

# DTR410™

## Digital On-Site Two-way Radio



### Key Features:

900 MHz ISM License-free Band

Frequency Hopping Spread Spectrum (FHSS)

Digital One-to-Many Group Call

Digital One-to-One Private Call

Public Group Call:  
Up to 25 public groups selected  
from 50 public group IDs

Private Reply with a group call

Public Group Call Name Aliasing:  
Via optional Mini Keyboard

Rugged, compact polycarbonate  
housing with rubber overmold for  
comfort. 5.2 x 2.3 x 1.4 inches

Meets Military 810 C, D, E,  
and F Specifications for shock,  
vibration, water, dust and  
temperature extremes

2-Pin Audio Accessory Jack:  
With captive connector cover

Connector Programming Interface:  
With captive connector cover

Lithium Ion Battery:  
Up to 15 hours of operation per full charge

Coverage:  
Up to 300,000 square feet or 25 floors\*

Full-graphic backlit display  
with contrast adjustment  
and backlight timer

Battery Gauge

Daily Alarm

Caller ID

Recent Call List:  
Last 20 transmissions

DTR Short Messaging Service:  
10 pre programmed messages and  
10 programmable messages with  
time and date stamping

DTR SMS Tool via PC

Unit-to-Unit Configuration Cloning:  
Via optional cloning cable

Talk Permit Tone (TFT)  
Independent Volume Control

Call and VibraCall Alert

Customer Programming Software  
(CPS)

Option to disable front dash panel  
radio programming

Remote Disable and Monitor

Over the Air (OTA) Time/Date:  
Update and contact distribution

### The Digital Difference

Digital technology. It provides coverage that is extended by 20% and up to 45% longer operation on a single charge.\* You'll also enjoy improved audio quality, but these aren't the only advantages of our new digital on-site two-way radios. No license is required to operate our 900 MHz units. And for enhanced security, we added Frequency Hopping Spread Spectrum (FHSS) with 50 non-overlapping groups. Unlike analog radios, multiple group communications can occur simultaneously on the same channel.

Because the digital technology of the DTR410™ enables each unit to have its own unique 11-digit identification, you get a new level of radio communication versatility with these calling options:

#### DIGITAL ONE-TO-MANY CALLING

Public group call—all other DTR Series™ radios on the same group ID and channel hear communications, similar to analog radios.

#### DIGITAL ONE-TO-ONE CALLING

Call and talk privately with a specific user. A private-call recipient can receive an alert—either an audible or vibrating signal. And the recipient's unit displays the caller's ID.

\*Coverage will vary based on terrain and conditions. All comparison claims made against Motorola CP100/XU2600 analog radio models. High capacity battery used.



## SPECIFICATIONS

### GENERAL SPECIFICATIONS

|   |   |
|---|---|
| Frequency:                                | 900 MHz ISM FHSS                                |
| Contact List Capacity:                    | Up to 25 Group contact list                     |
| Power Supply:                             | 3.8V $\pm$ 0.4V                                 |
| Dimensions: H x W x D                     | 132.3 x 57.2 x 35.4mm<br>5.2 x 2.3 x 1.4 inches |
| Weight:                                   |   |
| with 1200 mAh Li-ion Battery              | 200.2g (7.1oz.)                                 |
| Average Battery Life @ 5-5-90 Duty Cycle: |   |
| with 1200 mAh Li-ion Battery              | 15 hours  |
| FCC Designation:                          | AZ489FT5842                                     |
| IC Designation:                           | 109U-89FT5842                                   |

### RECEIVER

|  |                             |
|--|-----------------------------|
| Sensitivity: (3% BER Sensitivity)            | -125dBm                     |
| Frequency Stability: (-30° C to +60° C)      | $\pm$ 0.0005% ( $\pm$ 5PPM) |
| Spur Rejection:                              | 55dB                        |
| Blocking Immunity:                           |                             |
| Interferer from $\pm$ 500 kHz to $\pm$ 1 MHz | 75dB                        |
| Interferer from $\pm$ 1 MHz to $\pm$ 15 MHz  | 80dB                        |
| Audio Output: @ < 5% Distortion              | 1W                          |

### TRANSMITTER

|   |                              |
|---|------------------------------|
| RF Output:                                  | 1W                           |
| Channel Spacing:                            | 50 kHz                       |
| Frequency Stability: (-30° C to +60° C)     | $\pm$ 0.0005% ( $\pm$ 5PPM)  |
| Spurs/Harmonics:                            | 500 $\mu$ V/m (3m)           |
| Audio Response:                             | +1, -3dB                     |
| (from 6dB/oct. Preemphasis, 300 to 3000 Hz) |                              |
| Audio Distortion:                           | <3%                          |
| @ 1000 Hz, 60% Rated Max. Dev.              |                              |
| TX ACCPR:                                   | -50dBc                       |
| FCC Modulation:                             | 8-level FSK 900 MHz ISM FHSS |

#### Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured, and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

All specifications subject to change without notice.



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