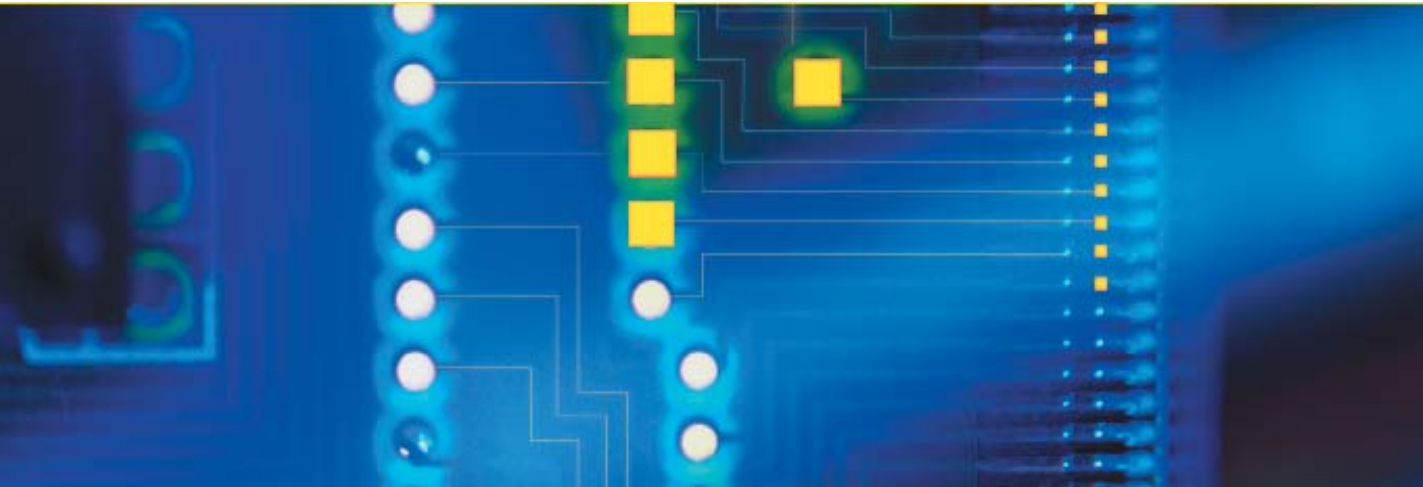




# Products and Services

From Desktop to Data Center





# American Power Conversion Corporation

Incorporated in 1981, American Power Conversion Corporation (APC) designs, manufactures and markets products that improve the reliability and availability of information systems worldwide. APC provides protection against some of the leading causes of downtime, data loss and hardware damage: power problems and temperature.

Our solutions include surge suppressors, uninterruptible power supplies, (UPSs), DC-based power systems, precision cooling solutions, cabling and connectivity solutions, power conditioning equipment, relat-

ed software as well as professional and consulting services for communications, computer, and computer-related equipment. Protected applications include facilities, sites, mainframe computers, data centers, wide area networks (WANs), local area networks (LANs), Internet and intranet equipment, midrange computers, telecommunications equipment, home and office workstations, and a variety of consumer electronics.

We also protect these applications against power problems on data, network, serial, coaxial (CATV), and telephone lines.



# A fresh approach to a legacy of power challenges

As the thought leader in power protection, APC offers a multitude of availability solutions using a fresh innovative approach to meeting the real-world needs of customers. Recognizing that downtime is not an option, and that the status quo was meant to be challenged, APC strives to find new ways in which to ensure availability wherever data is created, transmitted, or stored.

Take innovative new InfraStruXure™ as just one example. InfraStruXure is the industry's only on-demand network-critical

physical infrastructure (NCPI). InfraStruXure fully integrates power, cooling, management, and services within a rack-optimized design, resulting in a seamless and secure foundation upon which to build your entire IT environment.

For over 20 years, APC has advanced new power system technologies, keeping pace with the ever-changing demands of IT. With over 300 industry awards (80 of those in 2002 alone), and a strong global presence, the APC name is synonymous with quality, innovation, and diligence.

- Selected by Standard & Poor's to join the S&P 500
- Named a Fortune 1000 company by *Fortune Magazine*
- Ranked on "Forbes Platinum 400 List"
- *Internet Week*, "Top 100 companies analyzed for effectiveness and leveraging the Internet"
- *Network World*, "Top 200 Biggest Companies in Networking"
- Forbes 500 list of most profitable U.S. companies
- Barron's 500
- Top Tech 250



"... the highest technical support rating received by any vendor in any category of the 2002 Channel Champions Survey."  
— Channel Champions 2002 – Rack-Mounted UPSs", *Computer Reseller News*, Mark Spiwak

## TABLE OF CONTENTS

■ Surge Protection	4
■ Desktop Computer Power Protection	5
■ Business and Enterprise Power Protection	6
■ Racks, Enclosures and Power Distribution	7
■ InfraStruXure™	8
■ Power Management	10
■ Cooling Solutions	11
■ DC Power and Broadband Power Systems	12
■ Connectivity and Ancillary Power Equipment	13
■ Mobile Solutions	14
■ Global Services	15



# Surge Protection

From protecting multimedia applications on your desktop system to workstations on a network, from safeguarding high performance stereos to your Microsoft Xbox and Sony PlayStation2 systems, APC's SurgeArrest line is designed to protect your home and business electronic devices from power-related damage.



