SD630K-Ex F4 Explosion-Proof DMR Radio

DMR Radios | Model: SD630K-Ex F4

Intrinsically safe digital communications for explosive atmospheres.



Key features

- Intrinsically safe: Ex ib IIC T4 Gb / Ex ib IIIC T130°C Db (Zone 1 / Zone 2)
- Full keypad with 1.8-inch color LCD — glove-friendly operation
- 1024 channels (16 zones × 64)
- IP67 / IP68 waterproof and dustproof
- MIL-STD-810 and GJB150A-2009 rugged build
- Mandown and emergency alarm
- DSP noise reduction with loud audio
- Remote stun / kill / activation, alarm and monitor
- Output limited to ≤ 2 W for intrinsic safety
- Optional AES256 encryption, GPS/BDS and voice recording

Specifications

Frequency range	VHF 136–174 MHz · UHF 350–400 / 400–470 / 450–520 MHz
Channel capacity	1024 channels (16 zones × 64 channels)
Display	1.8-inch color LCD · full keypad
Channel spacing	12.5 / 25 kHz
Operating voltage	DC 7.4 V ± 10%
Battery	2000 mAh explosion-proof Li-Ion pack
Ingress protection	IP67 / IP68 waterproof & dustproof
Gas explosion protection	Ex ib IIC T4 Gb (Zone 1 / Zone 2)
Dust explosion protection	Ex ib IIIC T130°C Db
Military standards	MIL-STD-810 C/D/E/F/G · GJB150A-2009
ESD protection	IEC 61000-4-2 (level 4)
Operating temperature	−20 °C to +60 °C
Dimensions · Weight	120 × 55 × 35 mm · 320 g (excluding protrusions)
RF power output	≤ 2 W (intrinsically safe limit)

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FM modulation	11K0F3E @ 12.5 kHz · 16K0F3E @ 25 kHz
Modulation (4FSK)	12.5 kHz data 7K60FXD · data & voice 7K60FXW
Adjacent channel power	≤ −60 dB @ 12.5 kHz · ≤ −70 dB @ 25 kHz
Modulation limiting	±2.5 kHz @ 12.5 kHz · ±5 kHz @ 25 kHz
TX — Audio distortion	≤ 3%
Spurious emission	≤ −36 dBm (< 1 GHz) · ≤ −30 dBm (> 1 GHz)
TX — Signal-to-noise ratio	≥ 40 dB @ 12.5 kHz · ≥ 45 dB @ 25 kHz
Digital vocoder	AMBE++ / NVOC (optional)
Digital protocol	ETSI TS 102 361-1 / -2 / -3
Sensitivity	Digital ≤ −121 dBm (BER 5%) · Analog ≤ −122 dBm (12 dB SINAD)
Adjacent channel selectivity	≥ 60 dB @ 12.5 kHz · ≥ 65 dB @ 25 kHz
Intermodulation rejection	≥ 65 dB
Blocking	≥ 84 dB
Spurious response rejection	≥ 65 dB
Audio output power	1 W ± 0.1 W / 16 Ω
RX — Audio distortion	≤ 3%
RX — Signal-to-noise ratio	≥ 40 dB @ 12.5 kHz · ≥ 45 dB @ 25 kHz
RX — Audio response	+1 ~ −3 dB
Compatible models	To be confirmed
Certifications	Intrinsically safe circuit per GB/T 3836.1-2021 / GB/T 3836.4-2021, CCC certified — Ex ib IIC T4 Gb · Ex ib IIIC T130°C Db; MIL-STD-810 C/D/E/F/G · GJB150A-2009; ESD IEC 61000-4-2 level 4

Notes: specifications are taken from the manufacturer's product documentation supplied for this model. Certifications are listed only where that documentation states them; “To be confirmed” means not yet confirmed, not a claim. No price or minimum order quantity is stated in this datasheet — please send an inquiry for pricing, MOQ and samples. SafePTT supplies radios under its own brand from partner factories.