



Remote Power Control (RPC) Rack

Remote Ground Support Equipment (RGSE)

Rugged Ground Support Equipment for Avionics and FTS

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Invocon's Remote Power Control (RPC) Remote Ground Support Equipment (RGSE) provides for power control and monitoring for Avionics or Flight Termination System (FTS) payloads. This includes system monitoring, power switching (e.g., internal/external, on/off), and battery maintenance as well as RS422 communications all through the vehicle's UMBI(s). The rack is controlled remotely via direct Ethernet connection or through a fiber optic converter for extended range.

Key Invocon RPC Rack Features:

- Rugged Shock and Water-Resistant Rack with 4" Removable Casters 27"x42"x24"(WxLxH)
- 120 VAC power
- Remote Control vis Graphical User Interface (GUI):
 - Direct Ethernet
 - Through Ethernet to Single-Mode (SM) fiber converter
- Flexible and configurable design:
 - Each RPC rack can control up to two independent Avionics systems or the two-halves of an FTS.
 - All configurations include:
 - 120 VAC Power Strip
 - Ethernet Switch and Ethernet to SM (1310nm) fiber converter.
 - 2 independent 60VDC/15A power supplies for external power and control voltages
 - 2 independent 60VDC/15A power supplies for battery charging
 - 2 configurable relay modules for control and monitoring, each with:
 - 8 ADCs for monitoring
 - 16 control relays
 - 2 power relays for external power and battery charging
 - 4 RS422 bi-directional links for communications
 - 38999 UMBI connector
 - -301 (Avionics Configuration):
 - Adds 2, 2-channel multi-mode (MM) fiber to TTL converters for telemetry bitstream
 - Adds 2, 2-channel TTL to SM fiber converters for telemetry bitstream
 - -302 (FTS Configuration):
 - Base FTS configuration setup as indicated for all configurations.
 - -303 (FTS Configuration with Battery Discharge Functionality):
 - Adds 2 battery quick-discharge passive loads with dedicated power relays
 - Adds cooling fan to support battery discharge functions
 - Custom Configurations:
 - Invocon can add or remove components/functions or reconfigure functionality to suit customer requirements. This includes configurations with an alternate 38999 UMBI connector.
- Configurable remote control software Graphical User Interface (GUI) provided at rack delivery.

