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Remote Site Management Solutions

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1.0 Remote Site Management (Selling the concept is easy)

In the next year there is expected to be a shortfall of 685,000 IT professionals in the United States. This is just one reason customers all over the world have started installing tools which help manage and monitor equipment remotely.

With remote site management solutions installed, customers will have faster response times to network problems, reduce network down time and receive a return on investment. If these points are made, customers will buy.

The list below summarizes reasons customers will purchase remote site management solutions:

Pays for itself

Reduces network downtime

Eliminates costly service calls

Prepares technician for on-site

1.1 Remote Site Management Solutions Pay for Themselves

Below are real facts about how one BayTech customer justified the purchase of 900 units. This customer continues to purchase BayTech solutions for every site. Return on investment is the key.

- Customer paid \$540,000 for 900 units.
- This customer uses the product an average of 28 times a day.
- Their average service call cost is \$200.00 which equals \$5600.00 / day savings.
- The average response time to problems went from 4.25 hrs to 10 minutes
- Responses were made from a Central NOC

- The return on investment is 96.5 days for this customer.
- The industry average network installation life is 7 years or 2555 days.
- This customer will save \$13,768,000 in the next 7 years.

1.2 Remote Site Management Solutions Help Reduce Downtime

Companies with remote site management solutions will respond to network problems in record time.

- One Minute Reboot versus Onsite Visit
- Remote Configuration of Network Equipment versus Onsite Visit
- Remote Flash/Image Upgrades versus Onsite Visits

1.3 Remote Site Management Solutions Eliminate Costly Service Calls

Service calls are expensive; with the shortage of network personnel, major service providers are quoting several day turns on service calls.

With BayTech's remote site management solutions installed, customers will not only realize the cost savings of service call but also have a response time that is immediate.

Furthermore, the following facts will help justify the expense of these solutions:

- 91% of Onsite Service Calls Require a Reboot or Re-Programming of Network Equipment
- Driving is the Number One Time Consumer of Service Calls
- Building Entry is the Number Two Time Consumer of Service Calls

1.4 Prepare Network Engineers for Onsite Visits

Using a remote site management solution to troubleshoot the network problem will provide network engineers knowledge of which piece(s) of hardware are the problem.

The network engineer will have the correct equipment in hand. This eliminates the need to go onsite to troubleshoot only to find they did not bring the correct equipment.

1.5 Who are the prospects?

Colocation facilities needing the ability to reboot locked servers and manage their power to a circuit level. Companies like Exodus, Verio, Globix, Digex, or UUNET. The collocation market was a 4 billion dollar market in 2000, this is expected to grow to 28.4 billion by the year 2004.

Multi-location networks including: corporations, hospitals, city and state government, schools, banks and universities. The need here is primarily to focus on remotely managing the network either through remote power rebooting or console access to equipment. Examples of customers that currently use our solutions are: Target, Wal-Mart, Lucent, Airborne and Merrill Lynch. Network infrastructure is expected to grow by 7000% in the next 8 years.

ISP/ASP's

1.6 When is the best time to sell remote site management solutions?

Anytime would be the best answer for BayTech, however, there are target times which work better.

The best time is when a customer is planning a new network or in the process of doing a major upgrade or overhaul.

Customers are more reluctant to purchase the product if they just completed a major overhaul or built a new network.

2.0 Remote Site Management Solutions Offered By BayTech

Power Management and Monitoring - provides the ability to reboot or turn on/off equipment, and monitor power, voltage, current and temperature.

Console Access – Intelligent internetworking equipment has a RS-232 console interface. This interface is used for set-up, maintenance and trouble shooting of the equipment.

BayTech manufactures products that provide RS-232 console access to remote equipment. Access can be accomplished through an Ethernet (Telnet), dial-up modem or local RS-232.

Console Access and Power Control – BayTech manufactures a product geared for remote office applications which provide both console access and power control in a single solution.

2.1 Power Control and Monitoring Solutions

2.1.1 The Correct Questions for Product Selection

How much current in AMPS is required?

Most customers know the rating of circuits installed in their equipment room or data center. It is prudent to get the complete current requirement per circuit. This is done by adding the rated load of the individual components.

Electrical code states that you cannot use, on a continuous base, more than 80% of the rated circuit. IE.. 16amps on a 20-amp circuit. Customers, especially data centers follow this code.

What is the voltage of the site?

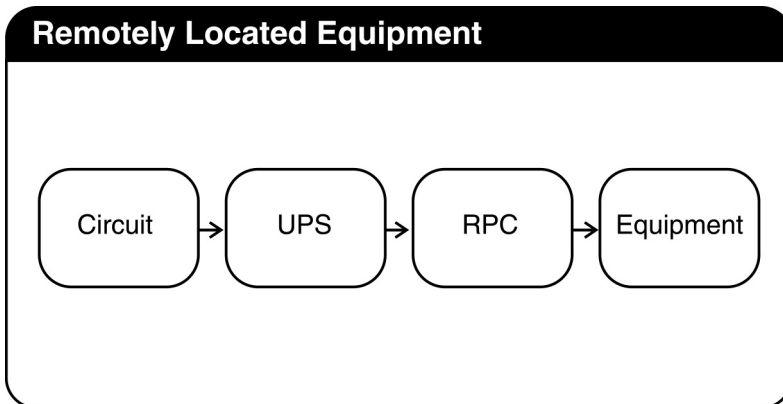
BayTech provides solutions for the following voltages: 115VAC, 220VAC or –48VDC

How many receptacles per circuit are required?

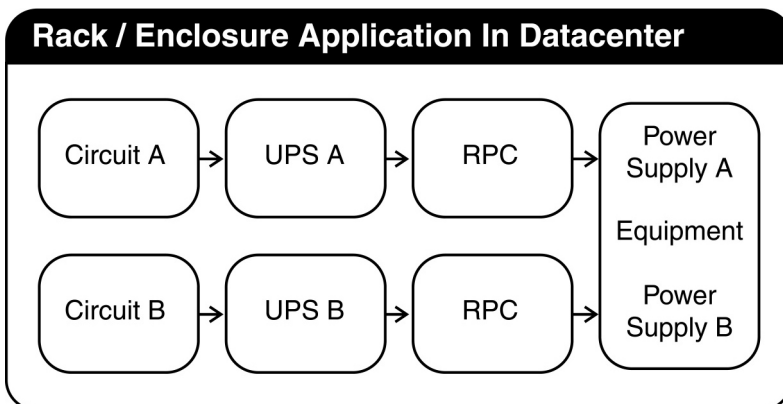
BayTech offers several models with different receptacle capacity. Typically a customer wants to have a few extra, however, if the application uses the rated circuits capacity with 4 components, it does not make sense to sell a unit with 21 receptacles.

How many circuits per rack or enclosure is planned?

Most remote location equipment rooms have one circuit connected to a UPS.



Data centers or co-location companies typically run 2 or more circuits to the rack or enclosure. These circuits come from different power sources and require a unit for each circuit.

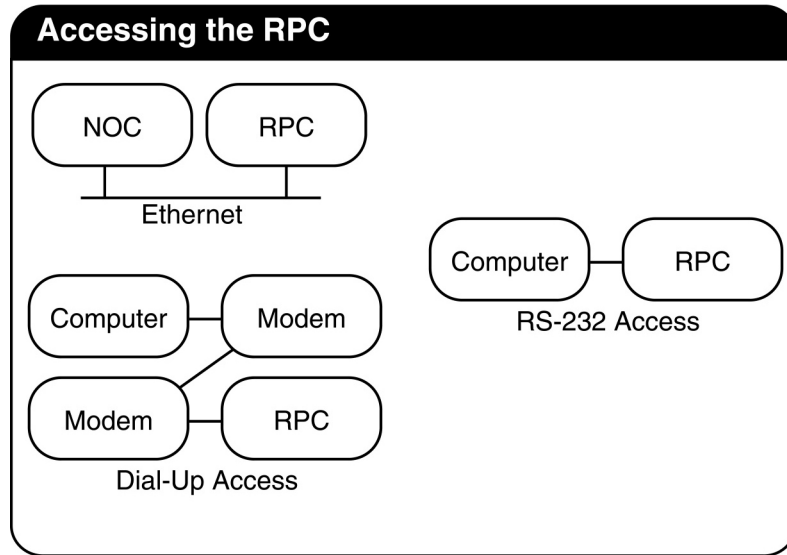


Does the customer need current, voltage, power and temperature monitoring?

Not all BayTech products offer current, voltage, power and temperature monitoring. You will need to refer to the product chart when specifying these features.

What type of access is needed to the power solution?

Ethernet, Dial-up modem, Local RS-232

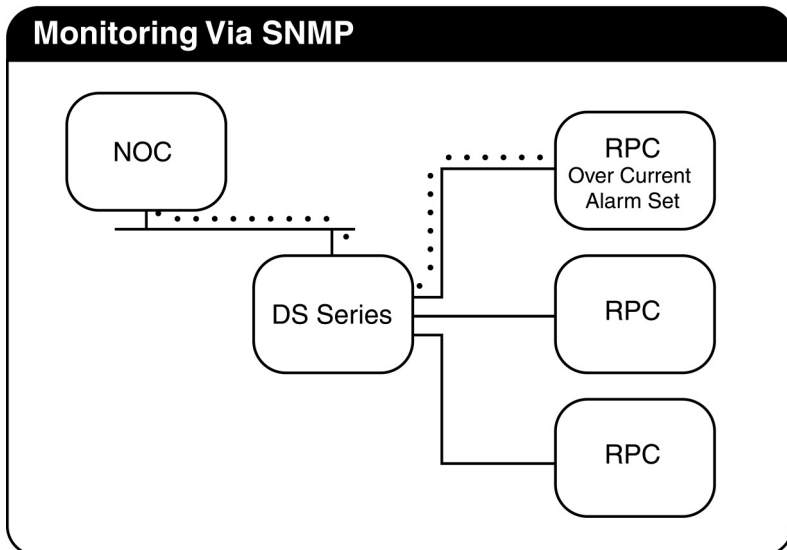


Will the customer use the BayTech DS-Series SNMP controller?

SNMP management is provided for the RPC product line through the DS-Series with SNMP installed. Typically, customers will use the RPC models with an RS-232 interface to connect to this controller.

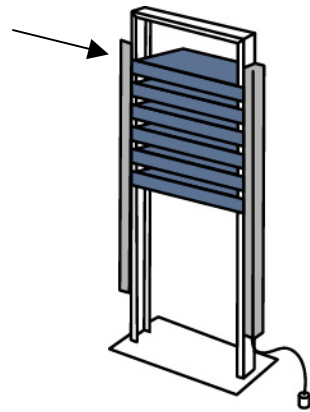
Models with the Ethernet interface built-in do not support SNMP.

SNMP monitoring with the DS-Series:

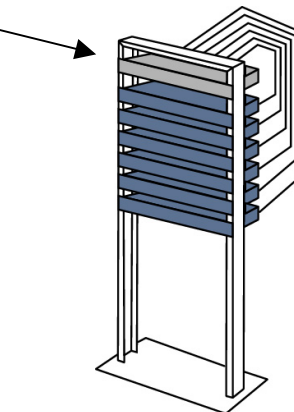


How will the solution be mounted? BayTech offers horizontal and vertical power solutions. Vertical solutions use no rack space (a premium in today's world), horizontal solutions mount in 19" spaces, 23" optional mounting is available.

Vertical Zero-U Mounting



Horizontal 1-U Mounting



What type of power plug is required? The standard US power plugs are indicated below. For international version please contact BayTech.

Nema 5-15P	IEC320 C13	IEC320 C14	
			
Nema 5-20P	Nema L5-20P	IEC320 C19	IEC320 C20
			
Nema L5-30P			
			

115VAC Options

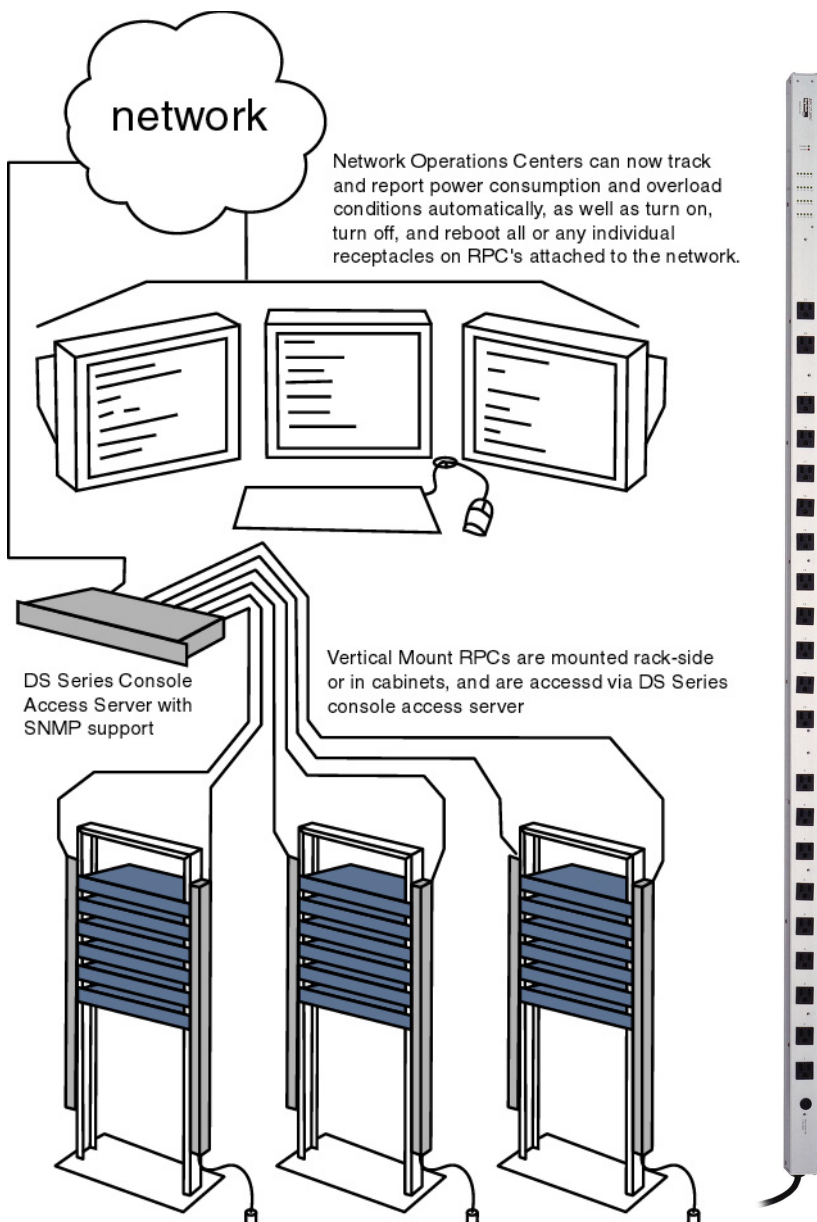
2.1.2 Sample Power Management Applications

Most power management applications can be specified in different ways. The applications below indicate some of the more standard configurations.

IMPORTANT: Do not hesitate to contact a BayTech applications engineer for recommendations.

SNMP applications require the DS-Series SNMP controller. The largest controller can handle up to 32 RPC's. The more strips a customer connects to a DS-Series controller, the lower the average cost per receptacle. Refer to the product chart for units that can be used with the DS-Series controller.

2.1.2.1 Data Center Power Management using the vertical RPC-27 with the DS-Series SNMP controller.



Synopsis – Customer is in a data center environment, needs power control and management of several racks or enclosures. Using rack space is not an option so the solution should be vertically mounted.

Features – Control of 120 receptacles, current, voltage, power and temperature reporting per circuit. Vertically mounted using no rack space.

SNMP control and trap reporting – With the DS-Series, NOC's have complete control of the RPC's. Traps based on preset current, power, voltage and temperature are generated. Traps are also generated on receptacle and user activity.

Local and Telnet Interface – The DS-Series supports Telnet and access for remote control and has a RS-232 console port for onsite access or use with an external modem for dial back-up

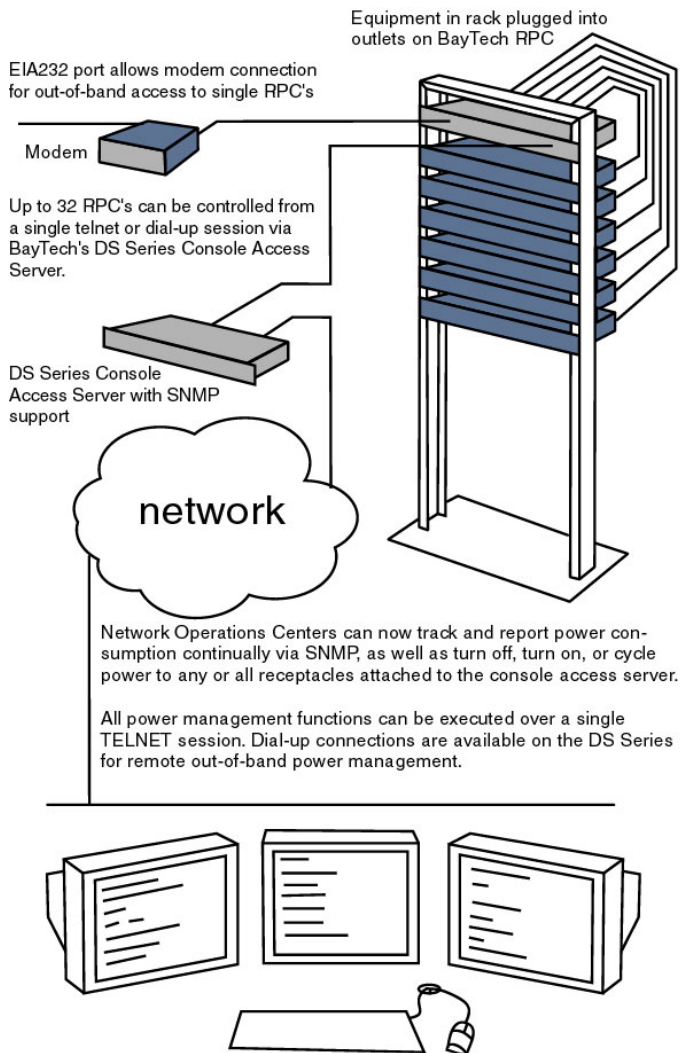
Reboot or turn on/off individual receptacles – all receptacles are individually controlled. For equipment with dual power supplies, group SNMP commands can be sent to generate reboots over multiple strips. Unused receptacles can be turned off to avoid overloading circuits.

Temperature measurement – RPC's have an internal temperature sensor, which can be used to detect temperature swings in an enclosure. SNMP traps are sent to a central NOC.

BayTech components:

DS-Series SNMP controller

2.1.2.2 Data Center Power Management using the horizontal RPC4-20 with the DS-Series SNMP controller.



FYI.....

All BayTech 20 amp 115VAC power products are available with 5-20P or L5-20P power plugs. This should be specified at time of order.

The RS-232 console port of any BayTech product can be used for onsite access or with an external modem for dial back-up.

Synopsis – Customer has a rack of equipment and needs power control and management. Solution should be expandable for future growth.

Features – Control of 8 receptacles, current, voltage, power and temperature reporting per circuit. Solution is expandable to 8 strips or 64 receptacles.

SNMP Control and trap reporting – The DS-Series controller shown provides complete control and monitoring of the RPC's connected. SNMP traps based on current, voltage, power and temperature can be generated and sent to a central NOC

Reboot of turn on/off all or individual components – Each receptacle can be individually controlled. Group SNMP commands can be generated for equipment with multiple power supplies connected across multiple strips.

Current, Voltage and Power measurement per circuit – True RMS measurement will provide accurate readings per circuit. Preset Thresholds generate audible alarms and SNMP traps when reached.

Temperature measurement – SNMP traps are generated based on temperature thresholds.

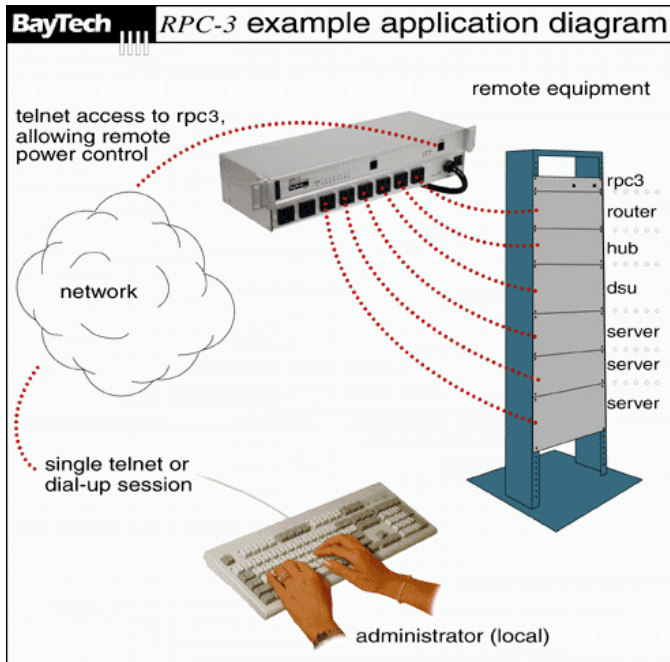
Local and Telnet control – The DS-Series controller also supports Telnet access for remote control and RS-232 console access for onsite control or modem dial back-up.

