



EPS-LP-1k5

Spacecraft power control, distribution and protection system with up to 1500 W total power.



 **ITAR-Free**

 **TRL 9**

Specifications

Total Input, Output & Battery Power	1500 W
Bus Voltage	29.7 V nominal (32 V max)
Centralised (EPS Housing) Configuration Options	1x PCU (required) 1 to 4 SRM 0 to n PDM-LP 0 to n PDM-REG 0 to 1 PDM-HP
Distributed Configuration Options	0 to n PDM-LP 0 to n PDM-REG
Communication Interfaces	CAN Telemetry & Telecommands DCL (Direct Command Line) Telecommands
Operating Temperature	-10 °C to +50 °C
Dimensions	211 x 153 x 175 mm *
Mass	3.3 kg *
Design Life	Up to 8 years LEO (20 kRad screening)

* Based on 1x SRM and 3x PDM-LP configuration

Functionality Highlights

- Spacecraft Power Cycle
- Watchdog Timer Function (1 hr to 72 hrs)
- Battery Charge Current Limiting
- Battery Under Voltage Protection (Hibernation)

Solar Regulator Model (SRM)

Topology	S3R (Sequential Switching Shunt Regulator)
1 x SRM Total Input Power	475 W at 29.7 V (16 Amax)

All Distribution Channels

Channel Protection (with overrides)	Over current Over load External Trip Input
Channel Functions	Watchdog timer Auto-retry
Redundancy	Dual Redundant

PDM-LP-752

(Power Distribution Module - Low Power)

Output Voltage	29.7 V nominal unregulated
Total Output Power	600 W
No. of Output Channels	8
Channel Configuration	1x 7 A 2x 5 A 5x 2 A

PDM-HP-50

(Power Distribution Module - High Power)

Output Voltage	29.7 V nominal unregulated
Total Output Power	150 W
No. of Output Channels	2
Channel Configuration	2x 50 A

PDM-REG

(Power Distribution Module - Regulated)

Output Voltage	5 V regulated
Total Output Power	60 W
No. of Output Channels	8
Channel Configuration	2x 5 A 6x 2 A