PRC-434G/CS

CSAR Personal Survival Radio



Dual functionality Personal Survival Radio

The advanced PRC-434G/CS (Cospas-Sarsat) transceiver is a small but powerful long-endurance Personal Survival Radio (PSR) that provides a complete solution for military or paramilitary applications in combat and non-combat environments. With its embedded GPS receiver, large LCD display, and state-of-the-art electronics, the PRC-434G/CS assures precise global positioning, easy navigation and extensive interrogatable two-way messaging. Fully back-compatible with all previous ASARS versions and interoperable with airborne Personnel Locator Systems (PLS) like ARS-700, ARS-700G, ARS-7000 and other NATO SAR systems, the PRC-434G/CS provides essential, quick and accurate location and rescue information for searching aircrews and land forces. All this means that regardless of survivor condition, you'll get the information you need to do the job, even in the most difficult terrain.

The PSR can be activated manually, for communication with the searching team or with other PSRs.



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Benefit From Years of Experience

A long-life, large-capacity LiMnO₂ battery pack, provides extended operation capabilities. A battery monitoring circuit, embedded in the battery pack, includes a "fuel gage" alerting the operator about the remaining capacity or hours of operation. A beacon mode allows for operation with non-SAR equipped aircraft.

Operational Highlights:

- Transponder operation, in response to interrogation with a selective call code (one million possible codes)
- GPS response to interrogations from the PLS, another PSR on the ground, or manually initiated and received from/at the PLS and/or PSR
- Navigation along 40 programmable waypoints
- Operation at two emergency frequencies (121.5 and 243 MHz)
- Transmission of GPS location data and digital emergency messages, to the ARS-7000 or at the C/S 406.XXX frequency band
- Remote activation and operation by Airborne Locator System
- Powered byLiMnO₂ battery for 30 hours, at Tx/Rx ratio of 1:10 (over 96 hours in sleep mode)
- Enhanced multi-moded waveform compatible with STANAG 7007
- Radio status indication (self-test)
- Automatic activation capability by q-switch, magnetic lanyard, water sensor
- One-hand operation
- Rotatable, inconspicuous antenna
- For customers who do not need C/S capability, we can offer the PRC-434G/SV model, which provides all the other features and characteristics.



Technical Highlights

Characteristic	Performance
Frequency Range	225-299.975 MHz + 121.5 MHz
Number of Channels	3,000 in 25 kHz steps
Cospas-Sarsat Capability	Transmission of C/S protocol (406.025 MHz)
Pre-programmed Channels	UHF: 10 + 1 guard
Non-programmable Channel	VHF: 1 guard (121.5 MHz)
Position Accuracy	GPS – C/A Code/25m
Modulation Type	AM (Voice or Swept Tone)FSK (narrow bad data)OOK, PSK for ASARS (transponder)
Transmit Power Output	0.95W (Beacon in UHF)0.95W (Voice in UHF0.1W (121.5 MHz)Adaptable power management
Sensitivity	-103 dBm
Battery Type	LiMnO ₂
Battery Life	>30 hrs. @ 1:10 T/R ratio >15 hrs. in Beacon mode @ 0°C >96 hrs. in Sleep mode
Battery Life Monitor	"Fuel-Gage" circuitry in battery pack
Display	LCD, 33x22 mm (WxH)
Water-tightness	Withstands 10m water depth immersion
Size (Battery Included)	154x85x47 mm (HxWxD)
Weight	<870 gr.
Operating Temperatures	-27°C to + 55°C



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