BayTech components:

DS-Series SNMP controller –

- 1- (1) DS3-IPS
- 2- (1) DS72 Network/RS232 module
- 3- (1) DS74
- 4- (1) RPC4-20

2.1.2.3 Network Power Management with RPC3-15, RPC3-20 or RPC3A

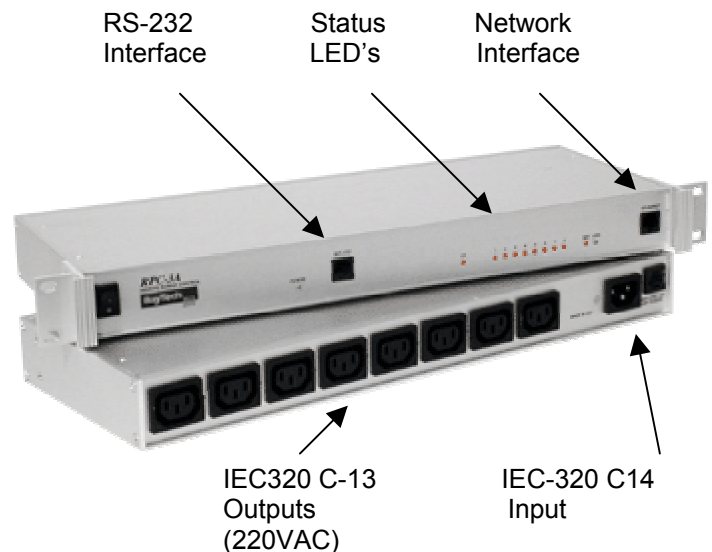
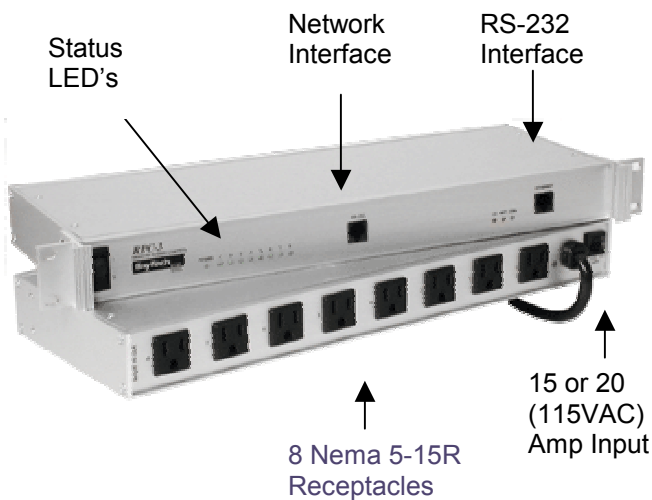


The RPC3-15, RPC3-20 and RPC3A are perfect stand alone units providing power control for up to 8 devices.

Each RPC has it's own IP and accessible via Telnet. The RPC also has a local RS-232 console port for onsite access or use with a modem for dial back-up.

Features – Control of 8 receptacles through direct IP connection, current monitoring per circuit.

- Network Access Via TCP/IP (TELNET)
- Programmable Receptacle Names
- 8-115 or 230 VAC Receptacles
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Retains Receptacle Status during power loss
- 10BASE-T Ethernet Control Port
- EIA232 Control Port for Local Access or Dial Back-up With External Modem
- Secure Password Protection
- RPC3-15 , 15 Amp(115VAC)
- RPC3-20 , 20 Amp (115VAC)
- RPC3A , 10 Amp (230VAC)

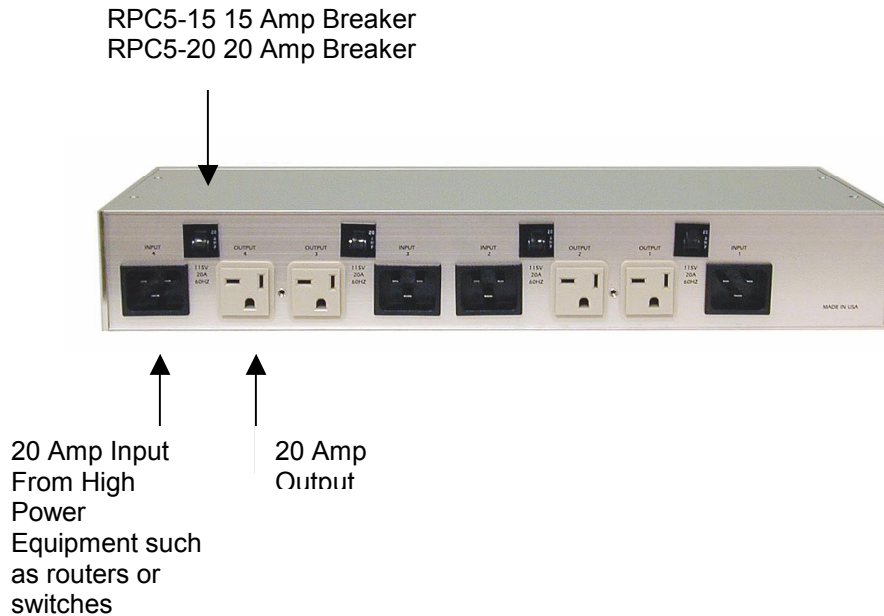


FYI.....

All BayTech 20 amp 115VAC power products are available with 5-20P or L5-20P power plugs. This should be specified at time of order.

The RS-232 console port of any BayTech product can be used for onsite access or with an external modem for dial back-up.

2.1.2.4 High Current Application with the RPC5-15 and RPC5-20



Synopsis – Customer has 2 Cisco 6520 switches, which use up to 16 amps per power supply when fully loaded. Customer needs the ability to reboot the switches when they lock up.

Features – Control of higher power equipment such as large routers and switches or servers. The RPC5-20 provides In-band access via Telnet and supports up to 20 amps per receptacle.

Access and Control – The RPC5-20 has an Ethernet interface for Telnet access and a RS-232 interface for onsite access. The RS-232 interface can be connected to an external modem for dial back-up.

FYI - Any of the four inputs power the logic of the RPC, power can be lost to all but one and the RPC will remain active.

This version of the RPC is available in five different models.

RPC5-15 115VAC 15Amp Ethernet and RS-232 interface

RPC5-20 115VAC 20 Amp Ethernet and RS-232 interface

RPC6-15 115VAC 15 Amp RS-232 interface

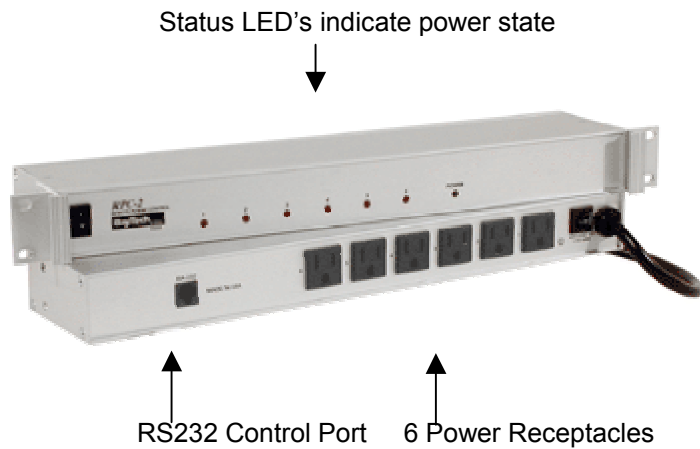
RPC6-20 115VAC 20 Amp RS-232 interface

RPC6A-20 220VAC 20 Amp RS-232 interface, current, voltage and temperature monitoring

2.1.3 Models Supplied by BayTech

Model Number	Number Of Power Inputs	Number Of Controllable Receptacles	Number Of Receptacles	Voltage	Monitoring Features	Total Amps	Type of Power Plug	Type of Output Receptacles	Internal Modem	Ethernet Access	RS232 Access	Required Rack Space	SNMP Support with DS-SERIES
					C= Current Reporting V=Voltage Reporting P=Power Reporting T=Temp Reporting								
RPC-2	1	6	6	115 VAC	NONE	15A	NEMA 5-15P	NEMA 5-15R	N	N	Y	1U	N
RPC-2A	1	6	6	208 VAC	NONE	10A	IEC320/C14	IEC320 C13	N	N	Y	1U	N
RPC-2 MD01	1	6	6	115 VAC	NONE	15A	NEMA 5-15P	NEMA 5-15R	Y	N	Y	1U	N
RPC3-15	1	8	8	115 VAC	C	20A	NEMA 5-15P	NEMA 5-15R	N	Y	Y	1U	Y
RPC3-20	1	8	8	115 VAC	C	20A	NEMA 5-20P/L5-20P	NEMA 5-15R	N	Y	Y	1U	Y
RPC-3A	1	8	8	208 VAC	C	10A	IEC320 C14	IEC320 C13	N	Y	Y	1U	Y
RPC4-15	1	8	8	115 VAC	CVPT	15A	NEMA 5-15P	NEMA 5-15R	N	N	Y	1U	Y
RPC4-20	1	8	8	115 VAC	CVPT	20A	NEMA 5-20P/L5-20P	NEMA 5-20R	N	N	Y	1U	Y
RPC4A-20US	1	8	8	208 VAC	CVPT	20A-US 10A-INT	IEC320 / C14	IEC320 C13	N	N	Y	1U	Y
RPC10-15	1	10	10	115VAC	CVPT	15A	NEMA 5-20P	NEMA 5-15R	N	Y	Y	2U	Y
RPC10-20	1	10	10	115VAC	CVPT	20A	NEMA L5-20P	NEMA 5-15R	N	Y	Y	2U	Y
RPC5-15	4	4	4	115 VAC	NONE	15A	IEC320 C14	NEMA 5-15R	N	Y	Y	1U	N
RPC5-20	4	4	4	115 VAC	NONE	20A	IEC320 C19	NEMA 5-20R	N	Y	Y	1.5U	N
RPC6-15	4	4	4	115VAC	NONE	15A	IEC320 C14	NEMA 5-15R	N	N	Y	1.5U	Y
RPC6-20	4	4	4	115VAC	NONE	20A	IEC320 C19	NEMA 5-20R	N	N	Y	1.5U	Y
RPC6A-20	4	4	4	208VAC	CTVP	20AUS	IEC320 C19	IEC320 C20	N	N	Y	1.5U	Y
RPC-7	1	12	12	115 VAC	CT	15A	NEMA 5-20P/L520P	NEMA 5-15R	N	Y	Y	0U	N
RPC-22	1	12	12	115 VAC	CVPT	20A	NEMA 5-20P/L520P	NEMA 5-15R	N	N	Y	0U	Y
RPC-22A	1	12	12	208 VAC	C	10A	SPECIFY	IEC320 / C13	N	N	Y	0U	Y
RPC-27	1	20	21	115 VAC	CVPT	20A	NEMA 5-20P/L520P	NEMA 5-15R	N	N	Y	0U	Y
RPC-28	1	20	21	115 VAC	CVPT	30A	NEMA L5-30P	NEMA 5-15R	N	N	Y	0U	Y
RPC-35	1A1 B	10 10	10 10	-48VDC	NONE	A Side- 60A B Side- 60A	1A1B	10 (a) 10 (b)	N	Y	Y	2U	Y
RPC-36	1A1 B	10 10	10 10	-48VDC	NONE	A Side- 60A B Side- 60A	1A1B	10 (a) 10 (b)	N	N	Y	2U	Y

2.1.3.1 RPC2 and RPC2A Remote Power Control



Features

- RPC2 6-Nema 5-15R 115VAC 15A Receptacles
- RPC2A 6-IEC320 C13 220VAC 10A Receptacles
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Retains Receptacle Status During Power Loss
- EIA232 Control Port
- Secure Password Protection
- 15 Amp Power Rating
- User Definable Receptacle Names

Function: The RPC-2 remote power switch provides a means to turn on, turn off, or reboot connected equipment, from a remote location or local terminal . The unit contains six individual relay controlled AC power receptacles that are controlled by sending a short character string (command) to the EIA-232 control port.

Access: The EIA-232 control port can be connected to any BayTech data switch or terminal server for remote control.

Control: The RPC-2 supports commands for both receptacle control, and status. These commands include: on, off, config, reboot and status. The unit provides a response to a command indicating that the command was acknowledged and completed.

In the event of a power failure to the RPC, the unit retains the most current operational status for each outlet in non-volatile memory. When the RPC regains power, it restores each outlet to those status settings. For example: if Outlets 1 and 2 are ON, and the remaining outlets are OFF when a power loss occurs, when AC power is restored, Outlets 1 and 2 are placed in the ON position. The power-up routine to each receptacle is performed sequentially to minimize power surges.

Specifications:

POWER RECEPTACLES: RPC2: Six receptacles Nema 5-15R, RPC2A Six receptacles IEC320 C13
Circuit Breaker: RPC2 125V, 15 Amp, RPC2A 240VAC, 10Amp

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection

DEFAULT LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 6 for receptacle 6. Programmable up to 10 characters per receptacle.

ENVIRONMENT: Operating temperature range: 0 to 70° C
Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

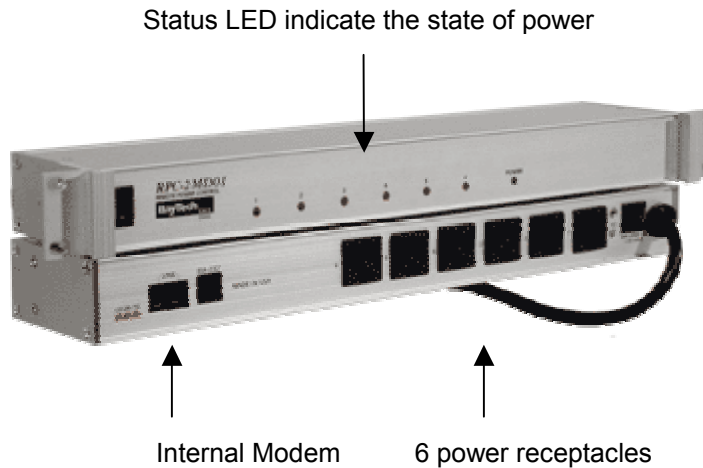
DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: One green power LED and six red LEDs indicate receptacle on/off status

MOUNTING: 19" rack-mount or desk top

WARRANTY: One year--parts & labor

2.1.3.2 RPC2-MD01 Remote Power Control



Features

- 6- Nema 5-15R 115VAC Receptacles
- Built in Modem
- Programmable Receptacle Names
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Retains Receptacle Status during power loss
- EIA232 Control Port
- Secure Password Protection
- 15 Amp Power Rating

Function: The RPC-2 MD01 remote power switch with internal modem allows you to turn on, turn off or reboot connected equipment. The unit contains six individual relay controlled AC power receptacles that are controlled by sending a short character string (command).

Access: The RPC2-MD01 has an internal 2400 bps modem, or an EIA-232 control port.

Control: The RPC-2 MD01 supports commands for receptacle control and status. These commands include: on, off, config, reboot and status. The unit provides a response to indicate that the commands were acknowledged and completed.

In the event of a power failure to the unit itself, the RPC-2 MD01 retains the most current operational status for each outlet in non-volatile memory. When the RPC regains power, it restores each outlet to those status settings. For example: if Outlet 1 and Outlet 2 are ON and the remaining outlets are OFF when a power loss occurs, Outlet 1 & 2 will be placed in the ON position. The power-up routine to each receptacle is performed sequentially to minimize power surges.

FYI: The Ring Detect Reset (RDR) feature will automatically cycle power on the internal modem of the RPC if an incoming call is detected and not answered within 5 or 6 rings.

Specifications:

POWER RECEPTACLES: Six receptacles Nema 5-15R
Circuit Breaker: 125V, 15 Amp

MODEM(MD01): V.22bis(2400 bps), 4 pin modular(RJ-11)

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection

DEFAULT LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 6 for receptacle 6. Programmable up to 8 characters per receptacle.

ENVIRONMENT: Operating temperature range: 0 to 70° C
Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

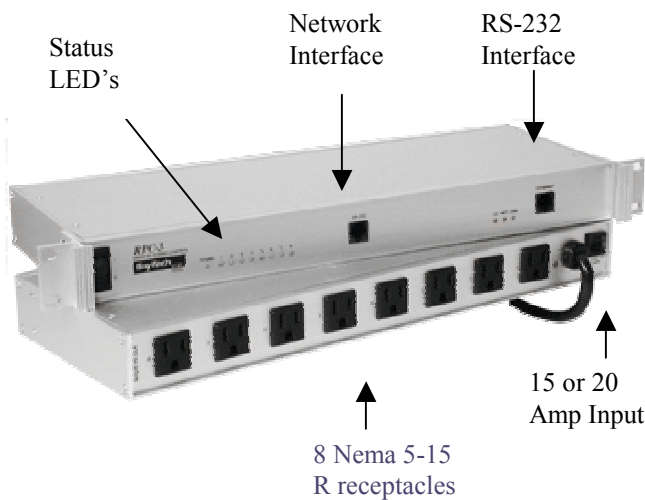
DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: One green power LED and six red LEDs indicate receptacle on/off status

MOUNTING: 19" rack-mount or desk top

WARRANTY: One year--parts & labor

2.1.3.3 RPC3-15 and RPC3-20 Remote Power Control



Features

- Monitor AC TRUE RMS current
- Warns of over-current conditions with audible signal
- RPC3-15 15 amp total support
- RPC3-20 20 amp total support
- Eight Nema 5-15R 115VAC receptacles
- Control receptacles via an EIA-232 port or Ethernet 10BaseT connection
- Reboot, Turn on/off individual or all receptacles
- Receptacle logical names

Function: Now you can know the current load for all circuits in your data centers. The RPC3-20 reports TRUE RMS AC Current for connected equipment. The overload audible alarm sounds when the preset threshold is exceeded.

The RPC-3 remote power switch, with network access, provides the means to turn On/Off, or reboot equipment connected through the RPC. The RPC has eight individually (relay) controlled AC power receptacles that are easily controlled by sending commands via Telnet, or via the unit's EIA-232 control port

With Multiple user support, customers who co-locate servers or other equipment with other companies can provide power control to specific devices connected to the RPC3.

Access: The unit provides a 10BASE-T (twisted pair, RJ-45) Ethernet interface. Network users access the unit by launching a Telnet session from their workstations. The unit also has a RS-232 port for configuration, onsite access or use with an external modem for dial back-up.

Control: The unit supports commands for both receptacle control, status and configuration. Commands include: on, off, reboot, config and status. The unit provides a response to indicate the commands were acknowledged and completed.

In the event of a power failure to the unit itself, the RPC-3 retains the most current operational status for each outlet in non-volatile memory. When the RPC regains power, it restores each outlet to those status settings. For example, if Outlet 1 and Outlet 2 are ON and the remaining outlets are OFF when a power loss occurs, Outlet 1 & 2 will be placed in the ON position automatically when power is restored.

The power-up routine to each receptacle is performed sequentially to minimize power surges.

Specifications:

Power Plug: **RPC3-15 5-15P ,**
RPC3-20 - 5-20P, Optional L5-20P (Twist Lock)

Power Receptacles: Eight receptacles Nema 5-15R 15Amp

Circuit Breaker: RPC3-15 15 Amp, RPC3-20 20 Amp

EIA-232 Serial Port: One eight pin modular (RJ-45) connector.

Network Interface: Ethernet, IEEE 802.3 compliance, 10BaseT (twisted pair RJ-45); supports TCP/IP & Telnet

LOGICAL NAME: Outlet 1 for receptacle 1, Outlet 2 for receptacle 2,...Outlet 8 for receptacle 8. Programmable up to 10 characters per receptacle.

