DC UPS System

Model Number: THRSLDUPS1001

Overview

The **DC UPS (Uninterruptible Power Supply)** ensures uninterrupted 24V DC power to mission-critical systems by bridging power outages and stabilizing voltage supply. Designed with high reliability, it integrates seamlessly with defense and industrial electronics.

With hot-swappable battery support, automatic switchover, and rugged construction, the DC UPS has been **supplied to DRDO Pune R&DE and Indian Air Force (IAF)**, proving its dependability in field deployments.

Technical Specifications

Parameter	Specifications
Input Voltage	24V DC ±10%
Output Voltage	24V DC ±2%
Continuous Output Current	5A
Peak Output Current	8A (short duration)
Backup Battery	$LiFePO_4$ / Lead Acid (configurable)
Backup Duration	30–60 min (load-dependent)
Switching Time	<10 ms
Protections	OVP, UVP, OCP, SCP, OTP
Indicators	LED status for AC/DC input, Battery, Fault
Communication Interface	RS-232 / CAN (optional)
Dimensions	(Insert actual size if available)
Weight	(Insert actual weight if available)
Operating Temperature	−20°C to +55°C

Key Features

- **Uninterrupted 24V DC output** during power failures
- **Fast switchover (<10 ms)** ensures no disruption to connected systems
- Configurable **backup battery options** (LiFePO$_4$ or Lead Acid)
- **Hot-swappable battery support** for extended uptime
- Advanced **protection circuitry** (OVP, UVP, OCP, SCP, OTP)
- Rugged IP65 enclosure, wide operating temperature range
- Proven in **defense deployments with DRDO Pune R&DE and IAF**

Applications

- Power backup for defense vehicle electronics
- Rugged controllers, communication systems, and sensors
- Industrial automation requiring high-availability power
- UAV/UGV/ROV platforms for uninterrupted operation

Note

The **DC UPS System** is part of **THRSL's standard technology suite**, designed for **plug-and-play deployment** across industries. Its successful supply to **DRDO Pune R&DE and Indian Air Force (IAF)** highlights its suitability for mission-critical applications.
Custom configurations are available for higher capacities, alternate interfaces, or specialized defense requirements.