



Power Control Assembly

DESIGNED FOR MISSION CRITICAL APPLICATIONS

INVOCON, INC.

0324

Invocon's Power Control Assembly (PCA) provides complete power control for small launch vehicles in a robust miniature package. The PCA controls two 28V power sources for use with four power output channels. It is intended to seamlessly switch between an external power source and an on-board battery. It supports battery charging in order to simplify vehicle maintenance prior to launch. Power outputs include two switched 28V channels, one un-switched 28V channel, and a configurable auxiliary channel.

PCA Features:

- Battery input compatible with:
 - Invocon's Smart Rechargeable Battery
 - Standard rechargeable battery
- UMBI/Lanyard connection
- Health and Status analog outputs
- Un-switched 28V output
- Two switched 28V outputs
 - One has configurable over-voltage protection for sensitive loads
- 5 V or 12V auxiliary output
 - Configurable source: switched or un-switched 28V channel
 - Configurable voltage: 5V or 12V
- Internal/External power selection
 - Specifically designed to avoid dropouts when switching between internal and external power sources
- Supports Standard Sequencing Semantics
 - All Fire, No Fire, Power Backup 1, and Power Backup 2
- Supports status LED for power on indication for ground crew situational awareness.



Typical Specifications:

Electrical	
Input voltage	22.5 –34 VDC
Output Current (28V)	12A (all 28V loads combined)
Output Current (5V, 12V)	2.0A
Connectors	D-Sub (Battery, Umbi/Lanyard, Telemetry, Unswitched/Aux, Switched/Status)
Mechanical	
Size (L x W x H)	4.85" x 4.4" x 1..21" (not including connectors)
Weight	1.5 Lbs.
Case material	6061 aluminum, Alodine coated
Environmental	
Operating Temperature	-24 to 61 °C