Operating Temperature Range: 0 to 65 degrees C

Storage Temperature Range: -40 to 80 degree C

Humidity: 5 to 95% RH

DIMENSIONS: 16.73"w x 6.17"d x 1.72"h

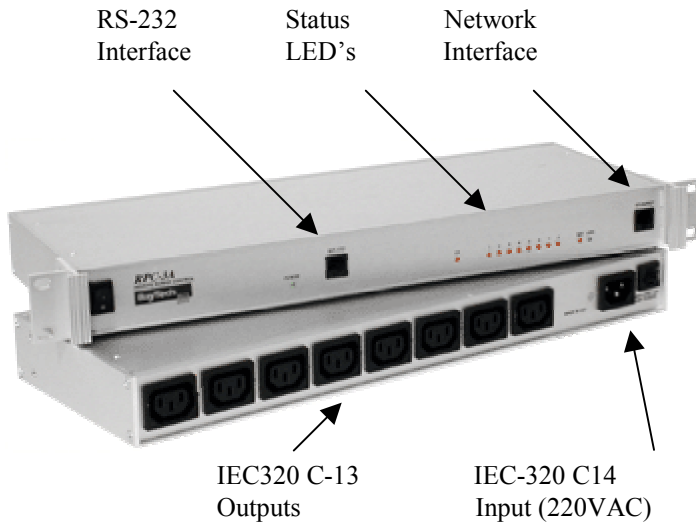
WEIGHT: 4 lbs, 8 oz

INDICATORS: Power receptacle status, CX connection status and diagnostics, RX & TX activity link

MOUNTING: 19" -or- 23" rack-mount or desktop, rack mount kit are optional.

Warranty: One year - parts & labor

2.1.3.4 RPC 3A 220 VAC Remote Power Control



Features

- Network Access Via TCP/IP (TELNET)
- Multiple Username and Password Support Per Receptacle
- Programmable Receptacle Names
- 8-IEC320 C13 230 VAC Receptacles
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- TRUE RMS Current Monitoring
- Overload Audible Alarm
- EIA232 Control Port
- Secure Password Protection
- 10 Amp Power Rating

The RPC-3a remote power switch, with network access, provides the means to turn On/Off, or reboot equipment connected through the RPC. The RPC has eight individually (relay) controlled AC power receptacles that are easily controlled by sending commands via Telnet, or via the unit's EIA-232 control port

KNOW BEFORE THE BREAKER TRIPS - With True RMS current measurement and current reporting the RPC will report how much current in AMPs the attached equipment is drawing. Further more, the RPC has an overload audible alarm that will sound when a preset threshold is reached. Typically, alarming is done when 80% of the circuits capacity is used.

MULTIPLE USER/PASSWORD SUPPORT - With Multiple user support, customers who co-locate servers or other equipment with other companies can provide power control to specific devices connected to the RPC3.

COMMAND CONTROL - The unit supports commands for both receptacle control, status and configuration. Commands include: on, off, reboot, config and status. The unit provides a response to indicate the commands were acknowledged and completed.

NOTE: When ordering this product please specify the country it is being used in. This will determine the power cord shipped.

Specifications:

POWER RECEPTACLES: Eight receptacles IEC320 C13 220VAC

Circuit Breaker: 230V, 10 Amp

NETWORK INTERFACE: Ethernet; IEEE802.3 compliant 10BASE-T

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection login procedure

LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 8 for receptacle 8. Programmable up to 8 characters per receptacle.

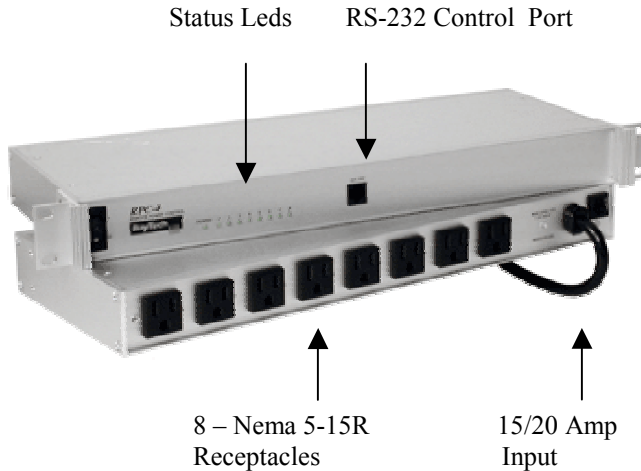
ENVIRONMENT: Operating temperature range: 0 to 70° C Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: (1) Power LED, (2) 8 red receptacles LEDs, (3) link integrity, (4) network activity and (5) cx status.

MOUNTING: 19" rack-mount or desk top -- rack-mount ears optional

WARRANTY: One year--parts & labor

2.1.3.5 **RPC4-15 and RPC4-20** Remote Power Control**Features**

- SNMP Support with DS-Series
- 8 Nema 5-15R 115 VAC Receptacles
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Retains Receptacle Status during power loss
- EIA232 Control Port
- Secure Password Protection
- 15 Amp Power Rating RPC4-15 (*shown in picture*)
- 20 Amp Power Rating RPC4-20
- True RMS Current Reporting
- Overload Audible Alarm

Function and Control: The RPC-4 has eight individually (relay) controlled AC power receptacles that are easily controlled by sending commands via the unit's EIA-232 control port. **Note:** For control with a Cisco terminal server, the RS-232 console port can be jumper configured to connect directly to a Cisco RJ45 Aux or terminal server port.

KNOW BEFORE THE BREAKER TRIPS - With True RMS current measurement and current reporting the RPC will report how much current in AMPs the attached equipment is drawing. Further more, the RPC has an overload audible alarm that will sound when a preset threshold is reached. Typically, alarming is done when 80% of the circuits capacity is used.

Access: The RPC4's have a RS-232 port for control and access. This port can be connected to any terminal server or and external modem.

The power-up routine to each receptacle is performed sequentially to minimize power surges.

During normal operation, the RPC-4's circuit breaker status is "ON". If the circuit breaker status is "OFF," that indicates the circuit breaker has been tripped.

Specifications:

RPC4-15 Power Plug: Nema 5-15P

RPC4-20 Power Plug: Nema 5-20P, Optional L5-20P (Twist Lock)

POWER RECEPTACLES: Eight Nema 5-15R receptacles

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection login procedure

LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 8 for receptacle 8. Programmable up to 8 characters per receptacle.

ENVIRONMENT: Operating temperature range: 0 to 70° C Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

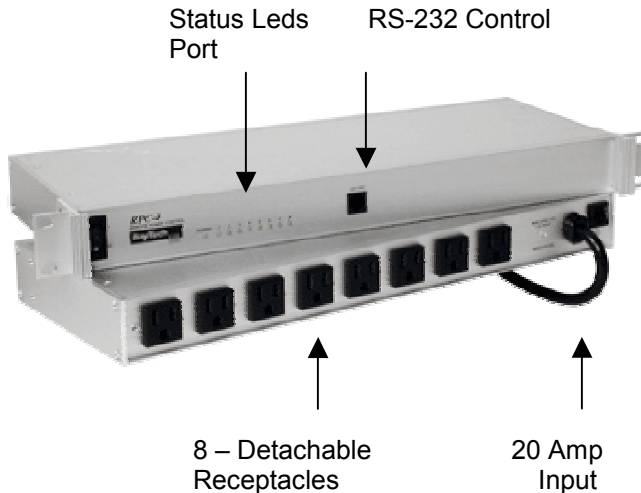
DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: (1) Power LED, (2) 8 green receptacles LEDs

MOUNTING: 19" rack-mount or desk top -- rack-mount ears provided. Optional 23"

WARRANTY: One year--parts & labor

2.1.3.6 RPC4A-20 Remote Power Control



Features

- SNMP Support with DS-Series
- 8-IEC320 C13 230 VAC Receptacles
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Retains Receptacle Status during power loss
- EIA232 Control Port
- Secure Password Protection
- 20 Amp Power Rating
- True RMS Current Reporting
- Overload Audible Alarm

Function and Control: The RPC-4 has eight individually (relay) controlled AC power receptacles that are easily controlled by sending commands via the unit's EIA-232 control port **Note:** For control with a Cisco terminal server, the RS-232 console port can be jumper configured to connect directly to a Cisco RJ45 Aux or terminal server port.

KNOW BEFORE THE BREAKER TRIPS - With True RMS current measurement and current reporting the RPC will report how much current in AMPs the attached equipment is drawing. Further more, the RPC has an overload audible alarm that will sound when a preset threshold is reached. Typically, alarming is done when 80% of the circuits capacity is used.

Access: The RPC4's have a RS-232 port for control and access. This port can be connected to any terminal server or and external modem.

The power-up routine to each receptacle is performed sequentially to minimize power surges.

During normal operation, the RPC-4's circuit breaker status is "ON". If the circuit breaker status is "OFF," that indicates the circuit breaker has been tripped.

NOTE: When ordering this product please specify the country it is being used in. This will determine the power cord shipped.

Specifications:

POWER RECEPTACLES: Eight Nema 5-15R receptacles

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection login procedure

LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 8 for receptacle 8. Programmable up to 8 characters per receptacle.

ENVIRONMENT: Operating temperature range: 0 to 70° C Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: (1) Power LED, (2) 8 green receptacles LEDs

MOUNTING: 19" rack-mount or desk top -- rack-mount ears provided. Optional 23"

WARRANTY: One year--parts & labor

2.1.3.7 RPC5-15 and RPC5-20 Remote Power Control



Front and rear view of RPC 5 15 amp.



Rear view of RPC 5 20 amp.

Features

- Network Access Via TCP/IP (TELNET)
- Individual inlet for each outlet
- Multiple Username and Password Support
- Programmable Receptacle Names
- 4-115 VAC Receptacles
- 15 Amps per receptacle (*RPC5-15*)
- 20 Amps per receptacle (*RPC5-20*)
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Any Inlet powers the units logic
- 10BASE-T Ethernet Control Port
- EIA232 Control Port for local access or dial backup
- Secure Password Protection

Function: The RPC5 is designed for high current applications such as large routers , switches or servers.

The RPC-5 has four individually (relay) controlled AC power receptacles that are easily controlled by sending on, off or reboot commands via Telnet, or via the unit's EIA-232 control port.

The RPC-5's EIA-232 port can be connected to an external modem for dial-up access in the event the network is down.

Control: The unit supports commands for receptacle control, status, and configuration. Commands include: on, off, reboot, config and status. The unit provides a response to indicate the commands were acknowledged and completed.

The RPC5 supports multiple users for collocation.

Specifications:

POWER RECEPTACLES: RPC5-15 Four Nema 5-15R receptacles, RPC5-20 Four Nema 5-20R receptacles

Circuit Breaker: 125V, 15/20 Amp

NETWORK INTERFACE: Ethernet; IEEE802.3 compliant 10BASE-T (twisted pair, RJ-45).

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection login procedure

LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 4 for receptacle 4. Programmable up to 8 characters per receptacle.

ENVIRONMENT: Operating temperature range: 0 to 70° C Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

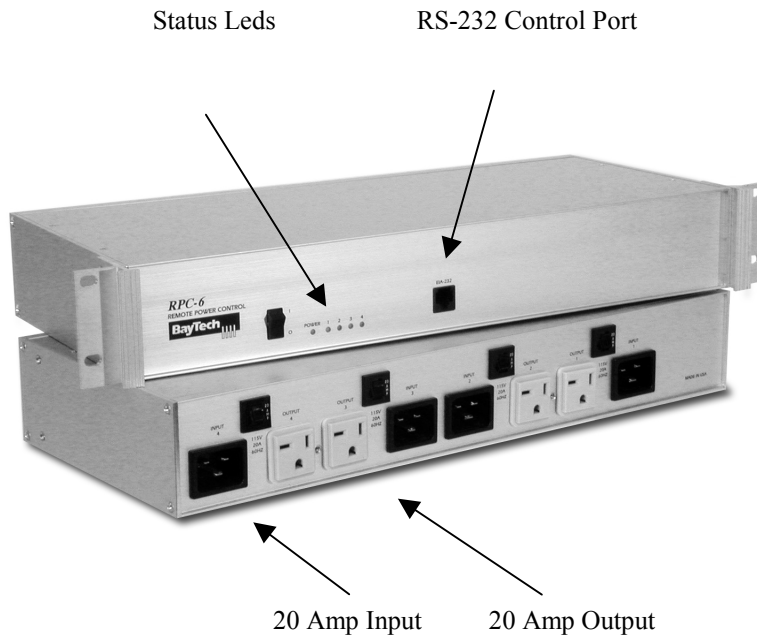
DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: (1) Power LED, (2) 4 red receptacles LEDs, (3) link integrity, (4) network activity and (5) cx status.

MOUNTING: 19" rack-mount or desk top -- rack-mount ears optional

WARRANTY: One year--parts & labor

2.1.3.8 RPC6-15 and RPC6-20 Remote Power Control

**Features**

- Individual inlet for each outlet
- Multiple Username and Password Support
- Programmable Receptacle Names
- 4-115 VAC Receptacles
- 15 Amps per receptacle (*RPC6-15*)
- 20 Amps per receptacle (*RPC6-20*)
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Any Inlet powers the units logic
- EIA232 Control Port for local access or dial backup
- SNMP Support with DS-Series

Function: The RPC6 is designed for high current applications such as large routers , switches or servers.

The RPC6 has four individually (relay) controlled AC power receptacles that are easily controlled by sending on, off or reboot commands via the unit's EIA-232 control port.

Access: The RPC6's EIA-232 port can be connected to an external modem for dial-up access in the event the network is down.

Control: The unit supports commands for receptacle control, status, and configuration. Commands include: on, off, reboot, config and status. The unit provides a response to indicate the commands were acknowledged and completed.

Specifications:

POWER RECEPTACLES: RPC6-15 Four Nema 5-15R

receptacles, RPC6-20 Four Nema 5-20R receptacles

Circuit Breaker: 125V, 15/20 Amp

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection login procedure

LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 4 for receptacle 4. Programmable up to 8 characters per receptacle.

ENVIRONMENT: Operating temperature range: 0 to 70° C Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

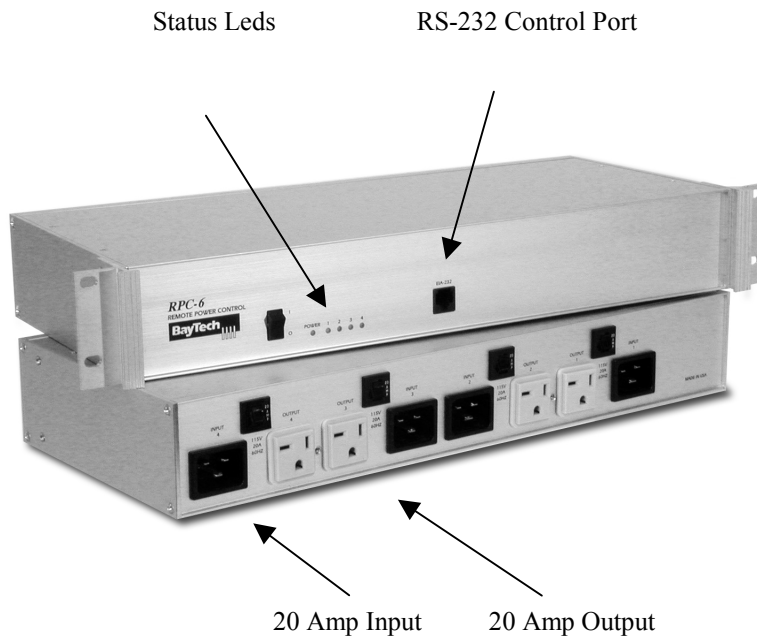
DIMENSIONS: 16.73"w x 5.25"d x 1.72"h

INDICATORS: (1) Power LED, (2) 4 red receptacles LEDs, (3) link integrity, (4) network activity and (5) cx status.

MOUNTING: 19" rack-mount or desk top -- rack-mount ears optional

WARRANTY: One year--parts & labor

2.1.3.9 **RPC6A-20** Remote Power Control



Features

- Individual inlet for each outlet
- Multiple Username and Password Support
- Programmable Receptacle Names
- 4-220VAC Receptacles
- US-20 Amps per receptacle
- International-10 Amps per receptacle
- Turn on/off Individual or All Receptacles
- Reboot Power For Individual or All Receptacles
- Any Inlet powers the units logic
- EIA232 Control Port for local access or dial backup
- SNMP Support with DS-Series

Function: The RPC6 is designed for high current applications such as large routers , switches or servers.

The RPC6 has four individually (relay) controlled AC power receptacles that are easily controlled by sending on, off or reboot commands via the unit's EIA-232 control port.

Access: The RPC6's EIA-232 port can be connected to an external modem for dial-up access in the event the network is down.

Control: The unit supports commands for receptacle control, status, and configuration. Commands include: on, off, reboot, config and status. The unit provides a response to indicate the commands were acknowledged and completed.

Specifications:

POWER RECEPTACLES: RPC6A-20 Four IEC320 C19 receptacles

POWER INPUT: Four L6-20P non detachable power cords 7ft'

Circuit Breaker: 220Vac, 20 Amp

EIA-232 CONTROL PORT: Eight pin modular(RJ-45) connector.

SECURITY: Password protection login procedure

LOGICAL NAME: Outlet 1 for receptacle 1,...Outlet 4 for receptacle 4. Programmable up to 8 characters per receptacle.

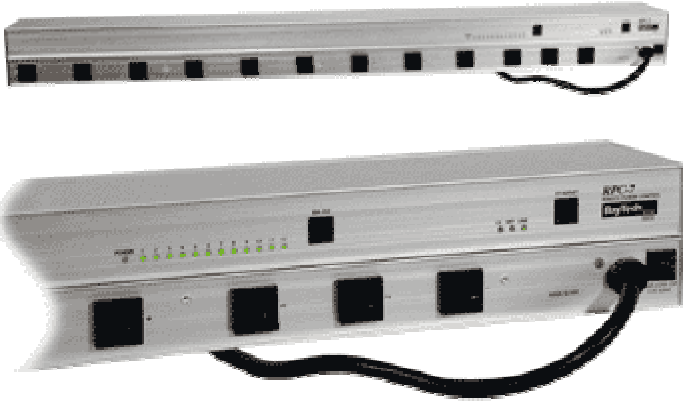
ENVIRONMENT: Operating temperature range: 0 to 70° C Storage temperature range: -40 to 80° C Humidity: 5 to 95% RH

INDICATORS: (1) Power LED, (2) 4 red receptacles LEDs, (3) link integrity, (4) network activity and (5) cx status.

MOUNTING: 19" rack-mount or desk top -- rack-mount ears optional

WARRANTY: One year--parts & labor

2.1.3.10 RPC7 Vertical Mount Remote Power Control



The above view is two units stacked with the front view on top and the rear view on bottom. This is not one unit.

Features

- Monitor AC TRUE RMS current
- Warns of over-current conditions with audible signal
- 20 amp total support, 15 amps per receptacle
- Twelve 115VAC receptacles
- Control receptacles via an EIA-232 port or Ethernet 10BaseT connection
- Turn on/off individual or all receptacles
- Toggle power on individual or all receptacles
- Circuit breaker trip status
- Retains receptacle status after power loss
- Receptacle logical names

Function: Now you can know the current load for all circuits in your data centers. The RPC7-20 reports TRUE RMS AC Current for connected equipment. The overload audible alarm sounds when the preset threshold is exceeded.

The RPC7-20, with network access, provides the means to turn On/Off, or reboot equipment connected through the RPC. The RPC has twelve individually (relay) controlled AC power receptacles that are easily controlled by sending commands via Telnet, or via the unit's EIA-232 control port

With Multiple user support, customers who co-locate servers or other equipment with other companies can provide power control to specific devices connected to the RPC3.

Access: The RPC7 supports Telnet via Ethernet or has an RS-232 ports for local access or us with and external modem for dial backup.

Control: The unit supports commands for both receptacle control, status and configuration. Commands include: on, off, reboot, config and status.

Specifications:

Power Plug: 5-20P, Optional L5-20P (Twist Lock)

Power Receptacles: Twelve Nema 5-15R receptacles

Circuit Breaker: 120V 20Amp

EIA-232 Serial Port: One eight pin modular (RJ-45) connector.

Network Interface: Ethernet, 10BaseT **LOGICAL**

NAME: Outlet 1 for receptacle 1, Outlet 2 for receptacle 2,...Outlet 12 for receptacle 12. Programmable up to 16 characters per receptacle.

Operating Temperature Range: 0 to 40degrees

Storage Temperature Range: -40 to 80 degree

Humidity: 5 to 95% RH

DIMENSIONS: 1.75"w x 3.75.d x 44"h

WEIGHT: 10lbs

INDICATORS: Power receptacle status, CX connection status and diagnostics, RX & TX activity link

MOUNTING: Vertical with mounting kit

Warranty: One year - parts & labor

2.1.3.11 **RPC22** and **RPC22A** Remote Power Control



Features

- True RMS current, voltage and power monitoring.
- Supports up to 12 per strip for co-location environments.
- User Name and password authentication.
- Individual or collective control of the receptacles.
- Programmable unit ID and receptacle names.
- Voltage monitoring feature (not available on RPC-22a)

RPC-22 (20 amp 115 VAC)

RPC-22A (10 amp 230 VAC)

Note: These units are vertically mounted units. The photos shown depict them sideways for a better view of the unit itself.

