Protege DIN Rail 2A Intelligent Power Supply

The Protege DIN Rail 2A Intelligent Power Supply provides 12VDC power ideal for running security, access control or automation devices along with large numbers of Protege network powered modules in the same installation. The Protege DIN Rail 2A Intelligent Power Supply is designed for use with industry standard DIN Rail mounting.

**Feature Highlights**

- 16VAC input ideal for our range of low cost AC transformers
- 2 Form B Relay outputs that can be used as programmable outputs while the module is online within the Protege system, or as additional status outputs for monitoring battery failure/disconnection and AC failure when the module is offline or running in standalone mode
- Battery backup connection for continued power delivery in power outage conditions
- Intelligent charging algorithm monitors battery and AC supply allowing optimum performance
- Processor controlled battery level testing and indication
- Connects to the Protege module network for intelligent communication and monitoring of actual values
- High Performance 32 Bit processor
- Designed for use with Industry Standard DIN Rail Mounting

**Reliable Power**

The Protege 2A Intelligent Power Supply is capable of supplying power to a large number of smaller devices or multiple high current devices with a combined output of 2 Amps total. Additionally, a battery charging circuit current of 350mA is also provided by the module.

A continuous source of power is maintained with the inclusion of intelligent battery backup charging, optimal level maintenance and seamless switch on AC failure. The battery backup, AC status and core temperature, are constantly monitored and failure conditions are communicated to the Protege System.

**Intelligent Power Monitoring**

The Power Supply is able to relay information about critical system voltages, currents and core temperature to the Protege Controller by registering as an analog expander module on the Protege network.

The Protege Controller can then store these values in system registers that can be viewed live from the Protege software. This allows live viewing of the system voltages, currents and core temperature along with logging for review at any time.

**Communication**

Single RS-485 communication interface port used for all network communication functions and interconnection to other modules.

**Upgradable Firmware**

Utilizing the latest flash technology and high performance communication mediums, the firmware can be updated using the Loadit utility over the system module network.

*Requires a transformer (TFR-100-16 or TFR-40-16). Transformers are sold separately.
## Technical Specifications

### Power Supply

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<td>AC Input Voltage</td>
<td>16 to 16.5VAC 50-60Hz</td>
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| Operating AC Input Current    | 3.15A @ 16.5VAC when Total Combined Current = 2.5A  
                               | 2.2A @ 16.5VAC when Total Combined Current = 1.7A |
| Operating Current             | 140mA (Typical) |
| Total Combined Current        | 1.7A (Max) using a 37/40VA transformer  
                               | 2.5A (Max) using a 60VA or greater transformer  
                               | Electronically limited at 2.5A |
| DC Output                     | 12.4VDC, 1.0A (Typical) Electronic Shutdown at 1.85A |
| Battery Charging              | 350mA (Typical) |
| Battery Low                   | 11.2VDC |
| Battery Restore               | 12.5VDC |
| Electronic Disconnection      | 9.4VDC |

### DC Output

12.4VDC, 1.0A (Typical) Electronic Shutdown at 1.85A

### Battery Charging

350mA (Typical)

### Battery Low

11.2VDC

### Battery Restore

12.5VDC

### Electronic Disconnection

9.4VDC

### Communication

RS-485 Isolated Module Network

### Inputs

- Tamper: Dedicated Hardware Tamper Input
- Trouble Inputs: 8 (internal)

### Outputs

- PGM Outputs: 2 Solid State Relay Outputs, 50mA 12V Max

### Dimensions

- Dimensions (L x W x H): 78.4 x 90 x 60mm (3.08 x 3.54 x 2.36”)
- Weight: 183g (6.46oz)

### Temperature

- Operating: 0°-50°C (32° - 122°F)
- Storage: -10° - 85°C (14° - 185°F)

### Humidity

0%-93% non-condensing, indoor use only (relative humidity)