# RADIO SELECTION GUIDE

All bands have advantages for specific applications. As a rule, the higher the frequency, the better the in-building penetration. However, as you increase in frequency, you will decrease in range. VHF frequencies (136-174) are better suited for outdoor applications where maximum range is required with little to no obstructions. UHF and the 800 /900 MHz frequencies are better suited for indoor applications or environments with obstructions. VHF and UHF frequency bands are typically used for conventional two-way radios systems, while 800 / 900 MHz frequency bands are commonly used for trunking two-way radio systems.

#### **FEATURES**

A wide variety of features are available to help increase the efficiency, productivity and safety of your workforce. Efficiency/productivity features include integrated data applications that increase a radio's capability beyond voice communication, and telephone interconnect, which enables radios to talk with a telephone PBX system. Safety features include emergency notification for use during urgent situations and intrinsically safe certifications for hazardous work environments.

# **TWO-WAY RADIO FEATURES**

#### **INTRINSICALLY SAFE**

Intrinsically Safe is a designation that affirms a portable radio, with an attached certified battery, is safe for use in locations where flammable gas, vapors or combustible dust may be present according to the Division, Class and Group for which it has been approved.

### TELEPHONE INTERCONNECT

Telephone Interconnect is a feature that enables a radio system to be connected to a telephone PBX system, which allows radios to make phone calls using the radio keypad.

# **TECHNOLOGY**

Two-way radios have traditionally used analog technology. Digital technology is the next generation of two-way radio and offers several advantages over analog, including clearer audio, integrated data applications, 40% longer battery life and increased capacity.

# **TEXT MESSAGING / GPS**

Using digital technology, Text Messaging communicates between radios, radios and dispatch systems, and radios to any emailcapable device. Also using digital technology, GPS enables location tracking of vehicles and personnel in outdoor environments.

# THIRD PARTY DATA APPLICATIONS

Third Party Data Applications expand the functionality of digital radios by enabling customized applications to be built for your unique business needs, including dispatch solutions, work order ticket management, system monitoring and much more.

# **TRUNKING**

Trunking is a radio system configuration that uses a control channel to efficiently organize the radios and conversations on your radio system. This enables a large number of radio users to operate on the same system.

### **EMERGENCY CALL**

Emergency Call allows a radio user, with the push of a button, to send a distress message to all other radio users to indicate an emergency and be given priority to talk.

