WIRELESS EMERGENCY ELEVATOR COMMUNICATIONS

As traditional phone lines have become more expensive and harder to find, new forms of cost-effective communication paths have filled the gaps. In the elevator industry, passengers rely on elevator phones in case of entrapments or emergencies. For elevator owners, monthly costs for phone-line services are usually inconvenient. Until recently, many elevator owners were limited to voice over Internet Protocol (VoIP), private automatic branch exchange (PABX) and traditional phone lines. However, global systems for mobile (GSM) communication technology are now available for the elevator industry and can offer economical and practical solutions.

While VoIP and PABX systems are alternatives to traditional phone lines, they are limited and not ideal for some small and medium-size applications. On the other hand, GSM phone lines are reliable, dedicated and flexible. For single-use applications up to multiple elevators, GSM technology allows for phone lines for individual elevators. This gives each elevator a dedicated and independent communication path that is completely isolated. An Internet connection or other third-party device is not required. The Elevator Connect 1000 from ESRM Communications can be used to replace standard phone lines without compromising reliability or code requirements.

GSM technology is designed to be easy to install, provide a quicker turnaround than other phone lines and be more flexible. VoIP systems can be complicated to install and set up, and they rely on an Internet connection, whereas the Elevator Connect 1000 GSM provides more of a plug-and-play installation. The in-
Elevator installation does not require conduit and wire to be run from the telephone room to the machine room. Elevator contractors can now mount the wireless communication interface next to the elevator controller or in the elevator hoistway, and the pipe directly to the elevator controller or junction point. This can provide reduced turnaround and cost savings.

While connecting wireless to the outside world on the GSM network, the Elevator Connect 1000 still connects with two wires to the elevator phone. This provides reliable 48-VDC line power and dial tone. In addition, there is a built-in lithium-ion battery that delivers 10 hr. of backup battery in case of power failure. (ASME A17.1b-2009 requires a 4-hr. battery backup.)

ESRM Communications’ product-development team has harnessed GSM technology to be compatible with modern elevator phones compliant with Americans with Disabilities Act guidelines. Years of research and modifications went into making the Elevator Connect 1000, a non-proprietary phone line specifically for
the elevator industry. It was also designed to meet and exceed ASME A17.1b-2009 codes.

The Elevator Connect 1000 has been used in the field for more than three years by such companies as Viking Electronics, Inc.; K-Tech International; and Janus Elevator Products Inc. ESRM Communications can provide complete, closed-loop emergency-communication systems that can be remotely monitored and tested through its Underwriters Laboratories-listed, 24/7 monitoring and answering call center.

An Elevator Connect 1000 (right) mounted in a machine room

For more information, contact ESRM Communications at 1114 Northeast 4th Avenue, Fort Lauderdale, Florida; phone: (954) 825-3226; e-mail: sales@EsrmComm.cc; or website: www.esrmphones.com.