

SIMOCO wireless solutions

SRB250 P25 Rapid Deployment Repeater

The Simoco SRB250 is a transportable rapid deployment repeater that is designed to provide radio coverage to a critical incident, emergency situation or extends existing Public Safety systems, either analogue or APCO Digital P25. It provides deployable "on demand" coverage for vehicle and portable radio users in VHF or UHF. It is an ideal solution to keep public safety and government agencies connected.

Features

- Ruggedised P25 repeater
- Rapid deployment
- P25 transparent repeat function, repeats encryption intact, regenerates P25 frames
- LiFePO₄ (LFP) batteries for lightweight endurance and optimum voltage for radio modules
- Inbuilt duplexer
- Simple deploy and repeat mode (single button, closed box)
- High duty cycle operation with open lid, generously heat sinked power amplifier
- 25 Watt transmit power
- Battery state of charge LED indicators
- Customisations available
- Environmentally protected
- -20 to +60 degrees operation
- Inbuilt AC mains battery charger
- Link into a GRN and integration with other digital operators or systems

Optional Features

- External LiFePO4 (LFP) 60 Amp Hour battery pack in ruggedised case
- Link Radio in ruggedised field enclosure
- Case colours and custom labeling (subject to availability)
- Local microphone



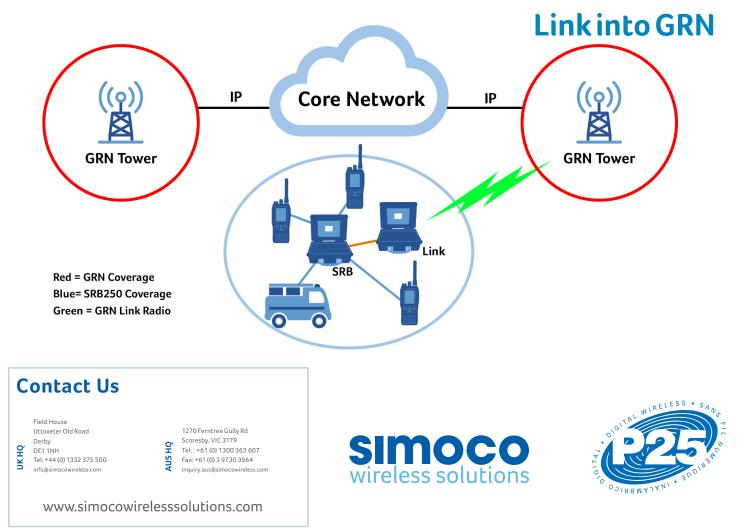




General Specification		Transmitter Specification	
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Frequency Bands	AC (136-174 MHz) TU (400-480 MHz) UW (440-520 MHz)	Duty Cycle	25 W (lid open): 45 mins Tx, 15 mins Stby ∂ 25° C 25 W (lid closed): 20 mins Tx, 20 mins Stby ∂ 25°C
Channel Stability	<1.5 ppm	Discussion of Nucleon	30 mins Tx, 30 mins Stby @ 25 °C
Channel Spacing	12.5 kHz	Hum and Noise	>40 dB
Zones/Channels	40 Zones/1,500 Channels	Modulation	C4FM, Analogue FM
Dimensions (LxWxD)	502 x 401 x 188 mm	Transmitter Power	3 levels programmable 1-25 W
Weight	14 kg	Transmit Rise Time	<25 ms
Power Source	Internal batteries Optional external battery box Option external power supply	Receiver Specification	
		Audio Output	4W @ <5% distortion
Internal Batteries	1 or 2 LiFePO₄ 12.8 V DC 7.5 Ah	Blocking	>95 dB at +/-1 MHz
Internal Battery Life	5 W Tx: 22 Hours	Hum and Noise	>40 dB
(90% Stby 10% Tx)	25 W Tx: 14 Hours	Intermodulation	>70 dB
Internal Charger	Single battery: 90% charge <2hours Dual battery: 90% charge <4 hours (from fully discharged)	Selectivity	>65 dB
		Sensitivity	<0.3 µV for 5% BER
Conformance	AS4295, FCC, IC	Internal Duplexer Specification	
Environmental	IP55	Insertion Loss	<1.5dB (typical)
Protection		Tx/Rx Split	VHF: 4.7-7 MHz
Operating Temperature	-20° C to +60° C operating		UHF: 5.2-10 MHz
P25 Operation		Antenna Connector	Type N

- Transparent P25 digital repeater DES OFB and AES 256 Encryption* Encrypted repeat or local encrypt/decrypt in repeater

*Encryption subject to export controls



Specifications based on standard operating conditions. Not all frequency bands are permissible for every market area. See Simoco Wireless Solutions Product Catalogue for a full list of specifications. All specifications are subject to change without prior notice. Simoco Wireless Solutions does not accept liability for any error or omission in this document.