SDM730
MOBILE RADIO

The Simoco Xd SDM730 is a digital mobile radio terminal capable of operating across multiple modes, including analogue conventional, digital conventional (DMR Tier II), digital trunking (DMR Tier III) and MPT.

Best in class sensitivity ensures crystal-clear communications in fringe areas while full duplex calling capability, allows for enhanced communications between office and field staff. Additional features include GPS and a rich Application Programming Interface (API) capable of delivering third party applications into the hands of your operational teams.

The industrial temperature specification, military test specs, IP 54 rating, noise reduction and 5W audio level mean it is well suited for communication in harsh environments.

The SDM730's ability to allow the user to operate across a variety of network signature modes means it is not only a safe and future-proof investment, but also provides a cost effective and flexible migration path for organisations managing the transition from analogue to DMR digital.

Features

- Four operating modes - analogue conventional, digital conventional (DMR Tier II), digital trunking (DMR Tier III)* and MPT*
- Available in VHF and UHF frequency bands
- Exceptional RF performance – exceeds ETSI and TIA-603 specifications
- 51mm Transflective TFT LCD display
- Text and status messaging
- Fully compliant with ETSI DMR standards
- MIL-STD-810 & IP54
- Single frequency mode
- Market leading 1.8W audio output
- -121dBm receiver sensitivity (typical) – increase coverage area and improve audio quality
- DTMF dialing
- Group, emergency, priority and all-calls
- Authentication
- Supports lone worker alerts

Optional features

- AES encryption 256 bit*
- Full duplex calls
- GPS

*software license required

Secure. Reliable. Adaptive.

General Specification

Frequency Bands	VHF:136–174MHz UHF:400–470MHz
Channel Capacity	1024
Channel Space	12.5/25kHz
Dimensions (H x W x D)	60x174x190 mm
Weight	1500g
LCD	71 mm TFT LCD (320x240 pixels, 262k colors)
Operating Voltage	DC 13.6V Nominal DC 10.5-16V Extreme
Current Drain (Transmit)	8.7A (45 W) 7A (25 W) 4A (5 W)
Model Variants	SDM730 up to 45 W with GPS and Full Duplex (Tx power to be reduced in accordance with local regulations)(Bluetooth available on request)

Receiver Specification

Digital Sensitivity	Typical: -121dBm/BER 5% Typical: -118dBm/BER 1%
Analogue Sensitivity	Typical: -121dBm/12dB SINAD
Intermodulation	>75dB (TIA603) >70dB (ETSI)
Blocking	>95dB (TIA603 & ETSI)
Spurious Response Rejection	75dB (TIA603 & ETSI)
Adjacent Channel Selectivity	70dB @ 25kHz (TIA603&ETSI) 60dB @12.5kHz (TIA603&ETSI)
Conducted Spurious Emission	-57dBm (<1GHz) -47dBm (>1GHz)
Rated Audio Power Output	5W (Full Duplex) 6.2W (Half-Duplex)
Rated Audio Distortion	3% (Analogue) 5% (Digital)
Hum and Noise	48dB @ 25kHz Analogue 42dB @ 12.5kHz Analogue 55dB @ Digital
Audio Response	+1 ~ -3dB
Digital Vocoder Type	AMBE+2
Digital Protocol	ETSI-TS102 361 -1, -2,-3,-4

Transmitter Specification

Frequency Stability	0.5ppm
RF Power Output	Selectable levels; 45/25/5 W (High/Medium/Low)
Digital Modulation	7K60FXD (Data Only) 7K60FXE (Data and Voice)
Analogue Modulation	16K0F3E @ 25kHz 11K0F3E @ 12.5kHz
Adjacent Channel Power	70dB @ 25kHz 60dB @ 12.5kHz
Conducted and Radiated Emission	-36dBm (<1 GHz) -30dBm (>1 GHz)
Transmission Deviation limits	5kHz @ 25kHz 2.5kHz @ 12.5kHz
Audio Distortion	3% (Analogue) 5% (Digital)
Audio S/N	48dB @ 25kHz Analogue 42dB @ 12.5kHz Analogue 55dB @ Digital
Audio Response	+1 ~ -3dB

Reliability

Operating Temperature	-30 – +65ºC
Storage Temperature	-40 – +85ºC
Dust & Water Intrusion	IP54
Environmental Standards	MIL-STD-810 C/D/E/F/G Standard
ESD	IEC 61000-4-2 (1evel 4) ±8kV (Contact). ±15kV (Air)

GPS

TTFF Cold Start	<120s
TTFF Hot Start	<10s
Horizontal Accuracy	<10m
Acquisition Sensitivity	<-140dBm
Tracking Sensitivity	<-152dBm

All specifications are subject to change without prior notice.

Standard Accessories

Mounting bracket
7A0CM02S564

Palm Microphone
7A0CM02S564

Power Cord
7A0DC000Z00