

# OPUS

# D10 SERIES



D10



D12



D14

**The OPUS D10 series delivers a host of advanced DMR digital radio features and high-end performance in a compact and convenient form-factor.**

Available in three designs, the needs of every type of user have been considered.

The D10 delivers simplicity of operation whilst the D12 introduces an informative display, simple text messaging and advanced calling options. The D14 completes the range with a full keypad, comprehensive

user control and maximum flexibility.

By sharing a common chassis design and wide range of accessories, organisations can enjoy the benefits of shared battery and charging solutions, whilst providing different users with the most suitable device for their specific needs.

#### Four benefits of OPUS digital radios:

- Double channel capacity
- More effective communication
- Improved communication coverage
- Improved operating times

Advanced digital processing allows us to double the communication capacity of a conventional radio channel and allowing two simultaneous conversations.

Calls can be directed to specific groups or individual radios - ensuring privacy and minimising disturbance to other users.



#### Missed the last message...

Incoming calls are automatically recorded\* on your radio and can easily be replayed. Unless deleted, the last 256 calls or 2 hours of communication are saved.

#### Migrating from analogue...

All models can be programmed with both analogue and digital channels giving you full compatibility with legacy radio systems for painless migration.

#### Need to alert your users...

Each of the programmable buttons can be configured to send a text message to a preset group of users for fast, informative messaging.

\* These features are scheduled for future firmware release and may not be available at the time of purchase.

### **Ergonomic design and quality construction throughout...**

From the moment you pick-up your Opus D10 series radio you will notice the quality.

The convenient size. The reassuring, well-balanced weight. The tactile and well-placed, controls - comfortable for both left and right handed use.

The satisfying click as you turn on the device and the perfect torque of the channel selector - ensuring precise volume control and confident channel selection.

The quality plastics and alloy chassis are produced to high tolerances, resulting in a radio that is IP65 rated against dust and water ingress. Built to survive the rigours of everyday use in a wide variety of harsh environments.

Operationally, your system supplier has control over many of the device settings and features, allowing them to tailor each device to meet your precise requirements. Assigning different features to the controls, setting up your users and talk-groups. Even customising the radio announcements, tones and messages.

### **Enhanced Privacy**

Digital radio is inherently more secure than analogue radio. For even greater security, the D10 series features additional levels of encryption.

### **Keep your staff safe and protect lone-workers...**

With three emergency alerting methods, the D10 series is the ideal choice for vulnerable staff or those working in high risk situations.

The panic button can be used to summon help immediately, whilst the lone-worker and man-down alerts can automatically trigger emergency alerts to other users in the event of an accident or incapacity.

Display equipped models helpfully identify the user in distress.

### **Benefit from a display...**

The clear and uncluttered backlit display of the D12 and D14 give the user additional useful information, such as the channel name, caller identity and battery level.

The user is also able to access the radios menu system, to make private calls to specific radios, send text messages, change channel group (zone), view the call log and change personal device settings.



**Protect vulnerable and high-risk staff with panic button, man-down and lone worker alerting.**

## Key Features

- Compact Size
- Light weight
- Three Design Options
- Voice recording
- Man-Down Alerting
- Lone-Worker Alerting
- Panic Button Alerting
- Easy-to-read display
- Motorola 2-Pin Audio Jack
- Dual-function Programmable Function Buttons
- Simple to operate
- Six 'one touch' actions, such as sending a text or calling a specific user
- Up to 50 Preset 'Quick Text' messages
- IP65 Ingress Protection
- 'Easy Trunk' dynamic slot selection\*
- Voice announcement alerts\*
- High capacity LiION battery
- Firmware Upgradeable

## SPECIFICATIONS

### General

|                                                |                                      |
|------------------------------------------------|--------------------------------------|
| Power Supply                                   | 7.5VDC $\pm$ 20%                     |
| Frequency Coverage                             | 136~174, 400~470 MHz                 |
| Channel Spacing                                | 12.5kHz/25kHz                        |
| Channel Capacity                               | 2000                                 |
| Maximum Zones                                  | 2 (D10)/250 (D12, D14)               |
| Channels per Zone                              | 999+1                                |
| Operating Temperature                          | -30~+60°C                            |
| Dimensions (H x W x D) (with standard battery) | 96.5 x 54 x 33mm                     |
| Weight (with standard battery)                 | 245g                                 |
| Battery life (5:5:90)                          | 14hr Digital Mode/11hr Analogue Mode |

### Transmitter

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| RF Power                         | Low: 1W, High: 4W (UHF), 5W (VHF)                             |
| Frequency Stability              | 1.0ppm                                                        |
| Modulation Limiting              | $\pm$ 2.5kHz@12.5kHz                                          |
| FM Hum & Noise                   | -40dB@12.5kHz/-45dB@25kHz                                     |
| Conducted/Radiated Emission      | -36dBm<1 GHz, -30dBm>1 GHz                                    |
| Adjacent Channel Power           | -60dB@12.5kHz/-70dB@25kHz                                     |
| Adjacent Transient Channel Power | -50dB                                                         |
| FM Modulation Mode               | 12.5KHz: 11 K0F3E/25KHz: 16K0F3E                              |
| 4FSK Digital Mode                | 12.5KHz (data only): 7K60FXD<br>12.5KHz (data+voice): 7K60FXE |
| 4FSK Modulation Accuracy         | 5%@25°C, 10%@extreme temperature                              |
| Audio Response (300-3000Hz)      | +1~-3dB                                                       |
| Digital Protocol                 | ETSI TS 102 361-1, -2, -3                                     |
| Audio Distortion                 | <3%                                                           |
| Vocoder                          | AMBE+2™                                                       |
| Ext. Microphone Connector        | MOTO 2-pin                                                    |

### Receiver

|                                          |                                                                         |
|------------------------------------------|-------------------------------------------------------------------------|
| Analogue Sensitivity                     | 0.35 $\mu$ V/-116dBm (20dB SINAD)<br>0.22 $\mu$ V /-120dBm (12dB SINAD) |
| Digital Sensitivity                      | 0.22 $\mu$ V/-120dBm (BER 5%)<br>0.25 $\mu$ V/-118dBm (BER 1%)          |
| Intermodulation                          | TIA603 70dB; ETSI 65dB                                                  |
| Adjacent Channel Selectivity             | TIA603C 70dB; TESI: 70dB@25kHz<br>TIA603C 60dB; TESI: 60dB@12.5kHz      |
| Spurious Rejection                       | TIA603C: 75dB; ETSI: 70dB                                               |
| Blocking                                 | 84dB                                                                    |
| Rated Audio                              | 750mW/1000mW                                                            |
| Audio Distortion@Rated Audio             | 3%                                                                      |
| Audio Response (300-3000Hz)              | +1~-3dB                                                                 |
| Conducted Spurious Emission<br>ETS300086 | -57dBm<1GHz, -47dBm>1GHz                                                |

**Contact your local Opus dealer for further information:**