

PRC1000



The **PRC1000** Programmable Relay Controller is an extremely low-power, user programmable dual-mode/dual-relay controller providing complete power control for two separate devices.

Equipped with (2) SPDT (Single Pole Double Throw) relays, individually configurable schedule timers and serial data stream triggers, the PRC1000 provides for both manual or automatic operation of any electronic equipment.

Rugged Design

While there are many types of relay controllers on the market, the PRC1000 is truly unique in both its design and function. Housed in a safe, rugged enclosure of 18 gauge cold-rolled steel, the PRC1000 is tough enough to tolerate the most rugged installation requirements. Its low profile housing and integrated mounting solution make it easy to install into any telecom closet, remote cabinet, or solar system enclosure.

Low Power Applications

With its specially designed micro-power logic, the PRC1000 helps reduce the average power consumption of any remote power or charging system. With a typical draw of less than 625uA (microAmps), and a sleeping power draw of less than 25uA, the PRC1000 can both reduce the size photovoltaic panel requirements and lengthen the battery life of any solar installation.

Flexible Applications

With the ability to individually control either of the two relays using the scheduler or plain-text commands, the PRC1000 is a perfect fit for a wide variety of remote applications, including:

- Airport and heliport lighting systems
- Access control systems
- Alarm Systems
- Cathodic protection systems
- Environmental Monitoring Equipment
- Lighted advertising signs
- Marine lighting systems
- Meteorological stations
- Seismic measurement equipment
- Solar powered artistic projects
- Street lighting
- Railway signaling
- Remote data collection systems
- Remote sensors
- Telecommunications and radio equipment
- Telemetry/SCADA systems
- Traffic management systems
- Tower Lighting and Control Systems
- TV and satellite transmitters
- Video recording equipment

PRC1000 Specifications

Configuration

Terminal Interface
AT Commands
MS Windows® Utility

Inputs

(2) Relay Outputs
Rating:
1 Amp at 120 VAC
4 Amps at 30 VDC

Interfaces

(1) RS232 DB9F DCE

Serial Port Specs

Baud: 9600 bps
Parity: None
Stop Bits: 1
Data Bits: 8

Flow Control

None

Real-Time Clock

Yes

Physical Dimensions

(H x W x D)
.95" x 2.28" x 4.38"

Weight

~ .25 lbs

Enclosure Material

18 GA CRS

Environmental

Operating Temp
-40°C to +85°C

Humidity

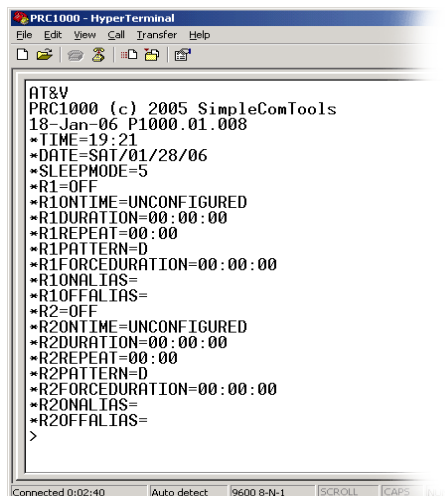
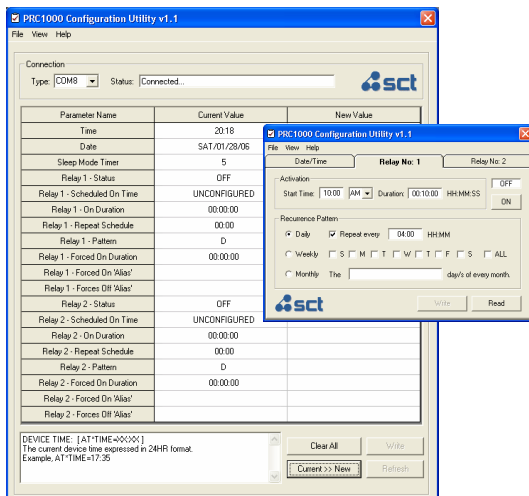
5-95% Non-condensing

Power Management

Input Voltage:
5 VDC to 20 VDC

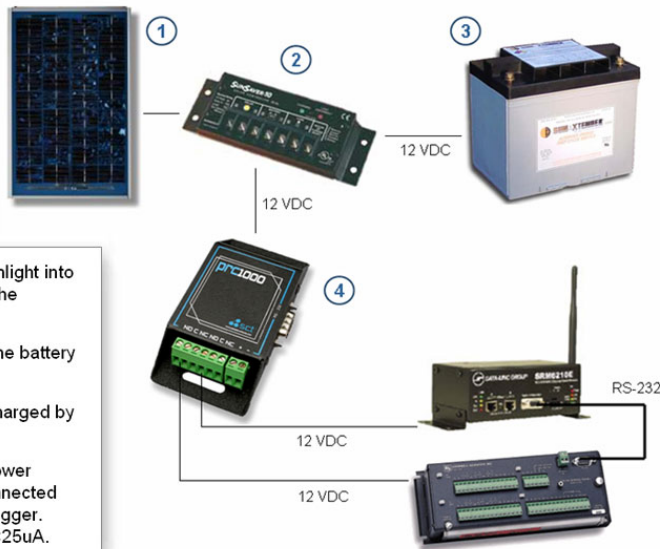
Input Current:
~675 microAmps @ 12VDC

SLEEP Mode:
~22.5 microAmps @ 12VDC



Machine-To-Machine – Simplified

Sample PRC1000 Solar System Installation



Use the PRC1000 for solar system optimization.

Schedule remote device operation periods to reduce system load, shrink panel and battery sizes, and reduce costs.

1. Solar panel converts sunlight into DC electricity to charge the battery.
2. DC electricity is fed to the battery via a solar regulator.
3. Deep cycle battery is charged by solar panel.
4. PRC1000 controls the power being supplied to the connected radio modem and data logger. Draw from PRC1000 is <math><25\mu\text{A}</math>.

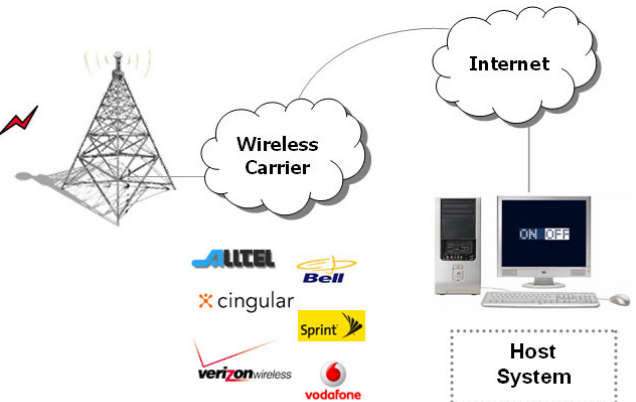
Sample PRC1000 Remote Control Installation

Use the PRC1000 as a wireless remote control.

Couple it with any low-cost circuit-switched or packet data modem and have a complete control solution.



The PRC1000 relay outputs control power to (2) separate devices with individual schedule or command line control. Supports both timed trigger of remote motors, alarms, or other relays. Also has ability to receive customized text commands, such as 'ON', 'POWERUP', 'START', etc.



PRC1000 Dimensions

