

The SRP9180 has been designed to meet the exacting and demanding needs of mission critical users. Coupled with the functionality and flexibility that only Xmode can deliver, this is the radio to meet current and future needs. The flexibility and reliability of the SRP9180 will meet the challenges of demanding environments.

Features

- Unique Xmode software and configuration upgradability, allowing operation on analogue, MPT1327 trunking, P25 conventional and P25 trunking systems.
- Ruggedized robust construction for demanding field use.
- Bright, easy to read display with ergonomic radio controls for operator convenience.
- IP67 ingress protection against dust and water immersion.
- DES-OFB and AES Digital encryption. Custom encryption schemes can be supported.
- Programmable function buttons and parameters allow radios to be tailored to exact requirements.
- Safety and emergency functions such as Lone Worker, Stun,
- GPS/Man Down and Emergency Alarm.
- Multi-vendor compatible accessory connector supports current generation or legacy accessories.
- AMBE+2 Vocoder for improved voice clarity.



General Specification

Frequency Bands*	AC (136 - 174 MHz) TU (400 - 480 MHz) UW (440 - 520 MHz)		
Dimensions (HxWxD)	147 mm x 63 mm x 36 mm		
Weight	408g (with 3000 mAh battery)		
Power Supply	Li-ion 2200 mAh or 3000 mAh		
Battery Life	>13 hours, high transmit power 3000 mAh battery, 90:5:5 duty cycle		
Channel Stability	<1.5 ppm		
Display	102 x 64 pixels		
Switching Bandwidth	Full band		
Modulation	Pre-emphasised FM, C4FM		
Conformance	EN 300 086, EN 300 113, EN 300 219, EN 300 489, EN 60950, AS4295, FCC, IC		
Environmental Protection	IP67		
Environmental Standards	MIL-STD-810 F	Method	Procedure
	Low Pressure (Altitude), Storage	500.4	I
	Low Pressure (Altitude), Operational	500.4	II
	High Temp, Storage	501.4	I
	High Temp, Operating	501.4	II
	Low Temp, Storage	502.4	I
	Low Temp, Operating	502.4	II
	Thermal Shock	503.4	I
	Solar Radiation	505.4	I (A2)
	Relative Humidity	507.4	
	Dust	510.4	I
	Sand	510.4	II
	General Vibration: Truck/trailer/tracked - restrained cargo	514.5	I Cat 4
	General Vibration: Minimum Integrity	514.5	I Cat 24
	Shock - Transit Drop	516.5	IV
Operating Temperature	-30 °C to +60 °C		

Transmitter Specification

Power Output	3 levels programmable 0.5 - 5 W
Audio Distortion	<3 % at 1 kHz, 60% deviation
Audio Frequency Response	+1 dB to -3 dB of pre-emphasised 300 to 3000 Hz on 25 kHz Channel (300 to 2550 Hz on 12.5 kHz Channel)
Tx/Rx switching time	>40 dB (12.5 kHz); >45 dB (25 kHz)
Hum and Noise	70dB @ 25kHz 60dB @ 12.5 kHz

Receiver specification

Sensitivity	>-117.5 dBm for 12 db SINAD >-119 dBm for 5% BER
Selectivity	>73 dB (25 kHz) >65 dB (12.5 kHz)
Intermodulation	>70 dB
Audio Frequency Response	+1 dB to -3 dB of de-emphasised 300 to 3000 Hz on 25 kHz Channel (300 to 2550 Hz on 12.5 kHz Channel)
Audio Output	500 mW into 16 Ω @ <5% distortion
Blocking	>95 dB at +/- 1 MHz
Hum and Noise	>40 dB (12.5 kHz); >45 dB (25 kHz)

Analogue Conventional Operation

Operation	Single and two-frequency simplex 1000 channels 240 scan / vote groups (SRP9180), 200 channels (SRP9170)
Signalling	CTCSS, DCS, FFSK, DTMF, Sequential Tone (selcall)

Analogue Trunked Operation

Operation	Two-frequency simplex in MPT 1327 trunked systems
Number of Channels	1024 trunked channels in 50 sub bands
Network Capability	UK – MPT1343 Germany – Chekker (Regionet 43) France – 3RP (CNET2424) Netherlands – Traxys (NL 1343) Australia – Multiax, MPT1343

P25 Operation

• 40 zones • 1500 channel pool • 5 Trunking systems • Scanning
• Voting • DES OFB and AES Encryption** • Individual Calls •
Emergency call • Analogue mode including scrambler • CTCSS,
DCS, DTMF • AMBE+2 Vocoder

* Not all combinations of frequency bands and options are permissible for every market area. Specifications based on standard operating conditions. **AES encryption subject to export controls.