Function: The RPC-22 remote power switch provides the means to turn On/Off, or reboot equipment connected through the RPC. The RPC has twelve individually (relay) controlled AC power receptacles.

The RPC22's allow you to monitor current, voltage, power and temperature. When used with the DS-Series SNMP controller multiple RPC22's can report alarms based on preset threshold.

Access: The RPC-22's EIA-232 port can be connected to the DS-Series SNMP controller, any terminal server or external modem for dial-up access.

Control: The unit supports commands for both receptacle control, status and configuration. Commands include: on, off, reboot, config and status. The unit provides a response to indicate the commands were acknowledged and completed.

Power Plug: 5-20P, Optional L5-20P (Twist Lock)

Interface 9600 bps, EIA-232, eight-pin RJ45 connector.

Environment Operating temperature range is from 0 to 40 degrees Celsius. Storage temperature range is from -40 to 80 degrees Celsius. Humidity tolerance is from 5 to 95 percent RH.

Dimensions 1.75"w X 1.75"d X 56"h

Indicators Green power LED, green receptacle status LED and red trip alarm LED

Mounting Vertical aligned on standard rack

Warranty One year on parts and labor

Specifics for 22:

Power Receptacles Twelve NEMA 5-15 receptacles 110V AC (+10%), 50/60 Hz, 20 Amps

Circuit Breaker 110V AC 20-Amps

Control The RPC-22A is controlled by simple commands of ON, OFF and REBOOT. Access the units internal menu through a serial connection either through any of BayTech's DS Series data switches, or through any terminal.

Specifics for 22A:

Power Receptacles Twelve IEC-320 receptacles 230V AC (+10%), 50/60 Hz, 10-Amps

Circuit Breaker 230V AC 10-Amps

Control The RPC-22A is controlled by simple commands of ON, OFF and REBOOT. Access the units internal menu through a serial connection either through any of BayTech's DS Series data switches, or through any terminal.

2.1.3.12 **RPC27 and RPC28** Remote Power Control

Function: The RPC27 and RPC28 provide more controllable receptacles than anything on the market.

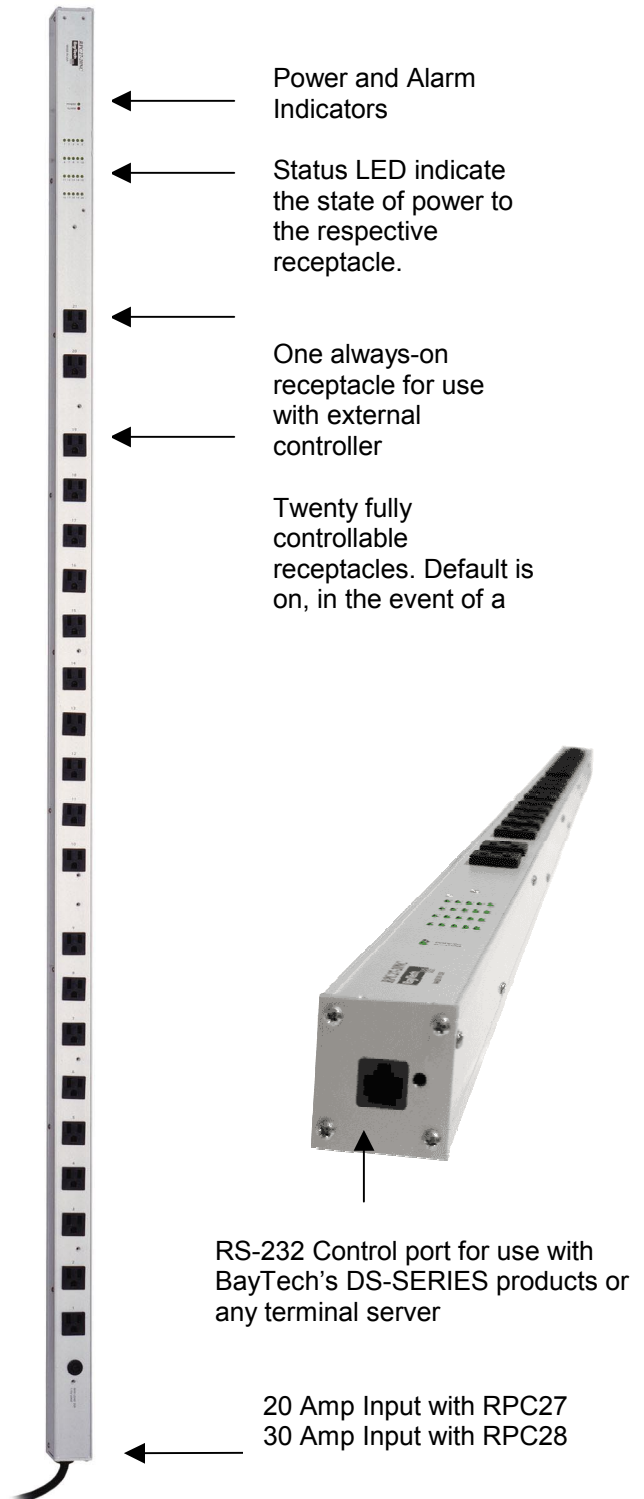
Used with the DS-Series SNMP controller the RPC's provide receptacle level rebooting and on/off set commands. SNMP traps can also be generated based on preset current, voltage, power and temperature thresholds.

To avoid overloading circuits unused receptacles can be turned off.

Access: The RPC's have a RS-232 control port for use with the DS-Series SNMP controller, any terminal server or external modem.

Control: The RPC's accept on, off, reboot commands for the whole strip, multiple receptacles or individual receptacles. Configuration is menu driven for setting thresholds and user information and receptacle names.

- **SNMP Support with DS-Series controller**
- **20 controllable Receptacles plus one always on.**
- **Reboot or Turn ON/OFF all receptacles**
- **True RMS current monitoring with overload alarm buzzer and indicator LED.**
- **Up to 9 users plus administrator with capability of assigning receptacles to users.**
- **User Name and password authentication.**
- **Individual or collective control of the receptacles.**
- **Programmable unit ID and receptacle names.**
- **Voltage monitoring feature**
- **Temperature monitoring**



2.1.3.13 RPS2 – Remote Power Sensor



Function: The RPS2 is a dual side power sensing unit. The input and output for the RPS2 is 20 Amp 115 VAC . The RPS2 measures and reports :

- True RMS Current
- TrueRMS Voltage
- True Power in VA
- Teperature

Access: The communications interface for the RPS2 is RS-232 serial. This interface can be used with BayTech's DS-Series SNMP Controller or with any terminal server or modem.

Monitor: When used with the DS Series SNMP controller the RPS2 will report SNMP traps based on preset conditions for current, voltage, power and temperature.

The DS Series can handle as many as 32 RPS2's.

Specifications

Power Input: (2) Non detachable Nema L5-20P

Power Output: (2)Nema L5-20R power receptacles

Interface: RS-232 interface with RJ45 connector

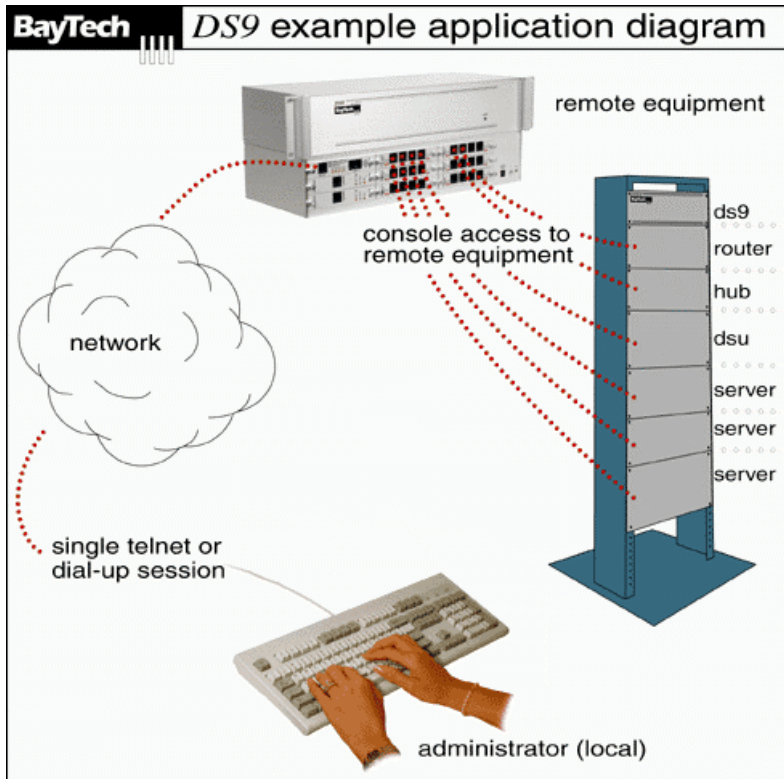
Indicators: Power and status indicator LEDs

Mounting: Floor mount

Dimensions 8.25"w X 5"d X 2.59"h

2.2 Console Access

The DS Series can give network administrators console access to up to 32 devices, including routers, switches, servers, CSU/DSUs, or BayTech's RPC series remote power management solutions.



- Use a single phone line to access all RS-232 consoles
- Use a single Ethernet connection to access all RS-232 consoles
- Have a user-friendly menu driven interface to equipment
- Use a scalable solution for growth
- Access equipment consoles independantly of the network
- Conserves IP addresses to power management equipment
- Modular in design
- Field expadable
- Standard 19" rack mountable (23" optional)

Build your own custom solution.

The DS-Series is modular in design with several chassis sizes. The modules installed determine how the unit is accessed and how many RS-232 devices can be controlled.

Modules available include an Ethernet (Telnet) Host module, dial-up host module, RS-232 Host module and the 4 port RS-233 peripheral module.

Base Unit Selection

Base unit selection is determined by the number of modules needed, which in turn is determined by how many devices are going to be controlled by it. For Dial-up and Ethernet console access in the same unit use the dual host units. For more ports and only dial-up or local RS232, the single host units are recommended.

2.2.1 The correct questions for product selection

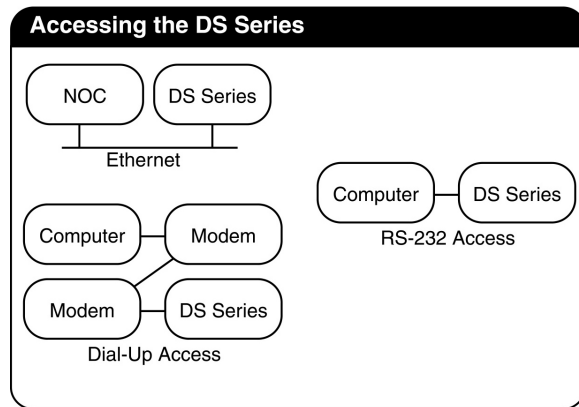
How many current and future RS-232 devices will the customer connect?

The DS-Series is available in 5 different models. The model selected depends on how many RS-232 devices the customer needs to connect and how the customer will access the unit. The table below explains the capabilities of the 5 models. The DS74 module has four ports.

Model #	Minimum RS-232 Ports with one DS74	Maximum RS232 Ports
DS3IPS – Single Host Unit	4	8 w/2 DS74's
DS6 – Single Host Unit	4	20 w/5 DS74's
DS6D – Dual Host Unit	4	16 w/4 DS74's
DS9IPS – Single Host Unit	4	32 w/8 DS74's
DS9D – Dual Host Unit	4	28 w/7 DS74's

How will the customer access the unit?

Ethernet (Telnet), Dial-up, or local RS-232. The table below list the module part#'s needed for access.



Model#	Support
Dual host units can have two of the following installed	
DS72TP	Ethernet (Telnet), RS-232 Port for local access or use with external modem for dial back-up
DS71-MD3	Internal 33.6kbps modem and RS-232 port for local access
DS71	RS-232 port for local access or use with external modem for dial backup

What are the voltage requirements for the DS-Series unit?

The DS-Series are available in 115VAC, 220VAC and –48VDC. Power requirements should be specified at time of order. 115VAC is standard, 220VAC and –48VDC are optional and cost more.

Voltage	Ordering and Cost
220VAC	Option4 – \$30.00
-48VDC	Option1 – \$80.00

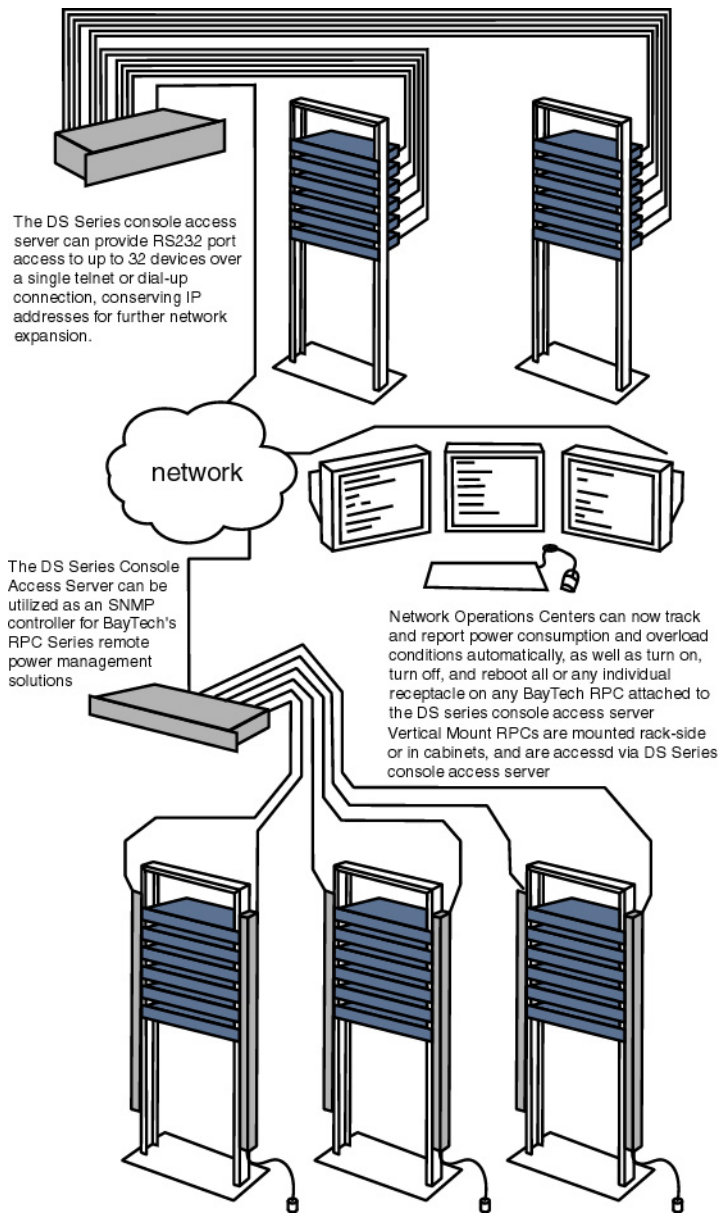
How will the DS-Series be mounted?

The DS-Series ships with a 19" rackmount kit. 23" is available and should be specified at time of order.

2.2.2 Sample Console Access Application

The DS-Series primary function is providing access to multiple RS-232 ports at a single location. The DS-Series can also be used as an SNMP controller for multiple RPC's

2.2.2.1 Console Access application / SNMP Controller Application



Synopsis: Customer needs In-band Telnet access to 12 RS-232 ports.

Features: The DS-Series through a single IP address provides access to 12 RS-232 devices. These devices can range from servers to routers.

Menu Driven Interface: When the customer Telnets to the DS-Series a numbered menu appears with the device names connected to the DS-Series. The names are programmable. Once the customer is finished with a particular device the menu is easily brought up and the customer can either log off or select another device.

Username and Password: The host modules for the DS-Series supports multiple user names and passwords.

Additionally, usernames and passwords can be assigned to individual ports. This allows users to only see ports assigned to their username.

Expandable Solution: The model select in this application allows the customer to expand by 8 more devices.

External Modem Support: The host module selected for this application has a local RS-232 port for onsite access or use with an external modem.

BayTech components:

- (1) DS6
- (1) DS72
- (3) DS74's

By adding 2 more DS74's this unit can handle up to 20 RS-232 devices.

2.2.3 DS-Series Models

2.2.3.1 Base Unit: DS3

Handles 8 RS-232 Ports



Power Input	Standard 115VAC Optional 220VAC, -48VDC
Current Draw	800ma max
Number of Module Slots	3
Number RS232 Devices Supported	8 with 2-DS74's
Host Modules Supported	1
Rack Space	1u 19" standard 23"optional

\$159.00

2.2.3.2 Base Unit: DS6

Handles 20 RS-232 Ports



Power Input	115VAC Optional /220VAC,-48VDC
Current Draw	800ma max
Number of Module Slots	6
Number RS232 Devices Supported	20 with 5-DS74's
Host Modules Supported	1
Rack Space	1-1/2 u 19" standard 23"optional

\$199.00

2.2.3.3 Base Unit: DS6D

Handles 16 RS-232 Ports



Power Input	115VAC Optional 220VAC, -48VDC
Current Draw	1 amp max
Number of Module Slots	6
Number RS232 Devices Supported	16 with 4-DS74's
Host Modules Supported	2
Rack Space	1-1/2 u 19" standard 23"optional

\$250.00

2.2.3.4 Base Unit: DS9

Handles 32 RS-232 Ports



Power Input

115VAC
Optional 240VAC, -
48VDC

Current Draw

800ma max

Number of Module Slots

8

Number RS232 Devices
Supported

32 with 8-DS74's

Host Modules Supported

1

Rack Space

2 u 19" standard
23"optional

\$299.00

2.2.3.5 Base Unit: DS9D

Handles 28 RS-232 Ports



Power Input

115VAC
Optional 240VAC, -
48VDC

Current Draw

1amp max

Number of Module Slots

9

Number RS232 Devices
Supported

32 with 8-DS74's

Host Modules Supported

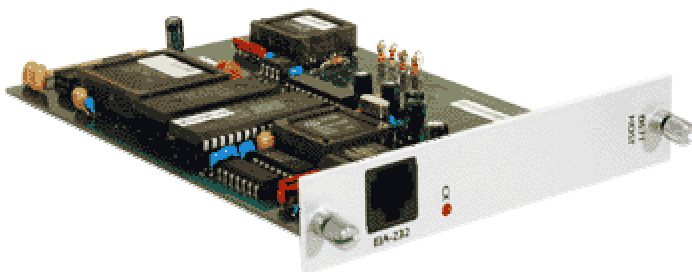
2

Rack Space

2u 19" standard 23"
Optional

\$350.00

2.2.3.6 Module: DS71

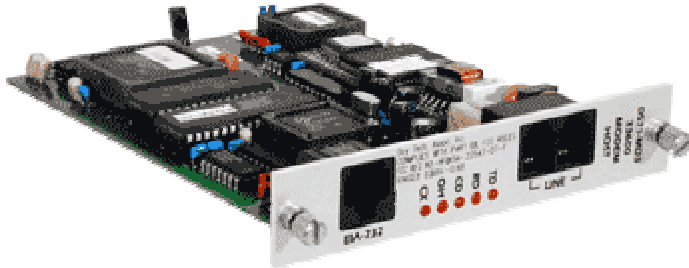


The [DS71](#) host communication module provides an RS-232 interface that controls user access to the DS-Series data switch base unit and all other installed DS-Series modules.

The DS71 is a system data controller that directs operations between the base unit, system modules and externally connected devices.

\$199 .00

2.2.3.7 Module: DS71 -MD3



The [DS71-MD3](#) is a 33.6kbps modem interface for the DS-Series product line. The DS71-MD3 has a menu interface for easy programming and device selection.

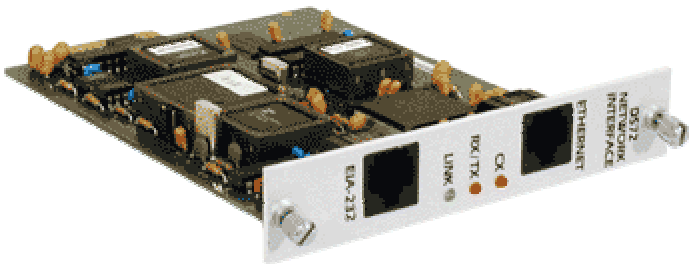
The RS-232 port on the DS71-MD3 is used to access equipment attached to the DS-Series while onsite, and to program the features of the DS-Series.

The DS71-MD3 supports a time guard disconnect for reliable binary transfers. It also has a programmable disconnect timer for automatic disconnection when there is no activity.

The DS71-MD3 has built-in lightning protection and a ring detect reset circuit which will power reset the modem if it fails to answer in 5-6 rings.

