

RadioLink Interoperability Module

The Windows based RadioLink software module supports real-time, two-way radio interoperability by supplying the means to set up and configure all cables and radios linked to the RIU or RIU+ (Radio Interoperability Unit). Serving as the liaison with the RIU or RIU+, RadioLink bridges communications between radios and other PTT devices, as well as PCs, phones and other modes of communication capable of accessing the SmartMsg network.



SmartMsg Radio Interoperability Unit (RIU)

- Communications interoperability for all LMR radio systems (800 MHz, UHF/ VHF, digital band and shortwave radios)
- VoIP-based convergence of multiple voice-capable devices, including radios, phones (cell, SAT, IP and PBX) and computers
- Intelligent "plug and play" communications interoperability with smart recognition of agencies and radio types accessing the network
- Real-time audio buffering to accommodate individual radio-system latency
- All-in-one package for mobile desktop or rack mounting
- Requires no secondary PC or server device



The SmartMsg RIU features embedded VoIP architecture to support simultaneous broadcast of text and voice alert notifications to two-way VHF and UHF radios, pagers and other PTT devices, as well as cell phones, landlines, PCs and wireless PDAs.

The RIU supports radios from different manufacturers across multiple bands and frequencies (including shortwave and P25 digital), and pre-defined talk groups. The SmartMsg RIU consists of a compact hardware appliance with a standard PC configuration that allows it to operate as a standard SmartMsg server. The RIU+ version features the same functionality in a rack/mount unit with an integrated CPU.

The SmartMsg application automatically recognizes the presence of the RIUs and any connected radio. All devices are connected to the RIU via Federal Signal's patented SmartCables, which identify the cable's chip ID, the agency owning the cable and radio model settings. The cables automatically configure radio and agency-specific communications settings to ensure network security, and the VoIP architecture effectively enables each radio as a secure virtual repeater.

Continued on back

SmartMsg RIU+

The RIU+ combines the functionality of the base RIU with the added processing capacity of a PC in a compact package. The CPU, with 2GB+ of memory installed, delivers the necessary performance to run the SmartMsg server and RadioLink software on Microsoft Windows® Embedded Standard 2009 operating systems. Connectivity is provided by an Ethernet (recommended) or an optional 802.11 wireless connection. The unit includes two radio cables.

