

# **SIMOCO SRP9100 SERIES OF PORTABLE RADIOS**

*Innovative Portable Radio Communication Solutions*



*Designed & Manufactured by*

 **TMC Radio**



# ***SIMOCO SRP9100 Series Portable Radios by TMC Radio***

## **Innovative Communications**

Today's public safety and service organisations increasingly depend on efficient mobile communication solutions. These solutions are essential for linking and supporting deployed staff in business, government, transport, distribution, security, manufacturing, public safety and emergency services.

From the simplest voice communication application to the most demanding system requirement, the SRP9100 family of portable radios can provide a reliable solution.

Designed around DSP technology, the SRP9100 is a highly configurable radio with many radio functions such as channel bandwidth and audio processing defined by software. This architecture allows a path for future functionality or application specific upgrades.

Incorporating full function dual mode capability, users can roam between local PMR and MPT1327 trunked systems.

The SRP9100 user interface has been designed with a simple and intuitive menu structure, requiring a minimum of user training. The SRP9100 now shares much of the SRM9000 mobile series functionality.



## ***SIMOCO SRP9100 range offers you:***

### **An integrated family of conventional, trunked and Dual Mode Portable radios**

#### **Improved Communication**

Radio communications do not always take place in ideal conditions. The local environment may be noisy from machinery or temperatures may be extreme. The SRP9100 series optimises transmitted voice intelligibility with DSP speech processing to help minimise ambient noise.

#### **Reliability**

Radio users operating in demanding situations depend on equipment that will provide reliable communications when needed. The SRP9100 series with its enhanced battery life and power saving options is always ready for your important message. Mechanical robustness is achieved with a rugged ABS case over an internal alloy chassis.

#### **Flexibility**

A comprehensive Field Programmer (FPP) provides the radio with an enormous range of configurable options for Signalling, Channel Options and Key Functions. The same FPP is used for both SRP9100 and SRM900 with both radios now sharing common functionality. The radio has seven customisable keys, ensuring particular system functions are readily accessible from the radio user interface. The SRP9100 series is supported by a wide range of accessories to cover almost any users operational need.

#### **Ease of Use**

The Portable has been designed and developed with input from our customers who depend on human factors for comfort, efficiency and ease of use. The shape of the radio has been designed for easy reach of PTT and function buttons. Displayed information is communicated to the user via a two-section display with scalable text and icons. Important information is displayed in large fonts for easy readability.

#### **Communications Experience**

Benefits of TMC Radio's years of experience in mobile communications together with our capable design team have resulted in a leading edge radio product.



# SRP9120

## Conventional/ Trunked/ Dual Mode Configuration

### Efficiency on the Move

A robust Portable Radio for the user who requires high performance and reliability with simplicity of use.

### SRP9120 Features

- The Portable has a large easy to read Alphanumeric 12 character text LCD display that supports up to 200 channels.
- Seven programmable function buttons.
- Customisable menu system.
- In PMR mode 100 Scan or Vote groups.
- CTCSS, DCS signalling for quiet operation.
- Digital Signalling Processor (DSP) technology for software defined radio channel modulation and channel definition.
- Simple encryption standard feature.
- Large range of ancillaries including speaker mic, headsets, covert kit, chargers and battery options.
- Better than 12 hour endurance with 90:5:5 usage and high capacity battery. The economiser further increases battery life.
- Intuitive radio configuration programmer.
- In Trunking mode the SRP9120 has the capability to store up to 2 network or personality configurations.
- Enhanced Selcall for options such as lone worker, stun and emergency alarm.



# SRP9130

## Safety First

### Smart Dual Mode Radio for advanced applications.

A fully featured Portable radio designed for professionals who rely on quality performance for high security or critical applications. It packs a host of advanced features into a compact easy to use unit.

