

The Leading Enterprise Internet of Things Solution

# **Cellular Gateways**

### **General Description**

Don't have an existing network connection where you need it most? ALTA Cellular Gateways allow your Monnit 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 (WAN) for use with all Monnit wireless sensors.

The ALTA 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. Monnit's ALTA 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.

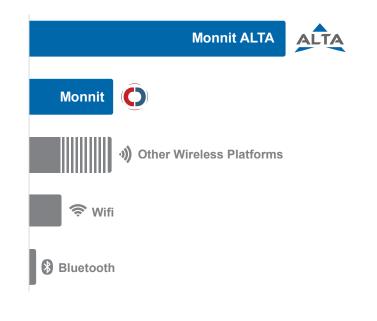
# **Example Applications**

- 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<sup>®</sup> 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 & play, no hassles for internet configuration set-up
- · 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 event of power outage
- \* Actual range may vary depending on environment.

# Wireless Range Comparison





# ALTA 2G Cellular Gateways



5.004 in.	
	3.80 in
	1.51 in

ALTA 2G Cellular Gateway Specifications				
Cellular				
3G Cellular Technology	HSPA (North America) Frequency Range: 850 / 1700 / 1900 MHz	HSPA (International) Frequency Range: 850/900/2100 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	ABS	ABS		
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				
FC Industry Canada	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 burn-out.

- Corrosive gas or deoxidizing gas chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides 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 as well as the damaging effects of water (rain, sleet, snow, splashing water, and hose directed 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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For more information about our products or to place an order, please contact our sales department at 801-561-5555.

Visit us on the web at <u>www.monnit.com</u>.