

**simocoXd**  
CONNECTIONS THAT COUNT

# SDP600 DMR DIGITAL PORTABLE



# // DMR Portables

Simoco range of DMR portables offer best in class radio communications in the most hostile environments, with a market-leading feature set including integrated intelligent man-down, Bluetooth & Full-Duplex voice, leveraging the full benefits of open interoperability, clarity and messaging inherent in Digital radio.

Offering full-keypad functionality for telephony, complex groups, advanced data messaging and a total of 12 programmable function keys, our high-end portable is ideally suited to organizations with complex operational needs.

For users with less complex needs the SDP650 offers all the benefits of Simoco Xd digital radio in a cost-effective, simply managed unit, which still offers a high degree of programmability, but with a simpler user-interface.

## DIGITAL, INTEROPERABLE AND COST-EFFECTIVE

The DMR standard cost effectively offers the benefits of a digital air interface, including spectral efficiency, quality audio to the edges of reception, enhanced battery life and certified interoperability.

Combined with Simoco's experience in high end digital portable radios and all IP voice networks, the DMR standard has allowed us to apply our extensive experience of digital mission critical radio to more cost-effective applications.

As members of the DMR Association Simoco continue to work on the further enhancement of the standards to enhance features and choice, and maintain interoperability between manufacturer's equipment.

## ROBUST IP67 RADIO

Building on Simoco's global experience of providing systems in mining, oil & gas, emergency services and utilities, our portables are constructed in a strong and robust chassis offering IP67 protection against dust and water ingress for use in hostile environments.

## INTUITIVE USER INTERFACE

With a menu system designed around a typical mobile phone interface, users can quickly access the full benefits of DMR with a minimum amount of training, allowing staff to quickly be operationally effective. Customization of programmable keys lets system owners closely match the radio functionality to organizational processes.

A comprehensive range of accessories from traditional remote speaker-mics to unobtrusive surveillance kits are available to complement the use of the radio.

## FULL DUPLEX CALLING

Full-duplex calls allow for natural and intuitive communications without the need to Push-To-Talk, which up-until now have only been available on Tetra high-end radio systems. This is a benefit of DMR's TDMA approach, uses no more radio resource than a Push-To-Talk Simplex call and has potential to reduce airtime requirements.

Full-duplex conversations are used for quick and clear understanding when communicating with a radio dispatcher or via telephone systems and can also enhance individual radio-to-radio calls. In high-pressure situations this reduces the risk of miscommunication.

## GPS & INTELLIGENT MAN DOWN

For the protection of lone-workers and users in hazardous situations, the combination of GPS with Intelligent Man-Down or Lone-Worker Applications allows fast alerting of problems and fast response, sending messages to other radios or control room applications.

## BLUETOOTH

Bluetooth enhances the radio with further expansion options such as audio accessories and data connectivity.

# // Features

## SHARED FEATURES

- Integrated Man Down - motion and positional sensor for full employee safety
- IP67 performance for best in class resistance to water and dust
- Ear-piece speaker for full-duplex calling mode
- Bluetooth, enhances the radio with wireless accessories and applications
- Integral GPS Antenna for dedicated satellite performance placed optimally within the radio
- High output main speaker for loud & clear digital audio
- 7-colour LED with all-round viewing for clear indication of radio status
- Easy access to emergency button for no-doubt notification
- Ergonomic push-to-talk
- Selector knob enhances use ability, for control of volume and brings smart-phone speed-scrolling to the radio
- IP67 rated side-connector
- Battery life 40% greater than equivalent analog and FDMA technologies

## FEATURES - SDP660

- Multiple programmable buttons, from side function keys to main keypad for ultimate customization
- Intuitive keypad
- Full color display with intuitive interface

## FEATURES - SDP650

- Simple display for easy single-word channel identification
- Two side programmable keys and two front programmable keys
- Easy access up-and-down channel change

## STANDARD PACKAGE INCLUDES:

- Antenna (2 types available per band)
- Single unit charger
- Standard battery
- Belt clip
- Quick reference guide
- 2-Year standard warranty



SDP660

SDP650

# // Simoco Xd - Specifications

## GENERAL

Frequency	AC (136MHz-174MHz), TU (400-480MHz)
Dimensions	5.39 x 2.52 x 1.42 in
Weight (with standard battery)	13.23 ounces
Battery Life (with standard battery)	13 hours
Power Supply	7.2V nominal
Channel Spacing	12.5kHz, 25kHz
Frequency Stability	± 2ppm
Channel Capacity	2000

## TRANSMITTER

RF Output Power	0.5W, 2.5W, 5.0W (programmable)
Modulation Limiting	+/-2.5 @ 12.5kHz, +/-5.0 kHz @ 25kHz
FM Hum and Noise	40dB (TIA-603-B)
Conducted / Radiated Emission	-36dBm
Adjacent Channel Power	-60dBc @12.5kHz
Audio Response	+1/-3dB (analog)
Audio Distortion	3% (TIA-603-B)
Digital Vocoder Type & Protocol	AMBE+2 half rate

## RECEIVER

Analog Sensitivity	-117.5dBm (12dB SINAD)
Digital Sensitivity	3dBμV (1% BER)
Intermodulation	65dB (ETS086-1)
Adjacent Channel Sensitivity	60dB @12.5kHz (ETS086-1)
Spurious Rejection	70dB (ETS086-1)
Hum and Noise	40dB (TIA603-B)
Audio Response	+1/-2dB (0.3-2.55kHz analog)
Conducted Spurious Emission	-57dBm

## ENVIRONMENTAL

Storage Temperature	-40°F to +176°F
Operating Temperature	-22°F to +140°F
IP Rating / Humidity	IP67 (IEC60529)

## OPTIONS

GPS	L1, TTFF < 60s
Bluetooth	Class 2

All specifications are subject to change without prior notice.



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For more information please contact your local Simoco Authorized Dealer: