

Cellular and Satellite Communication

Cellular Features

- **Persistent network connectivity for uninterrupted, bi-directional communications**
- **Advanced processor for optimized performance on 3G wireless networks**
- **Rugged design for use in extreme conditions**
- **Compact form factor for easy installation**

Satellite Key Features

- **Two-way communications enables messaging for monitoring and control operations**
- **Easy to install with no satellite dishes to point**
- **Low message latency allows for applications that require immediate communication to and from the asset. No long delays.**
- **Rugged design for use in extreme conditions – NEMA 4x Fiberglass housing**
- **Compact form factor for easy installation**

OVERVIEW – Federal Signal has expanded our communications infra-structure options by adding cellular and/or satellite capabilities for both mechanical and electronic siren controllers. The integrated cellular modem and satellite terminal is an ideal option for activating and monitoring sirens when distance and/or geographical barriers are present. The cellular modem can be ordered based on your specific carrier, the satellite terminal is offered using the Skywave IsatM2M network based on its proven reliability and coverage. Cellular and Satellite upgrade kits are available for the UltraVoice Electronic Siren Controller, AR Controller and MC Controller. Cellular and Satellite service can be added independently or together to form a robust network architecture.

CELLULAR* – The Federal Signal cellular modem provides uninterrupted real-time, two-way data exchange in support of mission critical applications. The cellular modem features a sleek, compact form factor, increasing its versatility and ability to be integrated within existing enclosures. With a rugged design, Class I Div 2 certification, the cellular modem is an ideal solution for a wide range of industrial and municipal applications. Federal Signal cellular modems are available for CDMA networks through North and South America and GSM networks through North and South America and throughout Europe.

SATELLITE* – Using Inmarsat's network of geosynchronous satellites, the SkyWave IsatM2M network provides the ability to monitor and control remote Federal Signal mechanical and electronic sirens. The remote satellite terminal is a rugged external, small form factor design, which requires outdoor mounting. Skywave offers flexible billing plans with low monthly costs and competitive per message prices. Their network availability of 99.995% and 24/7 Network Operations Center (NOC) provides continuous and reliable service, which is required with these types of mission critical services.

**Requires third party subscription service.*



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Cellular and Satellite Communication Specifications

Cellular	
Physical	
Size:	3" x 1.1" x 3.9" / 76mm x 27mm x 100mm
Weight:	Approx. 0.35 lbs. / 160 grams
Environmental	
Operating Temperature	-22 F to 149 F -30°C to 65°C
Bands	
Quad-Band	850, 900, 1800, 1900Mhz
Dual-Band	EV-DO Rev A. 800, 1900Mhz
Standards/Approvals	
FCC, Industry Canada, RoHS, PTCRB, Class I Div 2, Carrier Specific	
Warranty	
1 Year manufacturer's warranty	

Satellite	
Physical	
Size:	6.3" x 1.9" / 160mm (Diameter) x 47mm (Height)
Weight:	Approx. 1.1 lbs. / 500 grams
Environmental	
Operating Temperature	-40 F to 185 F -40°C to 85°C
Humidity:	95% Relative Humidity @ +30°C non-condensing
Dust & Water Ingress:	IP67/NEMA-4X
Satellite Communications (D+/ISATM@M)	
Frequency	Rx: 1525.0 to 1559.0Mhz; 32-FSK Tx: 1626.5 to 1660.5Mhz; 2-FSK
EIRP	9dBW max
Elevation Angle	0 to +90°
Standards/Approvals	
Inmarsat D+/IsatM2M Type, Approved, FCC, CE Mark (R&TTE), RoHS, Anate, IEC/ EN 60945	
Warranty	
15 Months from shipment manufacturer's warranty	

Order Information

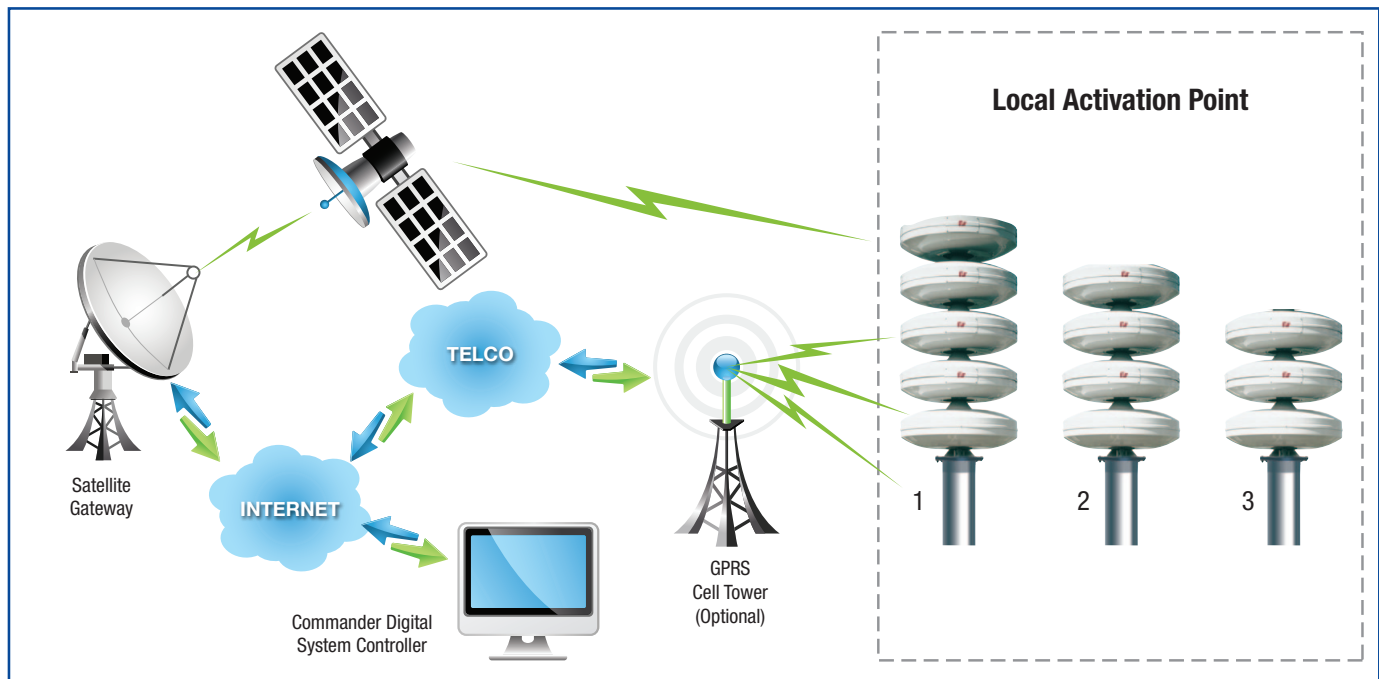
UltraVoice Upgrade Kits (may require additional equipment)

Q-UV-SATCELL1 – includes satellite terminal, cellular modem (Verizon), antenna, conversion kit to interface to UltraVoice, cables and mounting hardware

Q-UV-ISAT – includes satellite terminal, conversion kit to interface to UltraVoice, cables and mounting hardware

Q-UV-CELL1 – includes cellular modem (Verizon), antenna, conversion kit to interface to UltraVoice, cables and mounting hardware

Upgrade kits available for AR and MC cabinets. Contact customer service for more information.



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