\$395 .00

2.2.3.8 Module: DS72

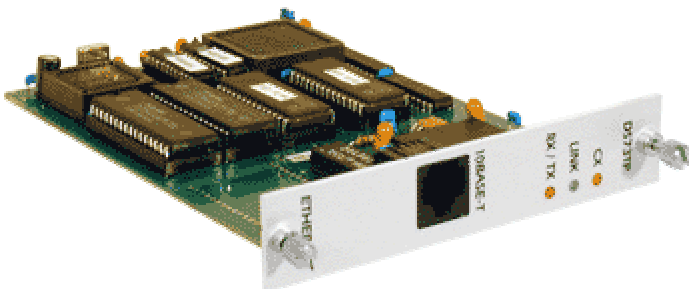


The [DS-72](#) network module provides an Ethernet Telnet interface to the DS-Series. Through a single IP address remote users can Telnet to the DS-Series and communicate with any of the RS-232 devices connected to the unit.

The DS-72 also has a local RS-232 port for configuration and access as well as dial backup with an external modem.

\$350.00

2.2.3.9 Module: DS73



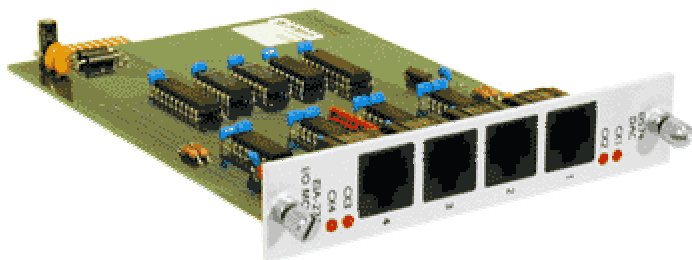
The [DS73](#) network communication module supports remote access to TCP/IP Ethernet networks by using the DS-Series Data Switch with a modem module. Remote users can dial into the DS-Series unit and connect to network hosts from anywhere at anytime.

PPP Protocol

Remote workstations and PCs connect to the DS73 using a dial-up PPP session. This offers dial-up users a low-cost IP network link suitable for remote access to the network

\$395.00

2.2.3.10 Module: DS74



Four Ports Per Module

The [DS74](#) peripheral communication module expands the DS-Series host module peripheral communications to 4 individual channels per module.

User Interface/Configuration

The DS74 has four EIA-232 ports, which use eight pin modular connectors. Using a host communications module you can select serial configuration for baud rate, word size, stop bits and parity for each port of the DS74.

\$99.00

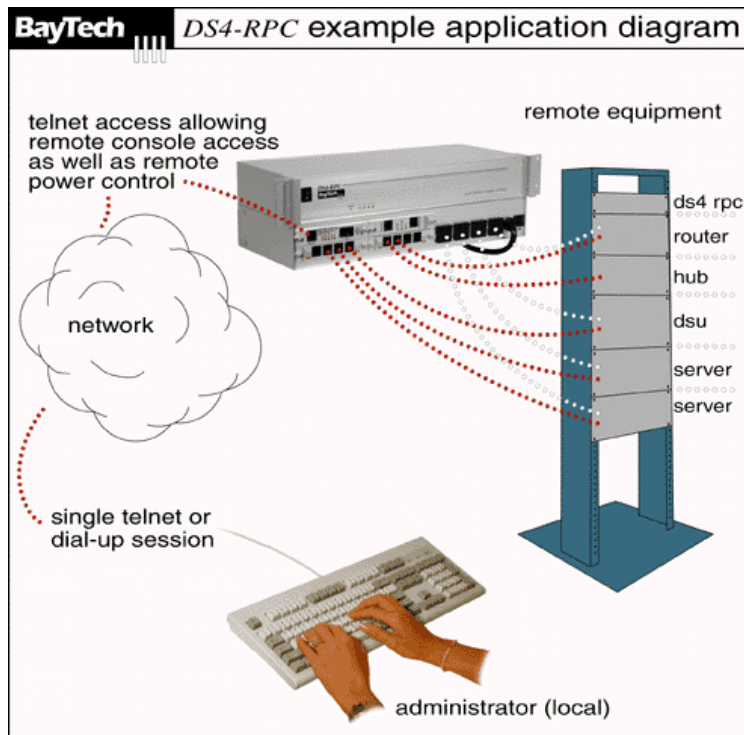
2.3 Console Access and Power Control in one unit

With the rich feature set of our RPC and DS Series in one easily installable unit, full control of your remote site is easier than ever.

The modular design of the data switch side allows for customizable configuration that will suit your individual needs. If you need to gain console access to your equipment via modem, local RS232, Ethernet or any combination of the three, there is a solution for you.

The four fully controllable receptacles on the RPC side allow total control of the power flow to your equipment. Turn on, turn off, or reboot any device plugged into it from anywhere in the world.

A user-friendly menu driven interface gives you the ability to manage receptacles, gain console access to your equipment, and perform all of the administrative functions available in the unit.



- Console access and power management in one unit
- Modular design for easy customization
- Network access via TCP/IP (TELNET)
- Dial-up Access with Internal Modem
- EIA232 control port for onsite access
- Turn on/off individual or all receptacles
- Reboot power for individual or all receptacles
- Programmable receptacle names
- Secure password protection
- LED receptacle indicators
- 115 VAC 15 amp and 240 VAC 10 amp options
- 19" or 23" rack mount

2.3.1 The correct questions for product selection

The DS-RPC has 4 power receptacles and is rated at 15amps; some of the models provide access to more than four consoles. To expand the power receptacles your customer will need to use a product like the RPC4.

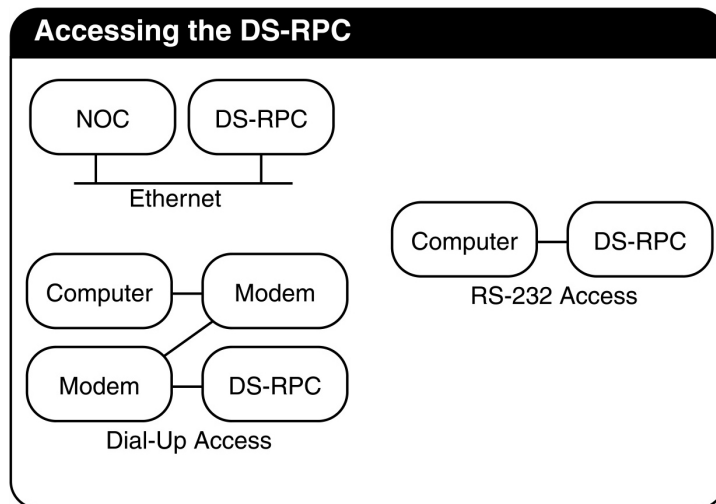
How many current and future RS-232 devices will the customer connect?

The DS-RPC is available in 3 different models. The model selected depends on how many RS-232 devices the customer needs to connect and how the customer will access the unit. The table below explains the capabilities of the 3 models. The DS74 module has four ports.

Model #	Minimum RS-232 Ports with one DS74	Maximum RS232 Ports
DS2-RPC – Single Host Unit	4	4 w/2 DS74's
DS4-RPC – Single Host Unit	4	12 w/3 DS74's
DS4D-RPC – Dual Host Unit	4	8 w/2 DS74's

How will the customer access the unit?

Ethernet (Telnet), Dial-up, or local RS-232. The table below list the module part#'s needed for access.

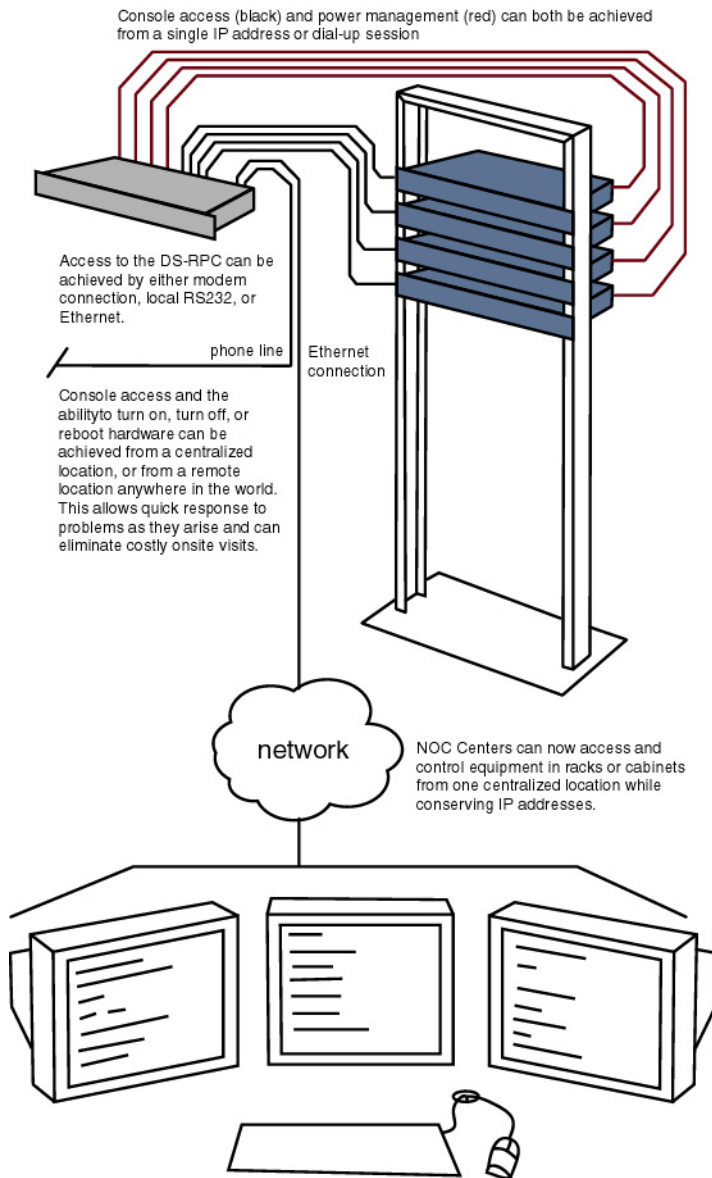


Model#	Support
Dual host units can have two of the following installed	
DS72TP	Ethernet (Telnet), RS-232 Port for local access or use with external modem for dial back-up
DS71-MD3	Internal 33.6kbps modem and RS-232 port for local access
DS71	RS-232 port for local access or use with external modem for dial backup

How will the DS-Series be mounted?

The DS-Series ships with a 19" rackmount kit. 23" is available and should be specified at time of order.

2.3.2 Sample Application using the DS-RPC



Synopsis: Customer needs In-Band console access and power control of equipment at a remote branch.

Features: The DS-RPC provides both functions in one unit. The model selected for this application provides four RS-232 consoles and four power receptacles, which are accessed in controlled through a Telnet connection. Additionally, the network interface module has a RS-232 port for onsite access or use with an external modem for dial backup.

Menu Driven Interface: When the customer Telnets to the DS-Series a numbered menu appears with the device names connected to the DS-Series. The names are programmable. Once the customer is finished with a particular device the menu is easily brought up and the customer can either log off or select another device.

Username and Password: The host modules for the DS-Series support multiple user names and passwords. Additionally, usernames and passwords can be assigned to individual ports. This allows users to only see ports assigned to their username.

BayTech components:

- (1) 1-DS2-RPC
- (2) 1-DS72
- (3) 1-DS74

2.3.3 DS-RPC Models

2.3.3.1 Base Unit: DS2-RPC



□The **DS2-RPC** has 2 module slots and 4 power receptacles.(supports up to 4 RS-232 devices)

\$295.00

2.3.3.2 Base Unit: DS4-RPC

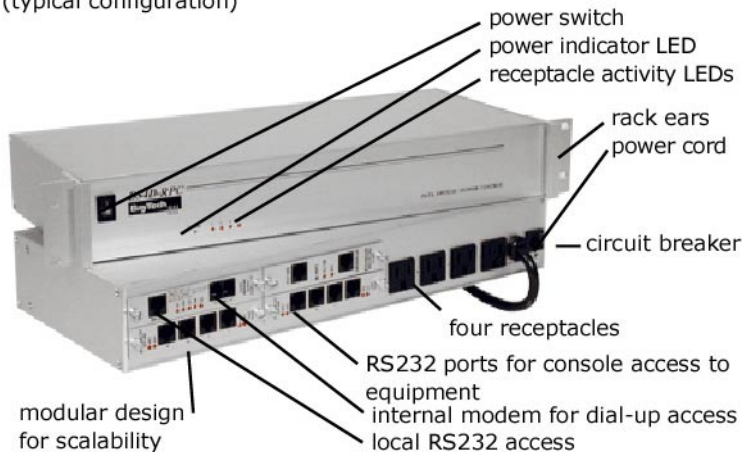


□The **DS4-RPC** has 4 module slots and 4 power receptacles. (Supports up to 12 RS-232 devices)

\$350.00

2.3.3.3 Base Unit: DS4D-RPC

DS4D Power Control & Console Access Server (typical configuration)



□The **DS4D-RPC** has 4 module slots and 4 power receptacles, it also supports two host modules.
(supports up to 8 RS-232 devices)

\$375.00

3.0 PDU – Power Distribution Units

3.0.1 PDU-20 20 Amp Power Distribution Unit



Features

- Complete PC board distribution eliminates wires coming loose from receptacles
- 20 amp max load with L520 twistlock plug
- 10 Nema 5-15R receptacles
- 20 Amp resettable breaker
- Power LED indicator

Function:

The PDU-20 is a rack mountable power distribution unit designed for simple AC power distribution. The maximum load for the PDU-20 is 20 amps across its 10 receptacles. PC board design adds greatly to the PDU-20's reliability by eliminating wire/solder connections.

Specifications

Power Plug: 5-20P, Optional L5-20P (Twist Lock)

Power Receptacles Twelve NEMA 5-15 receptacles
110V AC (+10%), 50/60 Hz, 20 Amps

Circuit Breaker 20 amp resettable breaker

Environment Operating temperature range is from 0 to 40 degrees Celsius. Storage temperature range is from -40 to 80 degrees Celsius. Humidity tolerance is from 5 to 95 percent RH.

Dimensions 16.75"w X 1.75"d X 1.75"h

Indicators Red power indicator LED

Mounting Standard rack mount

Warranty One year on parts and labor

4.0 TESTING LIVE UNITS

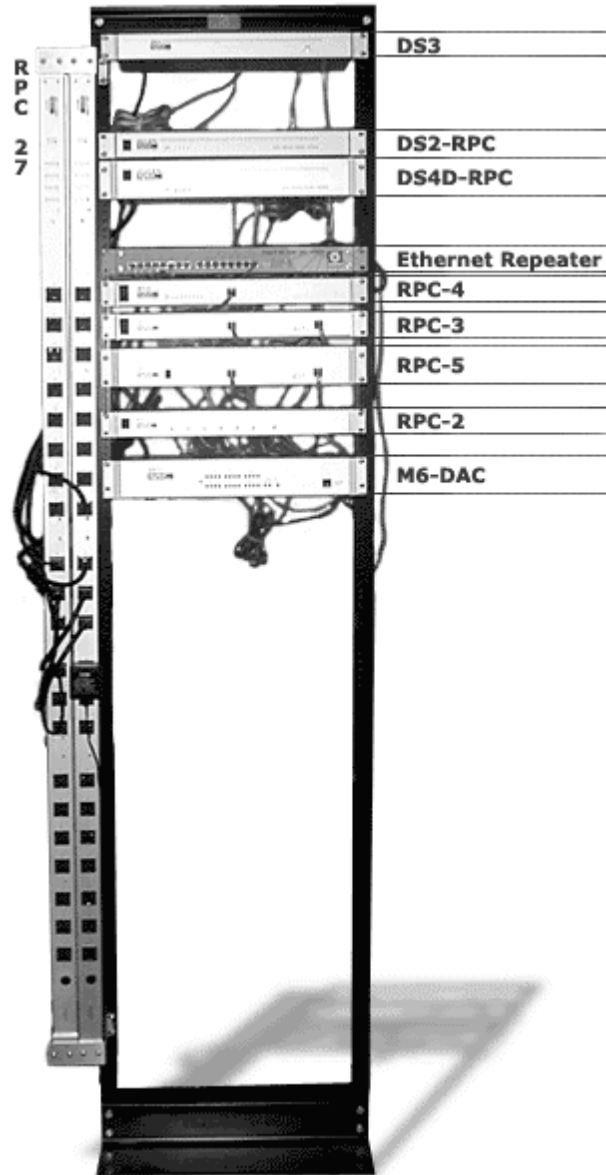
We have installed several live units for testing. These units are installed in our corporate headquarters and can be reached from anywhere and anytime.

Feel free to use this as a learning tool –or- to show potential customer while you are presenting BayTech solutions.

This has proven to be an invaluable tool.

This document provides the instructions necessary to demonstrate BayTech's RPC power control units, DS-Series data switch and M-Series DAC. Specifically, these instructions are broken down into five groups:

Below is a picture of the demo units installed as they are in our facility. Click on a unit to visit its home page.

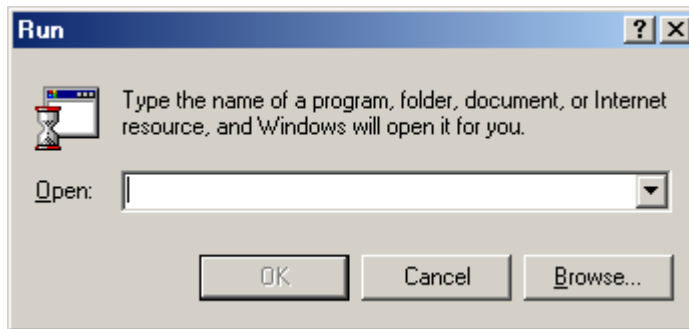


4.1 Instructions for connecting to the DS3-IPS via the Internet and controlling the RPC27-20NC

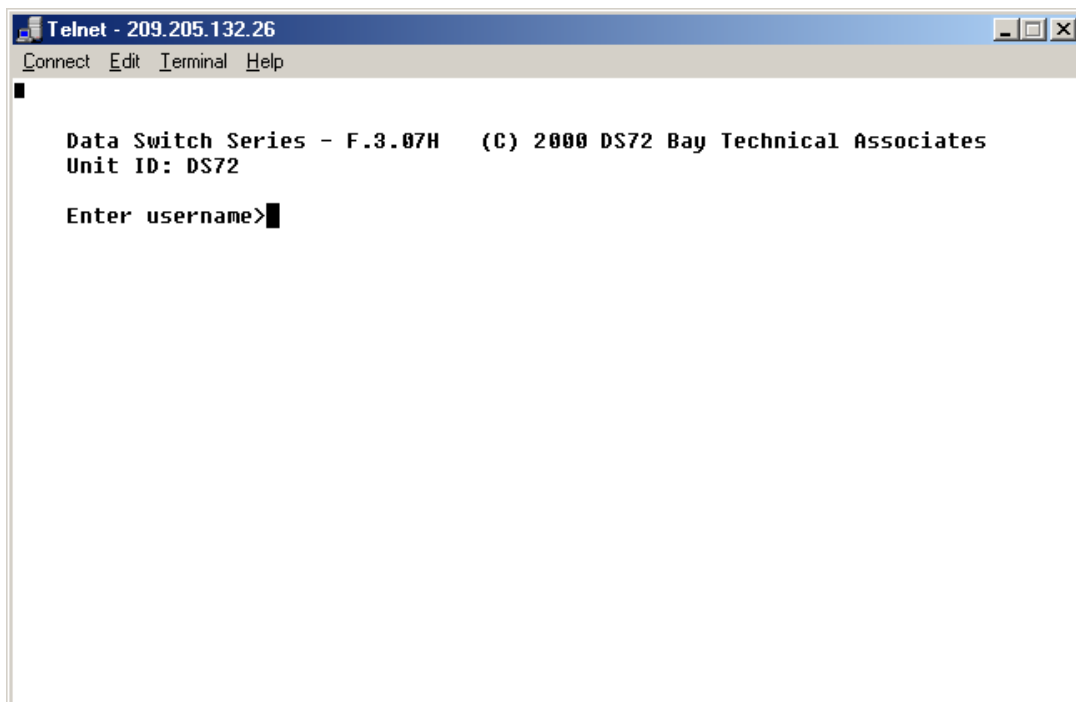
In this exercise you will connect via the Internet to the DS3IPS. There are two RPC27's connected to the DS3-IPS. When you are finished you will have experienced the DS-Series interface as well as the RPC27's. You will also learn how to reboot all or individual receptacles on an RPC27.

