMA Gain (dBi): 1.5	
SIM Card Compatibility	Mini-SIM (2FF) 25 mm x 15 mm x 0.76 mm	
Power		
Input Power	5.5 VDC @ 2.5 A	
Optional Battery Backup	Battery Type: Rechargeable Lithium Polymer	
	Battery Duration: Up to 24 hours	
	Battery Cycle Life: 500 times	
Mechanical		
LEDs	Cellular Status LED, Online Status LED, Sensor Network Status LED	
Device Memory:	50,000 sensor messages (Sensor messages will be stored in the event of Internet outage and transferred when connection is restored)	
Enclosure		
Dimensions	5.004 x 3.8 x 1.51 in.	
Weight	7 ounces	
Environmental		
Operating Temperature	-10 to 45°C (14 to 113°F)	
Storage Temperature	-20 to 60°C (-4 to 140°F)	
Wireless		
Wireless Range	1,000+ ft. non-line-of-sight	
Security	Encrypt-RF™ (256-bit key exchange and AES-128 CTR)	
Certifications		
	FCC: ZTL- G2SC1, FCC: RI7HE910	IC: 9794A-G2SC1 and IC: 5131A-HE910

Commercial-Grade Cellular Gateways:

Monnit commercial-grade cellular gateways are designed for applications in ordinary environments (normal room temperature, humidity, and atmospheric pressure). Do not use these gateways under the following conditions as these factors can deteriorate the product characteristics and cause failures and burnout.

- Corrosive gas or deoxidizing gas - chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxide gas, etc.)
- Volatile or flammable gas
- Dusty conditions
- Under low or high pressure
- Wet or excessively humid locations.
- Places with salt water, oils, chemical liquids, or organic solvents
- Where there are excessively strong vibrations
- Other places where similar hazardous conditions exist

Use these product within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality.

Industrial-Grade Cellular Gateways - Type 1, 2, 4, 4X, 12, and 13 NEMA-Rated Enclosure:

Monnit's Industrial cellular gateways are enclosed in reliable, weatherproof, NEMA-rated enclosures. Our NEMA-rated enclosures are constructed for both indoor or outdoor use and protect the sensor circuitry against the ingress of solid foreign objects like dust and the damaging effects of water.

- Safe from falling dirt
- Protects against wind-blown dust
- Protects against rain, sleet, snow, splashing water, and hose directed water
- Increased level of corrosion resistance
- Will remain undamaged by ice formation on the enclosure



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Change Log

Date	Change	Reason	Modified By
4/26/21	Change Log Created		
4/6/2023	Updated frequency range		Nathan D
5/2/2023	Edits throughout		D. Hill