PRD

Personnel Recovery Device

The Personnel Recovery Device (PRD) is a compact, lightweight, Mil-Spec Personal Locator Beacon (PLB) used for signaling soldier distress. This alert and notification device is intended for use of ground forces and issued to every soldier at risk of becoming isolated, missing, detained or captured.

The PRD complies with the PLB standard and is certified as a PLB. When used domestically and in training, the device acts like a standard Cospas-Sarsat (C/S) Class-II PLB, transmitting on an assigned C/S channel within the 406.0 MHz to 406.1 MHz band.

However, unlike a PLB, the PRD has configurable parameters allowing supervisors and issuing facilities to change the mode and functionality of the device for operation in secure OTH mode using customer's proprietary/national asset waveforms, or Point to Point between the user and the recovery aircraft.

In the secure mode, the PRD transmits a digital distress message containing PRD identification information and a GPS position to remote receivers. The messages (including GPS location) are encoded to protect data from adversarial or casual interception.

Elbit Systems™
C4I and Cyber

PRD

Personnel Recovery Device

The PRD case is designed for ultimate simplicity and durability. The main housing is constructed from solid aluminum for heightened strength and rugged performance. All materials and coatings have been carefully selected to withstand the battlefield contaminants and rough conditions encountered in an operational environment.

The device uses non-rechargeable, user replaceable, lithium CR123A batteries. These batteries provide the device power during all its operation modes.

The user interface allows switching device mode, waveform parameters and device parameter settings.

Built-In-Test results retrieving and accessing production test set commands, by authorized personnel.

Technical Highlights

Transmit Frequency	360 to 425 MHz frequency range, which includes the C/S frequency band, in 1 kHz steps.
Positioning Accuracy	Better than 20 meters.
Transmit Modulation	Binary Phase Shift Keying (BPSK) with an Error Vector Magnitude (EVM) no greater than 10%.
Transmit Power	5W nominal +2dB/-7dB.
Thermal Environment	• Operation: -20°C to +55°C. • Transport/storage: -35°C to 82°C.
Battery Type	Non-rechargeable lithium batteries type CR123A or commercial equivalent.
Battery Life	More than 48 hours across the operational temperature range.
Weight	283 gr., batteries included
Size (mm)	49.5 x 114 x 37.85 (W×H×D)
Water Resistance	10 meters for 10 minutes and 1 meter for 24 hours.

Elbit Systems C⁴I and Cyber
2 Hamachshev St., Netanya 4250712, Israel
E-mail: c4icyber.info@elbitsystems.com www.elbitsystems.com

Follow us on