Possible live application: You have an email server in a remote location which is locked. You need to reboot it

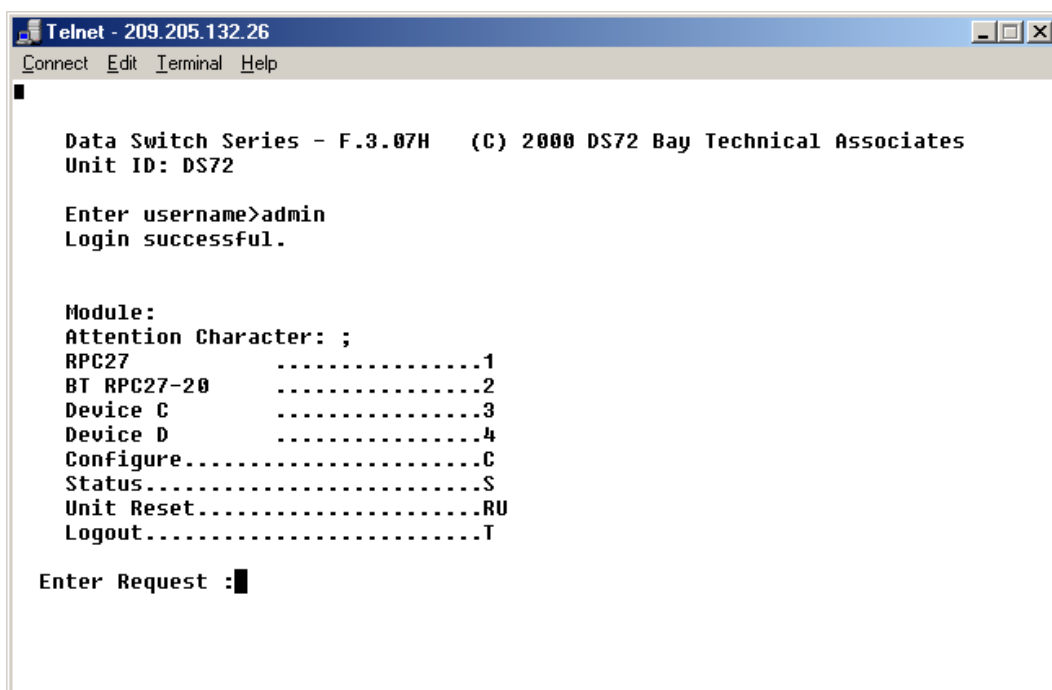
What you will need: Any Telnet software (client) should work. Windows supplies a Telnet client with 95,98,NT and ME. To access this go to the START menu, click RUN. It should look like:



- A. Type [TELNET 209.205.132.26] and hit enter, if you made it through you firewall you will see the following:



- B. The username is "admin", type this and hit enter. You should see the following:



```

Telnet - 209.205.132.26
Connect Edit Terminal Help

Data Switch Series - F.3.07H   (C) 2000 DS72 Bay Technical Associates
Unit ID: DS72

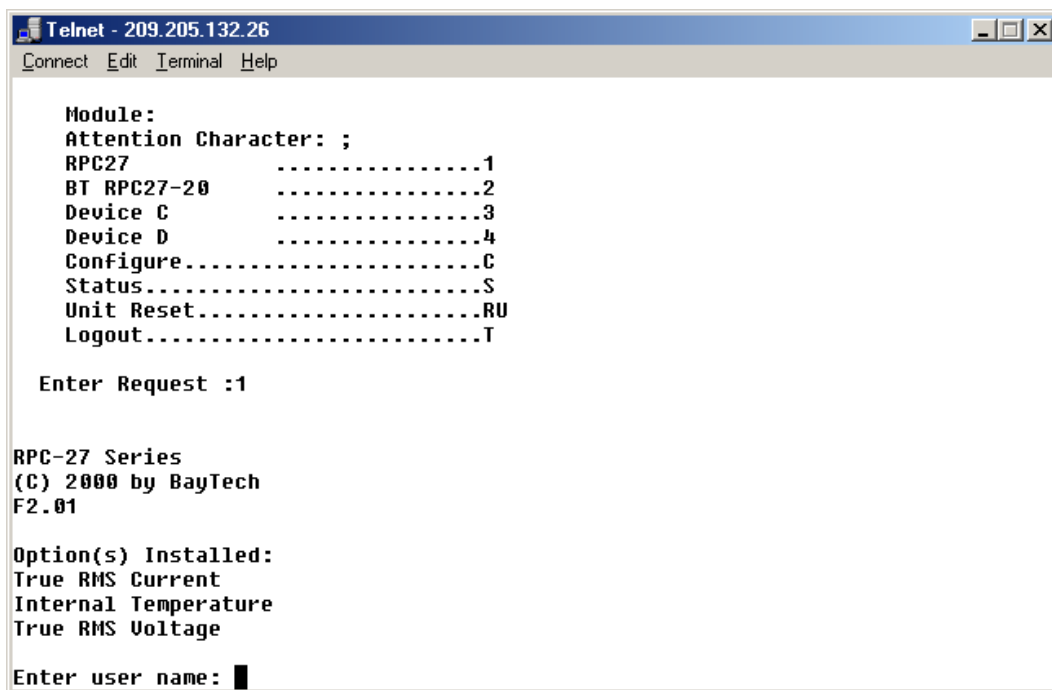
Enter username>admin
Login successful.

Module:
Attention Character: ;
RPC27      .....1
BT RPC27-20 .....2
Device C   .....3
Device D   .....4
Configure.....C
Status.....S
Unit Reset.....RU
Logout.....T

Enter Request :

```

C. From this menu you can see the various RPC27's. Type "1" and hit enter. You should see this:



```

Telnet - 209.205.132.26
Connect Edit Terminal Help

Module:
Attention Character: ;
RPC27      .....1
BT RPC27-20 .....2
Device C   .....3
Device D   .....4
Configure.....C
Status.....S
Unit Reset.....RU
Logout.....T

Enter Request :1

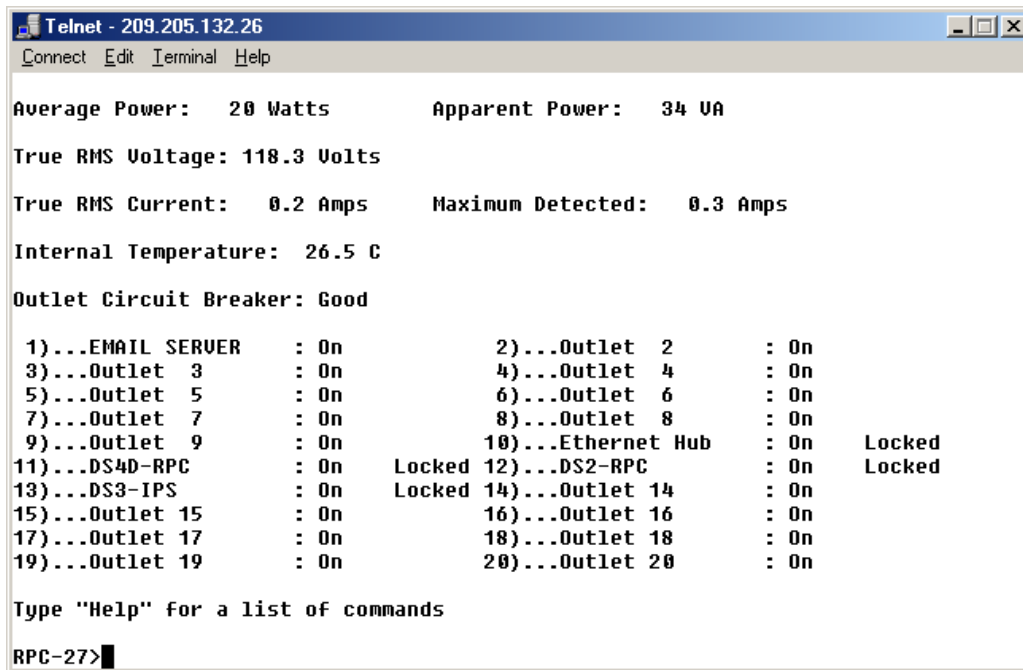
RPC-27 Series
(C) 2000 by BayTech
F2.01

Option(s) Installed:
True RMS Current
Internal Temperature
True RMS Voltage

Enter user name:

```

- D. The username is “admin” the password is “bta”, enter these at the appropriate prompt and hit enter. You should see the following:



```

Telnet - 209.205.132.26
Connect Edit Terminal Help

Average Power: 20 Watts      Apparent Power: 34 VA
True RMS Voltage: 118.3 Volts
True RMS Current: 0.2 Amps   Maximum Detected: 0.3 Amps
Internal Temperature: 26.5 C
Outlet Circuit Breaker: Good

1)...EMAIL SERVER : On      2)...Outlet 2 : On
3)...Outlet 3 : On      4)...Outlet 4 : On
5)...Outlet 5 : On      6)...Outlet 6 : On
7)...Outlet 7 : On      8)...Outlet 8 : On
9)...Outlet 9 : On      10)...Ethernet Hub : On Locked
11)...DS4D-RPC : On Locked 12)...DS2-RPC : On Locked
13)...DS3-IPS : On Locked 14)...Outlet 14 : On
15)...Outlet 15 : On      16)...Outlet 16 : On
17)...Outlet 17 : On      18)...Outlet 18 : On
19)...Outlet 19 : On      20)...Outlet 20 : On

Type "Help" for a list of commands
RPC-27>

```

DISCUSSION: Before proceeding let's discuss what you see in the screen.

1. Average Power, Apparent Power, True RMS Voltage, True RMS Current, Maximum detected, Internal Temperature: All of the listed items are measured continuously and reported when you display the screen. If you use the DS-Series SNMP controller these items are reported when they exceed the specified threshold.
2. Outlet Circuit Breaker: This is reported “Good” when the breaker is okay, it would be reported “Fail” if the breaker tripped. The logic of the RPC27 is fused so it will still be alive even when the breaker trips.
3. 1)...EMAIL SERVER : This is the server causing problems, notice you can individually name all outlets.
4. Locked: The RPC27 provides the option to lock individual receptacles, this is important if there is equipment that should never be rebooted or turned off.

- E. The task is now to reboot the locked “EMAIL SERVER” . From the RPC-27> command prompt type [reboot 1] and hit enter. You should see the following screen:

```

Telnet - 209.205.132.26
Connect Edit Terminal Help
Average Power: 20 Watts      Apparent Power: 34 VA
True RMS Voltage: 118.3 Volts
True RMS Current: 0.2 Amps   Maximum Detected: 0.3 Amps
Internal Temperature: 26.5 C
Outlet Circuit Breaker: Good

1)...EMAIL SERVER      : On           2)...Outlet 2          : On
3)...Outlet 3          : On           4)...Outlet 4          : On
5)...Outlet 5          : On           6)...Outlet 6          : On
7)...Outlet 7          : On           8)...Outlet 8          : On
9)...Outlet 9          : On           10)...Ethernet Hub    : On   Locked
11)...DS4D-RPC         : On   Locked  12)...DS2-RPC         : On   Locked
13)...DS3-IPS          : On           14)...Outlet 14       : On
15)...Outlet 15        : On           16)...Outlet 16       : On
17)...Outlet 17        : On           18)...Outlet 18       : On
19)...Outlet 19        : On           20)...Outlet 20       : On

Type "Help" for a list of commands

RPC-27>reboot 1
Reboot EMAIL SERVER      (Y/N)? █
  
```

- F. Type “y” and hit enter. You do have the option to disable this confirmation.
- G. The “EMAIL SERVER” will be rebooted and the menu will reappear.
- H. Type five semicolons in a row to get back to the main menu, type “T” and hit enter to log off the unit.

NOTE: The five semicolons are the attention string for the unit.

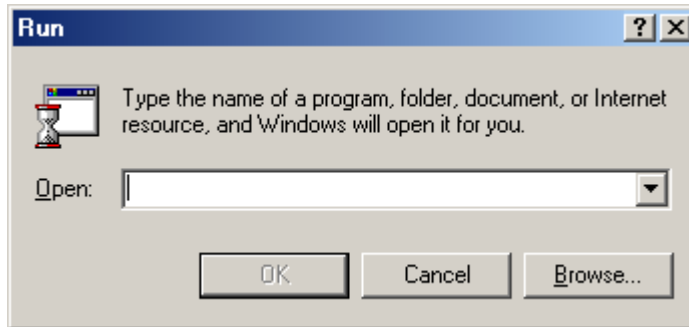
Summary: Simply, by being able to perform the above task you have the ability to reboot equipment from anywhere, anytime.

4.2 Instructions for using the DS-RPC via the internet

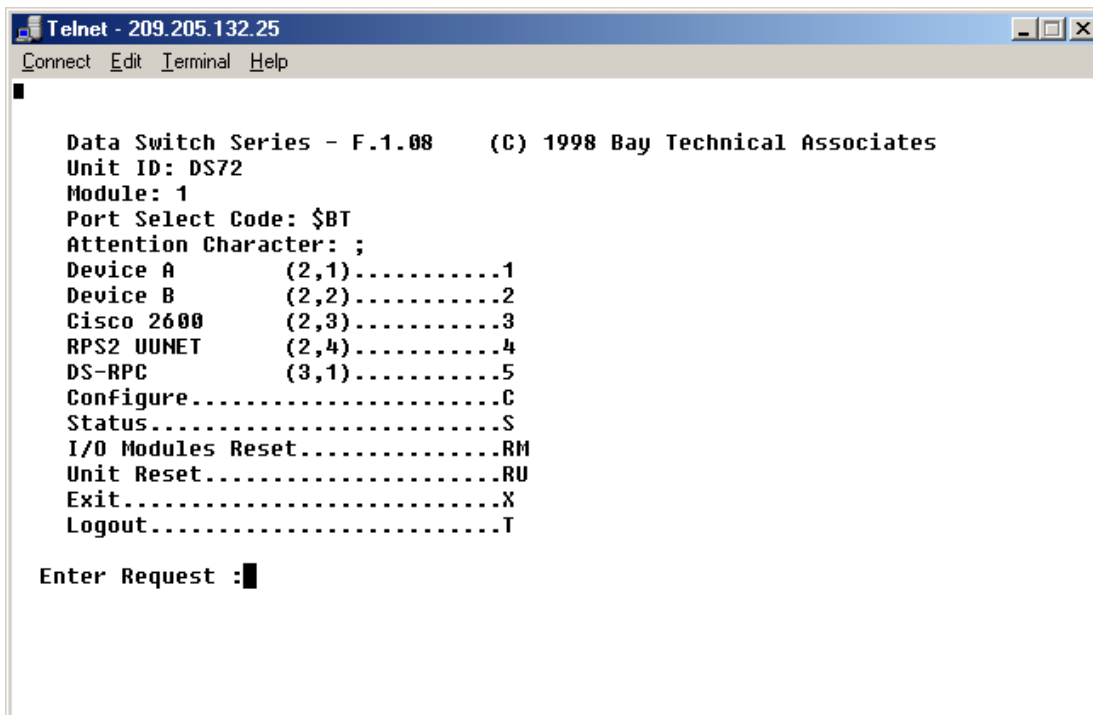
In this exercise you will connect via the internet to the DS2RPC. This unit has 4 RS-232 ports for console access, and 4 power receptacles for rebooting the equipment attached to the RS232 ports. When you are finished you will have send how to access and control the DS-RPC.

Possible application: I am a bank and have 220 branch offices, I just did a software update and three of the routers locked, I need to reprogram and reboot these routers.

What you will need: Any Telnet software (client) should work. Windows supplies a Telnet client with 95,98,NT and ME. To access this go to the START menu, click RUN. It should look like:

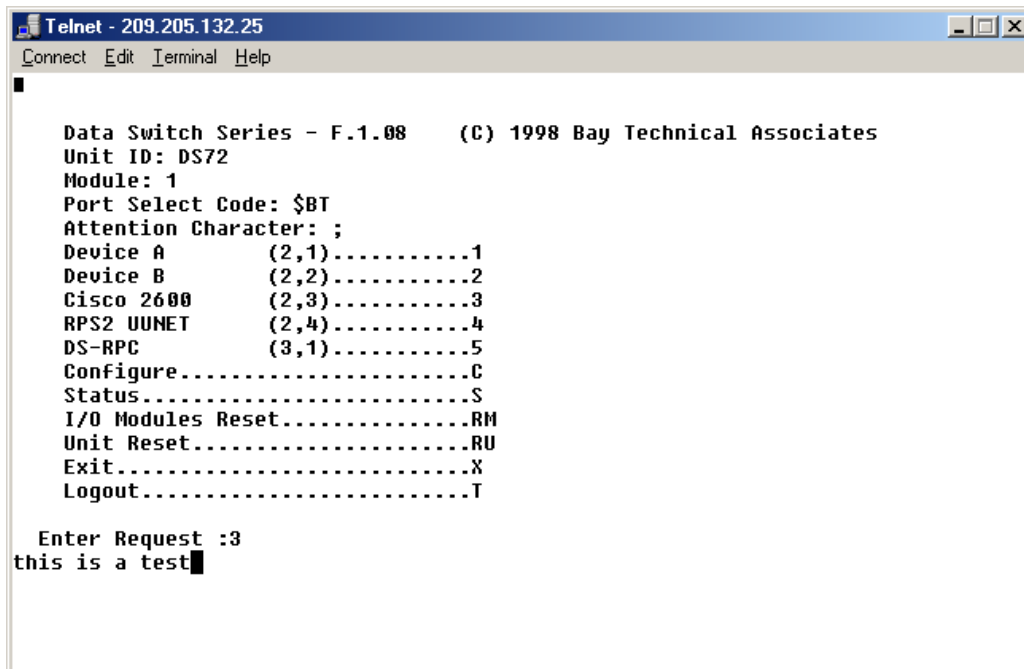


- A. Type [TELNET 209.205.132.25] and hit enter, if you made it through you firewall you will see the following:



NOTE: This unit does not have a password assigned.

B. The menu indicates the Router is on port 3 of the four RS232 ports. There is not a live router on this port. There is a loop back connector, which allows you to see your keystrokes. Select option 3 of the menu and hit enter. You should see the following after you type a few characters.



```

Telnet - 209.205.132.25
Connect Edit Terminal Help

Data Switch Series - F.1.08      (C) 1998 Bay Technical Associates
Unit ID: DS72
Module: 1
Port Select Code: $BT
Attention Character: ;
Device A      (2,1).....1
Device B      (2,2).....2
Cisco 2600    (2,3).....3
RPS2 UUNET    (2,4).....4
DS-RPC        (3,1).....5
Configure.....C
Status.....S
I/O Modules Reset.....RM
Unit Reset.....RU
Exit.....X
Logout.....T

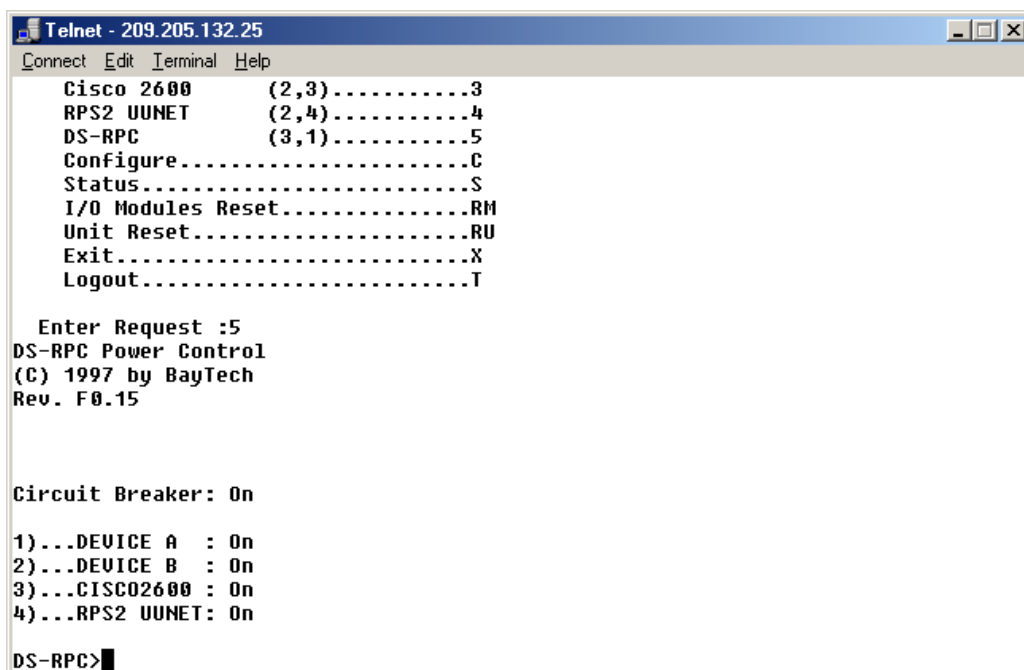
Enter Request :3
this is a test

```

DISCUSSION: You are in full duplex communications with port 3, if this was a live device you would be able to do remotely what you could do onsite through this console port.

To get back to the main menu you will type five semicolons. The main menu will appear.

