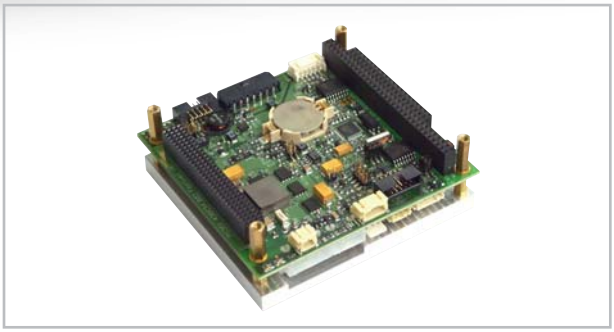
PS351 Power Supply Module



Features

- Ambient temperature monitoring, fan and heater control within programmable temperature ranges from –50°C
- System events logging with time and date reference
- Watchdog timer with output power control functions
- Automatic switching to a redundant power source
- Scheduled switching on/off
- Security functions for switched off system

Overview

PS351 is a PC/104-Plus power supply module optimized for use in unmanned systems operating in hard-to-reach areas, for autonomous systems powered from solar cell panels, for battery powered vehicle systems, for systems operating in extreme environments.

Technical Specifications

- Form-factor: PC/104-Plus (top side connection only)
- Input voltage: 10.5-36 V DC (40V abs. maximum)
- Input voltage transient protection: 3000 W
- Switched off state consumption current: 1 mA
- Input/output isolation: 1500 V
- Outputs:
  - +12V at 1.6A
  - +5V at 6A Total power 30W max.
  - +3.3V at 3A Total power 30W max.
- Overload and overheating protection
- Power circuits operating temperature range: –40°C to +85°C
- Control system operating temperature range: –55°C to +85°C
- Vibration: 5 g
- Single shock: 100g
- Multiple shock: 50g
- Control system:
  - Isolated (500V) from input and output control interface: RS232 or RS422 (38400 bit/s)
  - Programmable output voltage switch on/off schedule
  - Watchdog timer swiching the output voltage off in case of system hang-up
  - Integrated temperature sensor
  - Integrated RTC with battery backup (for scheduled operation support)
  - System events signals routed to additional connector (input voltage below the limit, switching to power backup etc.)
- Possibility to switch system events signals to IRQ5, IRQ6, IRQ10, IRQ11 interrupts of PC/104 connector
- Cold start: at temperatures below –40°C an external heater can be used to preheat the system to the specified temperature. Output voltages are switched on when the temperature reaches –40°C
- Cooling system control: additional cooling fan speed control in function of temperature
- I2C interface connector for connection of an external temperature sensor (LM77) or a redundant power source charging unit
- Dry contact external signals input with programmable assignment
- UPS function: automatic switching to an external redundant power source on main power source failure
- Input and RTC battery voltages monitoring
- Output voltages are routed to PC/104-Plus connectors as well as to additional on-board connector
- On-board LEDs can be disabled using jumpers; connectors for external LEDs

List of deliverables

- PS351 power supply module
- CD with documentation and software
- Mating cable connectors, jumpers
- Package

Ordering Information

PS351 Configuration

PS351-01 \Options

Device Type

PS351-01	5V at 6A, 12V at 1.6A, 3.3V at 3A; Input / Output isolation: 1500 V; UPS function; PC/104-Plus connectors. Control system; Heat spreading plate.
PS351-02	5V at 6A, 12V at 1.6A, 3.3V at 3A; Input / Output isolation: 1500 V; UPS function; Control system.
PS351-03	5V at 6A, 12V at 1.6A, 3.3V at 3A; Input / Output isolation: 1500 V; UPS function; PC/104-Plus connectors; Heat spreading plate.

Options

\xxx	Choose available options from the table

PS351 Available Options

Coating	
\COATED	Protective coating

Other configurations and options are available upon request.

Example

PS351-01\COATED

5V at 6A, 12V at 1.6A, 3.3V at 3A; Input / Output isolation: 1500 V;
UPS function; PC/104-Plus connectors.
Protective coating

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Product specifications are subject to change without notice

Corporate Offices

FASTWEL GROUP Co. Ltd
108 Profsoyuznaya str.
Moscow, Russia 117437
Tel: +7 (495) 232-1681
Fax: +7 (495) 232-1654
E-mail: info@fastwel.com
Web: www.fastwel.com

FASTWEL Corporation US
55 Washington street, Suite 310
Brooklyn, NY 11201
Tel: 1.718.554.3686
Fax: 1.718.797.0600
Toll free: 1.877.787.8443
(1.877.RURUGGED)
E-mail: info@fastwel.com

FASTWEL Asia
6F., No. 118, Ln.235, Baoqiao
Rd., Xindian Dist,
New Taipei City, Taiwan, R.O.C.
Tel: +886-2-8912 1938
Fax: +886-2-8912 1939
E-mail: asia@fastwel.com