The SRP9130 incorporates all the features of the SRP9120, with the addition of so many more outstanding advanced features:

### SRP9130 Features

- The SRP9130 has a full 12-button dialling keypad.
- Up to 1000 channels in conventional mode. Trunked call addresses can be alpha tagged for phonebook.
- Touch tone signalling for telephone dialling (DTMF)
- In PMR mode 240 Scan/Vote Groups for channel clarity and efficient high quality communications.
- 250 entry Selcall Phonebook list to match name to Selcall codes.
- Enhanced Selcall for options such as lone worker, stun and emergency alarm.

## SRP9130 Data Features

- 1200/2400 Baud Internal Modem with enhanced FFSK signalling for simple data messaging.
- The SRP9130 Text Messaging allows you to transmit and receive status messages easily and securely.
- Highly versatile Selcall signalling system.
- SRP9130 users can make telephone calls via private (PABX) and public (PSTN) exchanges on suitable equipped networks.



## SRP9100 Series Accessories

### Battery Chargers:



Single Pocket Charger



Two Pocket Charger

### Six Pocket Charger

Six pockets provided, to charge either batteries, radios or a mixture of the two



### Batteries:

- NiCad (1600 mAh)
- NiMh (2100 mAh and 2700mAh)

### Audio Accessories:

Speaker Microphone



Medium Duty Microphone



Headset



### Other Accessories:

- Leather carrying cases
- Lone Worker.

# Technical Data

## General Specifications

Channel Spacing	12.5, 20 or 25kHz programmable, 10kHz optional
Frequency Bands	EO 66 – 88 MHz AC 136 – 174 MHz KM 208 – 245 MHz R1 335 – 375 MHz TK 400 – 450 MHz UW 440 – 500 MHz WR 470 – 530 MHz
Switching Bandwidth	Full band
Modulation	Pre-emphasised FM
Operating Temperature	-30°C to +60°C
Antenna Impedance	50 Ω
Environmental Protection	IP54
Power Supply	NiCad Battery 1600mAh; NiMH 2100mAh or 2700mAh
Duty Cycle	>12 hours, high transmit power 2700 mAh battery, 90:5:5 duty cycle
Dimensions	147mm (H); 68mm (W); 46mm (D)
Weight	480g (with 1600mAh battery and antenna)
Compliance	EN 300 086 EN 300 113 EN 300 219 EN 301 489 AS4295

## Transmitter

Power Output	0.5, 1, 2.5, 4 or 5W 2 levels programmable
Audio Distortion	<3% at 1KHz, 60% deviation
Audio Frequency Response	+1db to -3db of pre-emphasised 300 to 3000Hz on 25kHz Channel 300 to 2550Hz on 12.5kHz Channel
Transmit Receiver Time	<25ms
Hum and Noise	>40dB (12.5kHz); >45dB (25kHz)

## Receiver

Sensitivity	0.30μV for 12dB SINAD
Audio Output	500mW into 16Ω at <5% distortion
Selectivity	>73dB(25kHz) >65dB(12.5kHz)
Intermodulation	>65dB(ETS method)
Audio Frequency Response	+1db to -3dB of de-emphasised 300 to 3000Hz on 25kHz Channel 300 to 2550Hz on 12.5kHz Channel
Blocking	>95dB at +/- 1MHz
Hum and Noise	>40dB (12.5kHz); >45dB (25kHz)

## Conventional Operation

Models	SRP9120 and SRP9130
Operation	Single and two frequency simplex
Number of Channels	SRP9120 – 200 channels SRP9130 – 1000 channels 240 scan/vote groups
Signalling	CTCSS, DCS Sequential Tone (selcall) FFSK, DTMF

## Trunking Operation

Models	SRP9120 and SRP9130
Operation	Two frequency simplex in MPT1327 based trunked systems
Number of Channels	1024 trunked channels in 50 sub bands 1000 (non-trunked) conventional channels SP9130
Signalling	1200/2400 baud FFSK
Network Capability	UK – MPT1343 Germany – Chekker (Regionet 43) France – 3RP (CNET2424) Netherlands – Traxys (NL 1343) Australia – Multiax, MPT 1343

Note: Specifications based on standard operating conditions.  
Not all combinations of frequency bands and options are permissible for every market area.



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