C. Now we want to reboot the router. Menu option 5 provides access to the power control section of the DS2RPC. Select this option and hit enter. You should see the following:



```

Telnet - 209.205.132.25
Connect Edit Terminal Help

Cisco 2600    (2,3).....3
RPS2 UUNET    (2,4).....4
DS-RPC        (3,1).....5
Configure.....C
Status.....S
I/O Modules Reset.....RM
Unit Reset.....RU
Exit.....X
Logout.....T

Enter Request :5
DS-RPC Power Control
(C) 1997 by BayTech
Rev. F0.15

Circuit Breaker: On

1)...DEVICE A : On
2)...DEVICE B : On
3)...CISCO2600 : On
4)...RPS2 UUNET: On

DS-RPC>

```

D. Type [reboot 3] hit enter, answer "y" to the question. Your router is rebooted.

E. Type five semicolons to get back to the main menu, hit 't' and enter to logout.

NOTE: The five semicolons are the attention string for the unit.

Summary: In most cases you would have reselected the routers console port to watch it reboot. Simply, by being able to perform the above task you have the ability, through a single product' access the console port of 4 devices and reboot those 4 devices. This can be done from anywhere, anytime.

4.3 Instructions for connecting to the RPC3 via the internet.

Possible Application(s): You have collocated servers in a internet data center, one of the servers is locked. You need to reboot it. You also need to add another server but think you might exceed your circuits capacity. You need to know how much current you are drawing on that circuit.

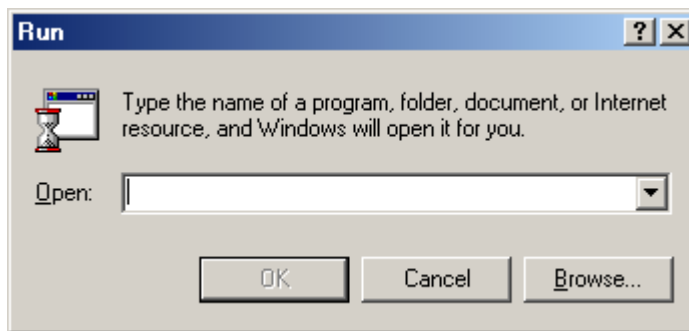
Important: the RPC3 with multiple user name and password support is geared toward customers who co-locate equipment with other companies. The idea behind the multiple user and password is to provide multi-company support within a single RPC3.

RPC3 Username and Password Table (with assigned receptacles)

User Name	Password	Assigned Receptacles
company1	cp1	1
company2	cp2	2
company3	cp3	3
company4	cp4	4
sysop	sysop	5,6,7,8
admin	BTA	Full Access

Note: When logging in as anyone other than the "admin" you will be directed straight to the outlet control menu with your assigned receptacles. The admin will have the entire menu for configuration purposes.

What you will need: Any Telnet software (client) should work. Windows supplies a Telnet client with 95,98,NT and ME. To access this go to the START menu, click RUN. It should look like:



- A. Type [TELNET 209.205.132.23] and hit enter, if you made it through you firewall you will see the following:

```

Telnet - 209.205.132.23
Connect Edit Terminal Help

RPC-3 Telnet Host
Revision F 4.20a, (C) 1999
Bay Technical Associates
Unit ID: RPC3

Enter username>

```

- B. You are “company1”, your username is “company1” and your password is “cp1”. Type these at the appropriate prompt. You should see the following screen:

```

Telnet - 209.205.132.23
Connect Edit Terminal Help

Revision F 4.20a, (C) 1999
Bay Technical Associates
Unit ID: RPC3

Enter username>company1

Enter password>***
Option(s) installed:
True RMS Current
Internal Temperature

True RMS current: 0.0 Amps
Maximum Detected: 0.0 Amps

Internal Temperature: 32.5 C

Circuit Breaker: On

Selection   Outlet   Outlet   Power
Number     Name     Number   Status
1           YOURSERVER 1        On

Type "Help" for a list of commands

RPC-3>

```

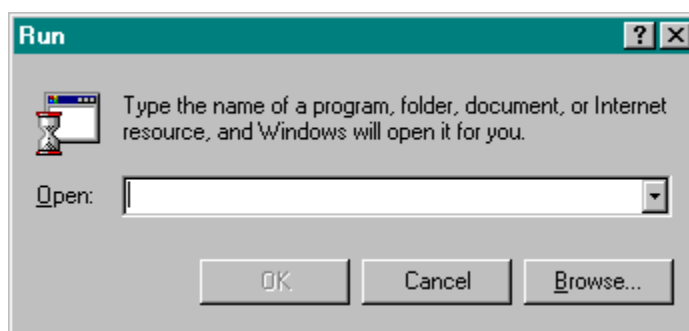
Discussion: Since you only have one receptacle assigned, only one is shown. You will also notice the “True RMS current” reading. In a live situation this would show the current draw of the attached equipment.

- C. The task is now to remote “YOURSERVER”. From the RPC-3> prompt type [reboot 1], hit “y” to the “are you sure questions”, your server is rebooted.
- D. Type [logout] and hit enter to end the session.

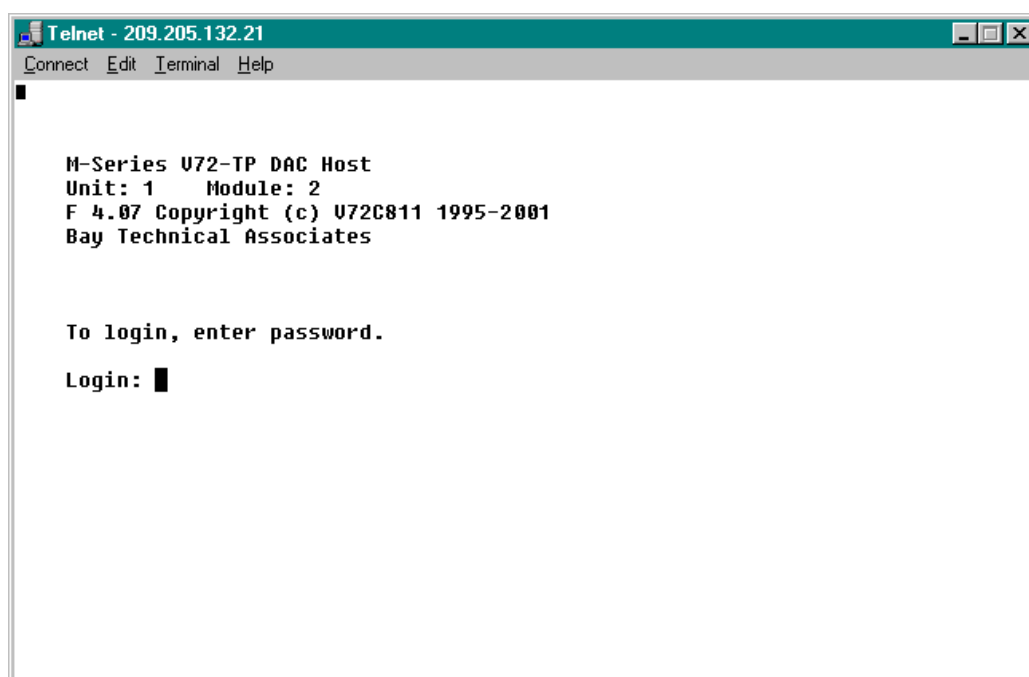
4.3 Instructions for using the M6-DAC via the Internet

In this exercise you will connect via the Internet to the M6-DAC. This unit has 8 RS232 ports for console access expandable up to 20 RS232 ports. One of the important things to note with the M series, is it’s ability to have concurrent sessions.

What you will need: Any Telnet software (client) should work. Windows supplies a Telnet client with 95,98,NT, and ME. To access this, go to the START menu, and click RUN. It should look like this

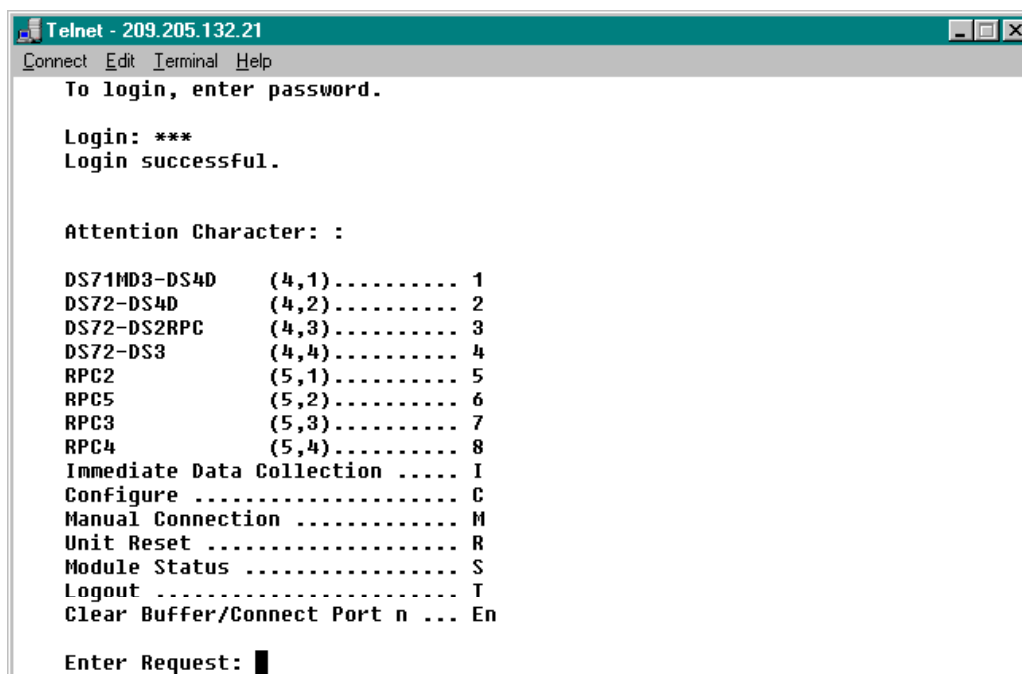


- A. Type [Telnet 209.205.132.21] and hit enter, if you made it through the firewall you will see the following:



- B. When prompted, type "BTA" and hit enter (this is case sensitive)

The V72TP's main menu you will appear.



Note: All Ports are labeled with the corresponding equipment that is connected, but you can look at the following chart to help see which serial ports connect to which device.

M Series V75 (module slot 1)

Serial Port 1	Serial Port on the DS71-MD3 module in the DS4D-RPC
Serial Port 2	Serial Port on the DS72 module in the DS4D-RPC
Serial Port 3	Serial Port on the DS72 module in the DS2-RPC
Serial Port 4	Serial Port on the DS72 module in the DS3-IPS

M Series V74 (module slot 2)

Serial Port 1	Serial Port on the RPC-2
Serial Port 2	Serial Port on the RPC5-15
Serial Port 3	Serial Port on the RPC3-15
Serial Port 4	Serial Port on the RPC4-15

- A. This menu shows all of the pieces of Bay Tech equipment that are housed in this rack. By selecting any one of the eight ports, you can access that piece of equipment. Lets connect to the RPC4-15. Type 8 and hit enter.

```

Telnet - 209.205.132.21
Connect Edit Terminal Help

Enter Request: 8

Unit ID: T RPC4-15

True RMS Current:    0.0 Amps
Maximum Detected:    0.0 Amps

Internal Temperature: 32.0 C

Circuit Breaker: On

1)...Outlet 1 : On
2)...Outlet 2 : On
3)...Outlet 3 : On
4)...Outlet 4 : On
5)...Outlet 5 : On
6)...Outlet 6 : On
7)...Outlet 7 : On
8)...Outlet 8 : On

Type "Help" for a list of commands

RPC-4>

```

- B. You are now in the RPC4-15 menu. We can now issue a command that will reboot all 8 outlets on the unit. Type "reboot" at the prompt.

```

Telnet - 209.205.132.21
Connect Edit Terminal Help

Enter Request: 8

Unit ID: T RPC4-15

True RMS Current:    0.0 Amps
Maximum Detected:    0.0 Amps

Internal Temperature: 32.0 C

Circuit Breaker: On

1)...Outlet 1 : On
2)...Outlet 2 : On
3)...Outlet 3 : On
4)...Outlet 4 : On
5)...Outlet 5 : On
6)...Outlet 6 : On
7)...Outlet 7 : On
8)...Outlet 8 : On

Type "Help" for a list of commands

RPC-4>reboot
Reboot All Outlets (Y/N)? 

```

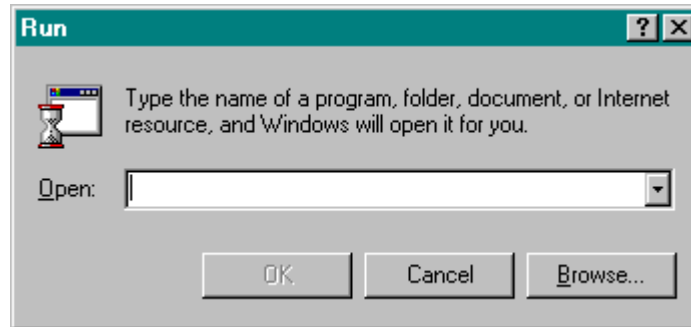
- C. Type "y" and hit enter. All of the outlets will be rebooted. You can watch the timer count down from 10 as they are turned off, then back on.
- D. Type five colons (:) in a row to return to the M6 main menu

NOTE: The five colons are the attention string for the unit.

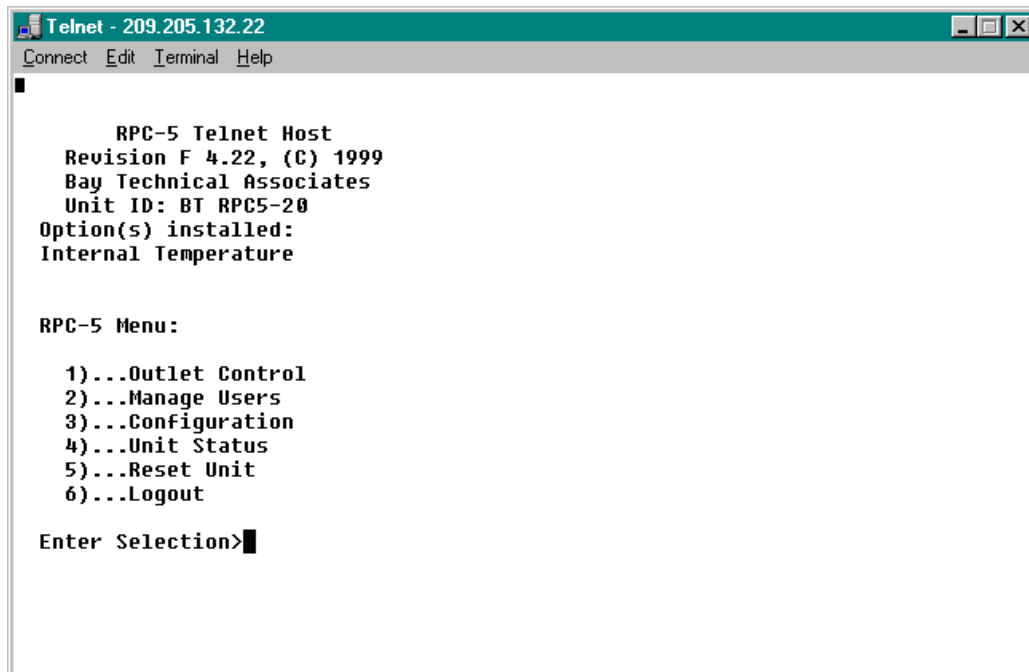
4.4 Instructions for connecting to the RPC5-15 via the Internet

In this exercise you will connect to the RPC5-15 via the Internet. With its 4 input receptacles and 4 output receptacles (each rated at 15 AMPs) you have more power per outlet capability. Each outlet is also equipped with its own circuit breaker.

What you will need: Any Telnet software (client) should work. Windows supplies a Telnet client with 95,98,NT, and ME. To access this, go to the START menu, and click RUN. It should look like this

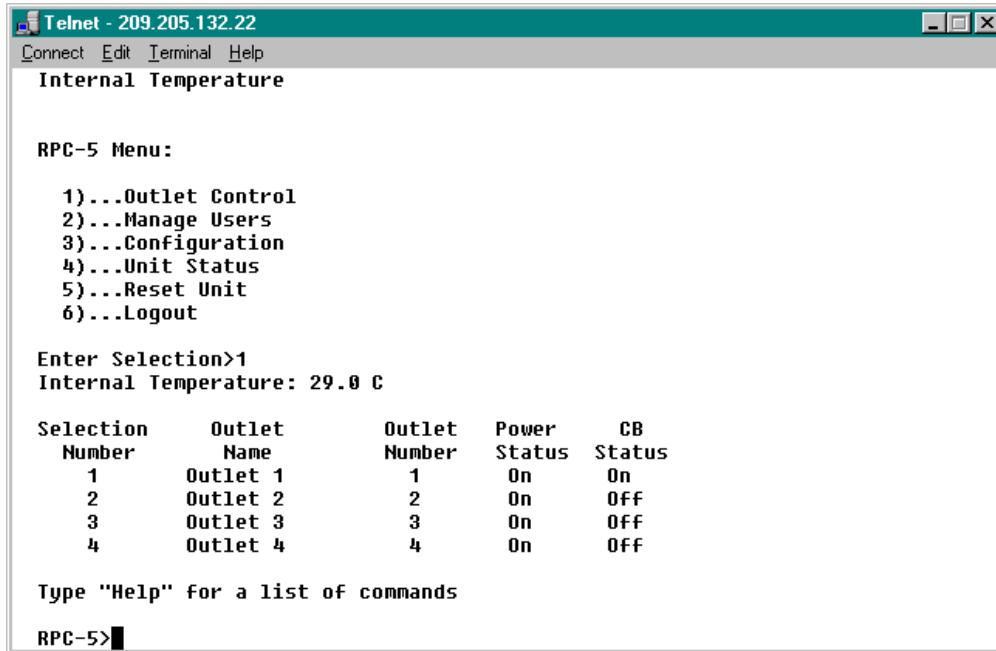


- A. Type [Telnet 209.205.132.21] and hit enter, if you made it through the firewall you will see the following:



Note: Users have the ability to set username and passwords for the RPC5-15, but there is not one set at this time.

- B. By typing 1 at the selection prompt. You will be brought to the Outlet Control screen.



```

Telnet - 209.205.132.22
Connect Edit Terminal Help
Internal Temperature

RPC-5 Menu:

1)...Outlet Control
2)...Manage Users
3)...Configuration
4)...Unit Status
5)...Reset Unit
6)...Logout

Enter Selection>1
Internal Temperature: 29.0 C

Selection      Outlet      Outlet      Power      CB
Number        Name        Number      Status     Status
1            Outlet 1        1          On         On
2            Outlet 2        2          On         Off
3            Outlet 3        3          On         Off
4            Outlet 4        4          On         Off

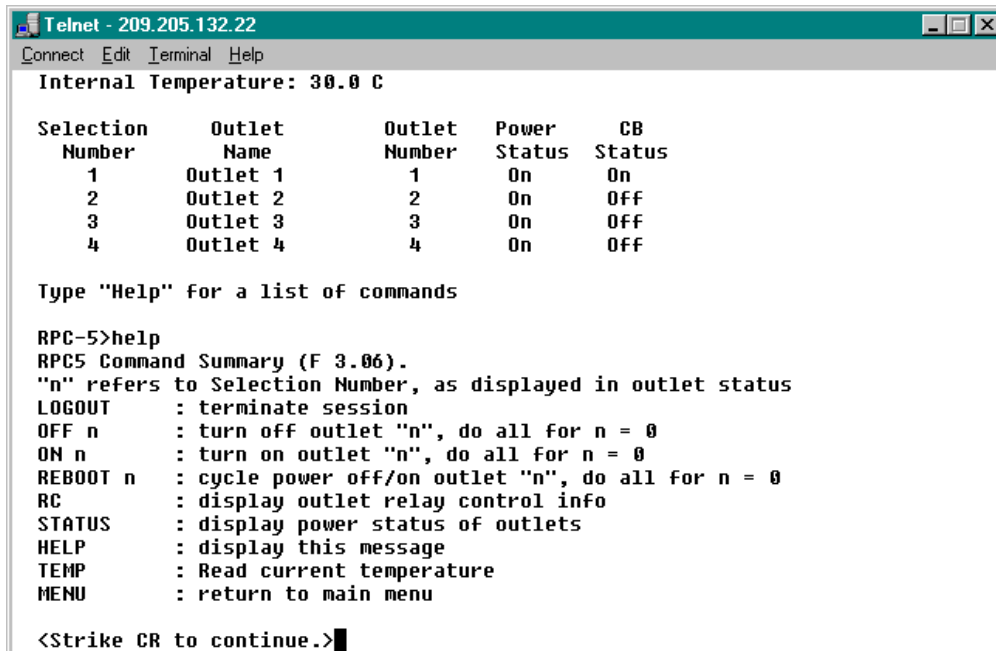
Type "Help" for a list of commands

RPC-5>

```

What you see: From this screen you can see a number of things, the Internal Temperature, each outlet, the power status of each outlet, and the status of the circuit breaker.

