



The SRL-35 is an all-weather UHF base radio with configurable high power output (up to 35 W1) and a full 70 MHz tuning range.

The SRL-35's channel spacing can set to 12.5, 20 or 25 kHz with complementary protocol support to satisfy high-efficiency narrowbanding² requirements. Interoperability is provided for several third party radios protocols including Satel, PDL, and TrimTalk³ formats.

The SRL-35 uses a Forward Error Correction (FEC) approach which ensures dependable communication links and a minimum of data loss. At full power, it is possible to see communication distances of up to 80 km.

The SRL-35 can also function as a repeater increasing your operating range.

Transceiver	
Frequency Range	403 - 473 MHz
Tuning Range	70 MHz
Channel Spacing	12.5 / 20 / 25 kHz (SW selectable)
Frequency Error Tolerance	< 1 kHz
Type of Emission	F1D
Communication Mode	Half-Duplex
Transmitter	
Carrier Power	10, 20, 25, or 35 W / 50 ohm (default) 5, 10, 20 or 25 W / 50 ohm (option¹)
Carrier Power Stability	+2 dB / -3 dB
TX Duty Cycle ⁴	100% (22°C / 35°C) 40% 35 W 20 min / 13 min No limit 10 W No limit / 50 min No limit
Receiver	
Sensitivity	< -114 dBm (BER < 10 E-3) ⁵
Co-channel Rejection	> -12 dB
Adjacent Channel Selectivity	> 47 dB at 12.5 kHz / > 52 dB at 25 kHz
Intermodulation Attenuation	> 60 dB
Spurious Radiation	< 2 nW
Data Modem	
Interface	RS-232
Interface Connector	IP67, 8-pin ODU
Data Speed of RS Interface	300 - 38400 bps
Data Speed of Radio Interface	19200 bps (25 kHz) / 9600 bps (12.5 / 20 kHz)
Data Format	Asynchronous RS-232
Radio Protocols ³	Satel / PDL / TrimTalk
Environmental	
Enclosure	Aluminum
Temperature	Operating: -40°C to 75°C Storage: -40°C to 85°C
Dust / Water Rating	IP67 (NEMA 6)
Power	
Operating Voltage ⁶	9 to 16 VDC / 4-pin ODU MINI-Snap Size 1 (feeding)
Power Consumption (average)	1.8 W typical (Receive) 120 W typical (Transmit 35 W output power) 100 W typical (Transmit 25 W output power) 0.4 W typical (Sleep State)
Physical	
Dimensions (h x w x d)	189 x 138 x 71 mm (with connectors)
Weight	1.42 kg
Antenna Connector	TNC, 50 ohm, female

- 1 25 W limited output power version is available as an order option for geographical areas where regulatory restriction on output power applies
- 2 On January 1, 2013, all public safety and business industrial land mobile radio systems operating in UHF radio bands in the US must cease operating using older 25 kHz wideband technology, and begin operating using at least 12.5 kHz efficiency technology
- 3 Use of PDL and Satel protocols is recommended in applications where possible. Compatibility with TrimTalk is subject to some restrictions
- 4 The output power is automatically decreased when necessary to prevent overheating
- 5 Depends on receiver settings
- 6 ≥ +12 Vdc at 35 W output power



Specifications subject to change without notice. ©2016 Topcon Corporation All rights reserved. 7010-2144 B 2/16