- C. From here you now have the ability to control outlets. Type "help" at the prompt, you can see all the options.



```

Telnet - 209.205.132.22
Connect Edit Terminal Help
Internal Temperature: 30.0 C

Selection      Outlet      Outlet      Power      CB
Number        Name        Number      Status     Status
1            Outlet 1        1          On         On
2            Outlet 2        2          On         Off
3            Outlet 3        3          On         Off
4            Outlet 4        4          On         Off

Type "Help" for a list of commands

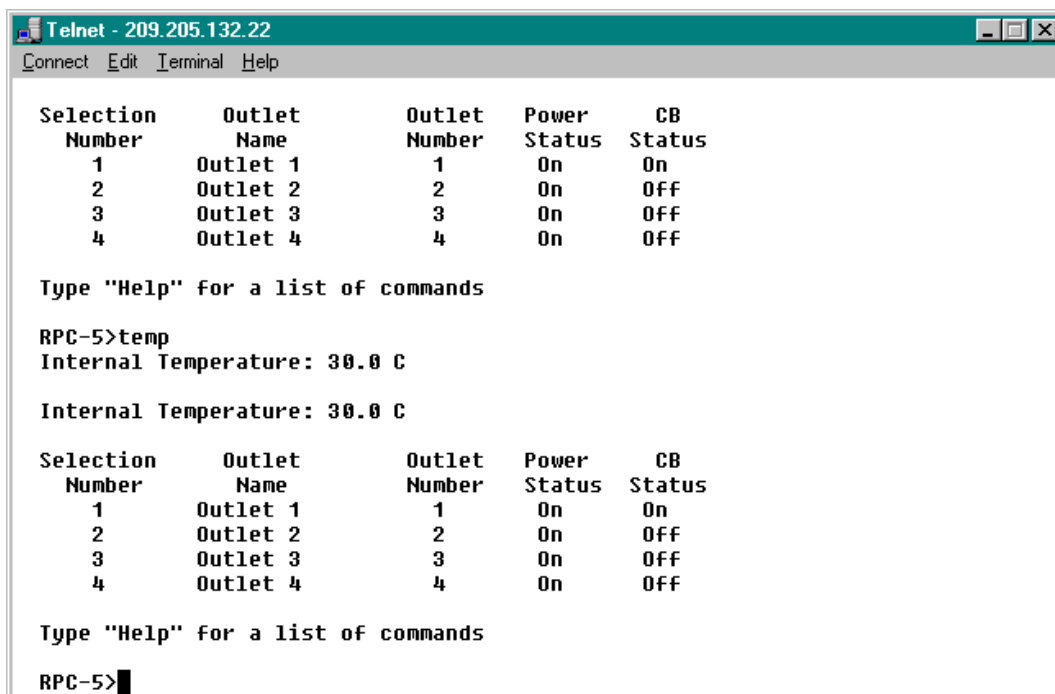
RPC-5>help
RPC5 Command Summary (F 3.06).
"n" refers to Selection Number, as displayed in outlet status
LOGOUT      : terminate session
OFF n       : turn off outlet "n", do all for n = 0
ON n        : turn on outlet "n", do all for n = 0
REBOOT n    : cycle power off/on outlet "n", do all for n = 0
RC          : display outlet relay control info
STATUS      : display power status of outlets
HELP        : display this message
TEMP        : Read current temperature
MENU        : return to main menu

<Strike CR to continue.>

```

- D. Hit enter again to exit the help menu.

- E. When you want to check the temperature of the unit, you can type "TEMP" at the RPC5 prompt, and it would show you the current ambient temperature of the entire unit.



The screenshot shows a Telnet window titled "Telnet - 209.205.132.22". The menu includes "Connect", "Edit", "Terminal", and "Help". The display shows a table of outlet status, followed by the command "temp" and the resulting temperature reading.

Selection Number	Outlet Name	Outlet Number	Power Status	CB Status
1	Outlet 1	1	On	On
2	Outlet 2	2	On	Off
3	Outlet 3	3	On	Off
4	Outlet 4	4	On	Off

Type "Help" for a list of commands

RPC-5>temp
Internal Temperature: 30.0 C
Internal Temperature: 30.0 C

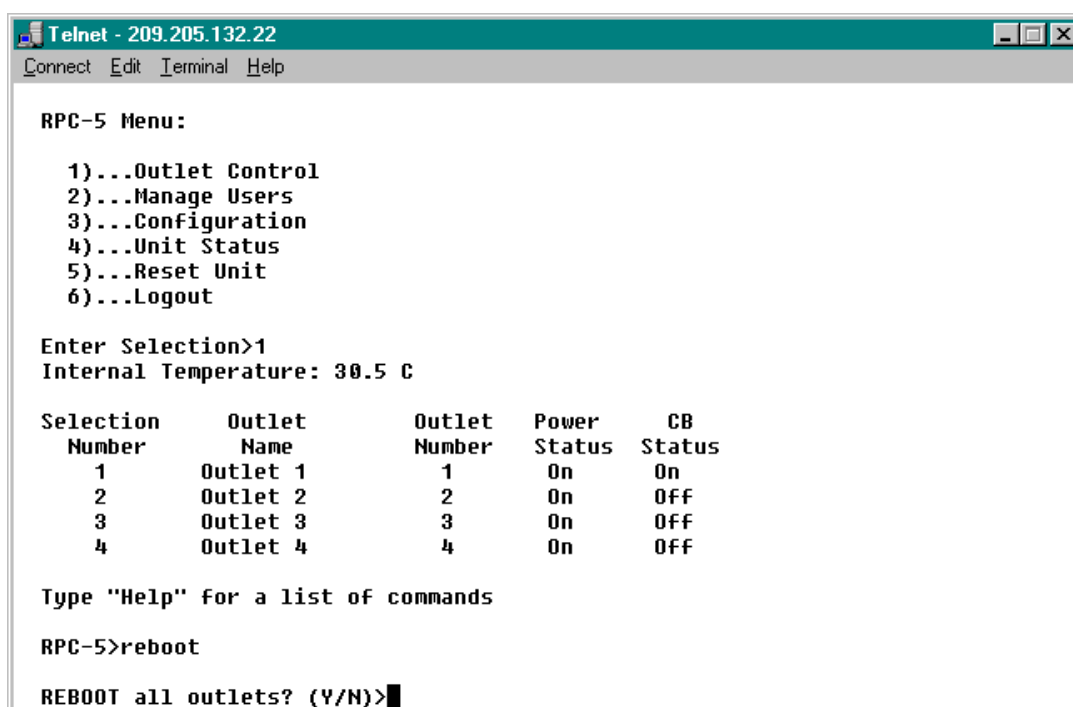
Selection Number	Outlet Name	Outlet Number	Power Status	CB Status
1	Outlet 1	1	On	On
2	Outlet 2	2	On	Off
3	Outlet 3	3	On	Off
4	Outlet 4	4	On	Off

Type "Help" for a list of commands

RPC-5>

This unit shows an ambient temperature of 30.0 C

- F. In this same menu you can type either turn on, off or reboot any or all of the four receptacles. Type "reboot" and hit enter.



The screenshot shows the same Telnet window. The user has entered "1" to select Outlet Control, and the display shows the "RPC-5 Menu" and the resulting temperature reading.

RPC-5 Menu:

- 1)...Outlet Control
- 2)...Manage Users
- 3)...Configuration
- 4)...Unit Status
- 5)...Reset Unit
- 6)...Logout

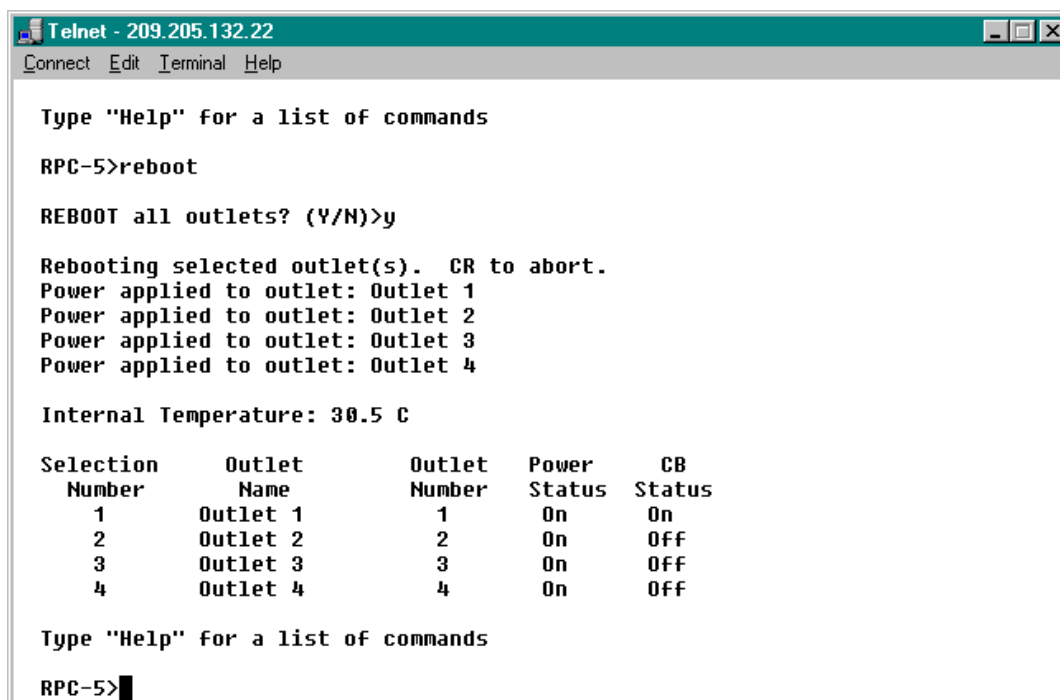
Enter Selection>1
Internal Temperature: 30.5 C

Selection Number	Outlet Name	Outlet Number	Power Status	CB Status
1	Outlet 1	1	On	On
2	Outlet 2	2	On	Off
3	Outlet 3	3	On	Off
4	Outlet 4	4	On	Off

Type "Help" for a list of commands

RPC-5>reboot
REBOOT all outlets? (Y/N)>

G. The unit will prompt you to confirm that you want to reboot. Type “y” and hit enter.



```
Telnet - 209.205.132.22
Connect Edit Terminal Help

Type "Help" for a list of commands

RPC-5>reboot

REBOOT all outlets? (Y/N)>y

Rebooting selected outlet(s). CR to abort.
Power applied to outlet: Outlet 1
Power applied to outlet: Outlet 2
Power applied to outlet: Outlet 3
Power applied to outlet: Outlet 4

Internal Temperature: 30.5 C

Selection      Outlet      Outlet      Power      CB
  Number      Name      Number      Status      Status
    1      Outlet 1         1         On         On
    2      Outlet 2         2         On         Off
    3      Outlet 3         3         On         Off
    4      Outlet 4         4         On         Off

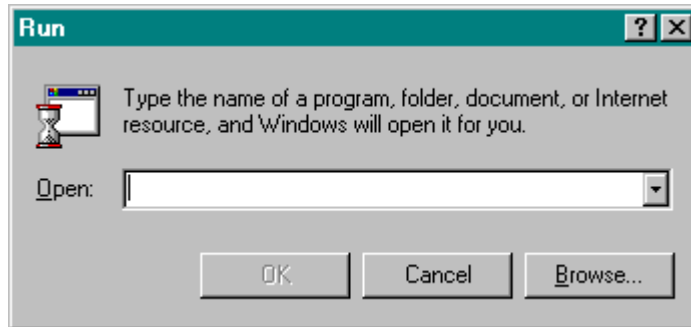
Type "Help" for a list of commands

RPC-5>
```

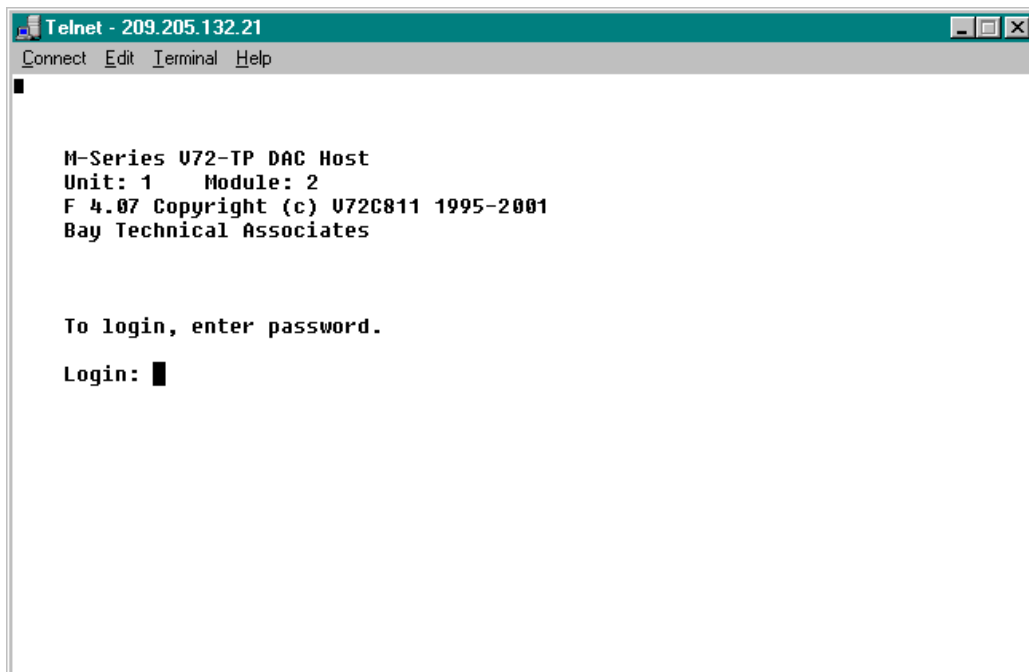
H. When you are finished, you can type “logout” to close out the telnet session.

4.5 Instructions for connecting to the RPC2 via the Internet through the M6.

What you will need: Any Telnet software (client) should work. Windows supplies a Telnet client with 95,98,NT, and ME. To access this, go to the START menu, and click RUN. It should look like this



- A. Type [Telnet 209.205.132.21] and hit enter, if you made it through the firewall you will see the following:



B. When prompted, type "BTA" and hit enter (this is case sensitive)

The V72TP's main menu you will appear.

```

Telnet - 209.205.132.21
Connect Edit Terminal Help
To login, enter password.

Login: ***
Login successful.

Attention Character: :

DS71MD3-DS4D    (4,1)..... 1
DS72-DS4D      (4,2)..... 2
DS72-DS2RPC    (4,3)..... 3
DS72-DS3       (4,4)..... 4
RPC2           (5,1)..... 5
RPC5           (5,2)..... 6
RPC3           (5,3)..... 7
RPC4           (5,4)..... 8
Immediate Data Collection .... I
Configure ..... C
Manual Connection ..... M
Unit Reset ..... R
Module Status ..... S
Logout ..... T
Clear Buffer/Connect Port n ... En

Enter Request: █
  
```

Note: All Ports are labeled with the corresponding equipment that is connected, but you can look at the following chart to help see which serial ports connect to which device.

M Series V75 (module slot 1)

Serial Port 1	Serial Port on the DS71-MD3 module in the DS4D-RPC
Serial Port 2	Serial Port on the DS72 module in the DS4D-RPC
Serial Port 3	Serial Port on the DS72 module in the DS2-RPC
Serial Port 4	Serial Port on the DS72 module in the DS3-IPS

M Series V74 (module slot 2)

Serial Port 1	Serial Port on the RPC-2
Serial Port 2	Serial Port on the RPC5-15
Serial Port 3	Serial Port on the RPC3-15
Serial Port 4	Serial Port on the RPC4-15

- E. This menu shows all of the pieces of Bay Tech equipment that are housed in this rack. By selecting any one of the eight ports, you can access that piece of equipment. Lets connect to the RPC2. Type 5 and hit enter. Hit enter again and you will see this menu:

```

Telnet - 209.205.132.21
Connect Edit Terminal Help

Manual Connection ..... M
Unit Reset ..... R
Module Status ..... S
Logout ..... T
Clear Buffer/Connect Port n ... En

Enter Request: 5

RPC-2 Series

RPC-2 Series
C774
(C) 1997 by BayTech
F2.07

Circuit Breaker: On

1)...Router      : On
2)...DSU         : On
3)...HUB         : On
4)...Server      : On
5)...ModemRack   : On
6)...UPS         : On

RPC>

```

- F. Now you see the main menu screen of the RPC2. From here you have the ability to issue on, off and reboot commands to and or all of the 6 receptacles. Lets try rebooting the server on receptacle 4. Type "reboot 4" and hit enter

```

Telnet - 209.205.132.21
Connect Edit Terminal Help

Unit Reset ..... R
Module Status ..... S
Logout ..... T
Clear Buffer/Connect Port n ... En

Enter Request: 5

RPC-2 Series

RPC-2 Series
C774
(C) 1997 by BayTech
F2.07

Circuit Breaker: On

1)...Router      : On
2)...DSU         : On
3)...HUB         : On
4)...Server      : On
5)...ModemRack   : On
6)...UPS         : On

RPC>reboot 4
2

```

- G. You'll see that there is no confirmation for this process and as soon as you hit enter it will reboot receptacle 4.
- H. To return to the main menu of the M6 that you connected to in beginning, you can type 5 semicolons (;) and it will send you back.

Summary: You noticed on the chart there are several usernames and passwords assigned to this unit. You can go back and try any of these. The current reading tells you whether or not you can install more equipment on this RPC3.

4.6 BayTech Demo Connections Chart

Use the *BayTech Demo Connections Chart* below as a reference when connecting to the units. The chart is divided into five columns:

- **Unit/Module:** The Demo Units available. DS and M Series units are listed with thier modules. The RPC units are listed with thier respective host ports. IP addresses and or phone numbers are listed for TELNET or dial-up connections.
- **Connected To:** The device the peripheral module DS and M Series) or RS232 host (RPC Series) is connected to. This could be an RPC or a module in either a DS or M Series unit.
- **Strip (RPC 27):** The RPC 27 that the unit is plugged into. There are 2 RPC 27 strips hanging rack side of the demo units.
- **Receptacle:** The receptacle on the RPC 27 that the unit is plugged into.
- **Misc Information:** Miscellaneous Information about the product

Unit / Module	Connected To	Strip (RPC27)	Receptacle	Misc. Information
DS3				
DS72 SNMP IP: (209.205.132.26)	Console Port 4 V75	1	13	Changed attention character to (commas),
DS74				
1. RPC27-20NC	Console from Port 1 DS74			
2. RPC27-20NC	Console from Port 2 DS74			
Empty				
DS2-RPC				
DS72 IP: (209.205.132.25)	Console Port 3 V75	1	12	Changed attention character to (quotation marks)"
DS74: No Connection				
DS4D-RPC				
DS71-MD3: No Connection		1	11	Changed attention character to (colons):
DS72 IP: (209.205.132.24)	Serial Port 2 on V75			
DS74:No Connection				
Empty				
RPC4-15				
Onboard serial host	Port 4 V74	2	14	
RPC3-15				
Onboard serial host	Port 3 V74	2	13	
Ethernet Port IP: (209.205.132.23)				
RPC-5				
Onboard serial host	Port 2 V74	2	12	

Ethernet Port IP: (209.205.132.22)				
RPC-2				
Onboard serial host	Port 1 V74	2	11	
M6				
V71: No Connection		2	10	Attention Character is the (semi-colons);
V72TP IP: (209.205.132.21)				
V93 Phone: (228) 467-4384				
V75				
1. DS71-MD3	DS4D-RPC			
2. DS72 (209.205.132.24)	DS4D-RPC			
3. DS72 (209.205.132.25)	DS2-RPC			
4. DS72 SNMP(209.205.132.26)	DS3-IPS			
V74				
1. RPC2	Port 1 V74			
2. RPC5	Port 2 V74			
3. RPC3-15	Port 3 V74			
4. RPC4-15	Port 4 V74			
Empty				
RPC27-20NC				
Onboard serial host	Console Port 2 DS74 on DS3-IPS	N/A	wall	
RPC27-20NC				
Onboard serial host	Console Port 2 DS74 on DS3-IPS	N/A	wall	
Ethernet Hub				
1. V72 (209.205.132.21)		1	10	
2. RPC5 (209.205.132.22)				
3. RPC3 (209.205.132.23)				
4. DS72 (209.205.132.24)				
5. DS72 (209.205.132.25)				
6. DS72 SNMP (209.205.132.26)				