## Computer Surge Protection

**SurgeArrest® Essential**  
Essential surge protection for computers and home electronics

- Offers <330V let-through, 4 and 7 outlet, with and without telephone protection



**SurgeArrest® Home/Office**  
Reliable surge protection for home or office computers and electronic equipment

- Offers <85V let-through, 8 plug activated safety outlets, with 2 line telephone or 2 line telephone and coax data-line protection



**SurgeArrest® Performance**  
Guaranteed surge protection for high performance computers and electronic equipment

- Offers <40V let-through, 11 plug activated safety outlets, overload indication and a model with 2 line tel, coax and network data-line protection



**PowerManager™**  
Space-saving surge protection and cord management

- Unique under-monitor surge protection with cord management
- Allows powering of equipment individually or as an entire system
- Advanced noise filtering and protection from damaging surges



## Audio/Video Power Protection

**SurgeArrest® Game Manager**  
Game system organizer and surge protection unit

- Organizes and safely stores games, memory cards and controllers
- Let-through voltage rating of <330 volts
- eP Joule rating of 820
- Available with online gaming surge protection
- 6 built-in surge protected power outlets
- Portable game storage modules



## Data Line Protection

**ProtectNet®**  
Data line surge suppression for comprehensive network and PC protection

- Protects your system from damaging data line surges



**ProtectNet® Rack-mount**  
Modular, scalable surge protection for network and telecommunications data lines

- Fail safe mode
- Lightning and surge protection
- Requires only 1U of rack space



## Hardwire Surge Suppression

**SurgeArrest® Panelmount**  
Hardwired surge suppression (TVSS)

- Protects your entire house, commercial facility, industrial building and data center from externally generated power surges and spikes



## Voltage Regulators

**Line-R®**  
Automatic voltage regulation for protection against brownouts and overvoltages

- Automatically adjusts voltages to safe levels
- Lightning and surge protection
- Resettable circuit breaker



## Learn More on the Web

*Critical electronics should be protected from harmful high voltage (surges or spikes). Regular outlet strips aren't helpful unless they contain any surge suppression capability. Look for surge protectors with low let-through voltage ratings. How does this help during a blackout? When the utility restores power, it can sometimes fluctuate (causing surges, spikes, and sags) until it returns to normal. Visit APC's online surge selector at [http://www.apc.com/tools/surge\\_selector](http://www.apc.com/tools/surge_selector) to help decide which surge solution is right for your application.*



## Desktop Computer Power Protection

Protect your computer, Internet connection, and peripherals with APC's Back-UPS®. Back-UPS allow you to work through brief power outages by instantly switching your computer to emergency battery backup power. Easy-to-install and use software automatically saves your files and safely shuts down your system during extended outages. Back-UPS products range from reliable power protection for home and office to leading-edge power protection for high performance computers, as well as those requiring longer runtimes.



### Home Computer Protection

#### Back-UPS® ES 350, 500, 725 Best value solution for home and office computers

- 6 power outlets (3 battery, 3 surge)
- Fax/Modem line protection
- Cable modem/TV line protection (725 only)
- File-saving, auto-shutdown software (USB)
- Up to 50 minutes of runtime



### Business Desktop Computer Protection

#### Back-UPS® CS 350, 500 Reliable power protection for office and home office desktop computers

- 6 power outlets (3 battery, 3 surge)
- Fax/Modem protection
- File-saving, auto-shutdown software (serial or USB)
- LED indicators provide proactive notification of changing power & UPS conditions
- Up to 55 minutes of runtime



#### Back-UPS® LS 500, 700 High-performance solution for high performance computers

- 7 power outlets (4 battery, 3 surge)
- Automatic Voltage Regulation corrects low voltage without using the battery, ideal for poor power regions
- Two-line fax/modem protection
- LED indicators provide proactive notification of changing power & UPS conditions
- File-saving, auto-shutdown software (USB)
- Space-saving ergonomic shape provides easy access to outlets and makes LEDs viewable from any angle
- Up to 65 minutes of runtime



#### Back-UPS® RS 800, 1000, 1500 High performance protection for business desktop computers

- Up to 8 power outlets (1000/1500 - 6 battery, 2 surge; 800 - 4 battery, 3 surge)
- Automatic Voltage Regulation corrects low & high voltages (800 - low only) without using the battery; ideal for poor power regions
- Fax/Modem & Ethernet dataline protection
- Fast recharge times
- File-saving, auto-shutdown software (serial or USB)
- LED indicators provide proactive notification of changing power & UPS conditions
- Versatile mounting: Tower, under-monitor or 2U shelf mount (1000/1500)
- Up to 360 minutes of runtime



The Back-UPS® RS for high performance power protection (pictured above) offers versatile mounting options: tower, under monitor, and 2U shelf mount.



*"I recently received an urgent phone call from my wife who was calling from home. Something had killed the power to some of the rooms in the house.*

*"The APC Back-UPS® had supplied power to TiVo for well over an hour. When I later watched the recording that had been started in the middle of the outage I never noticed a problem."*

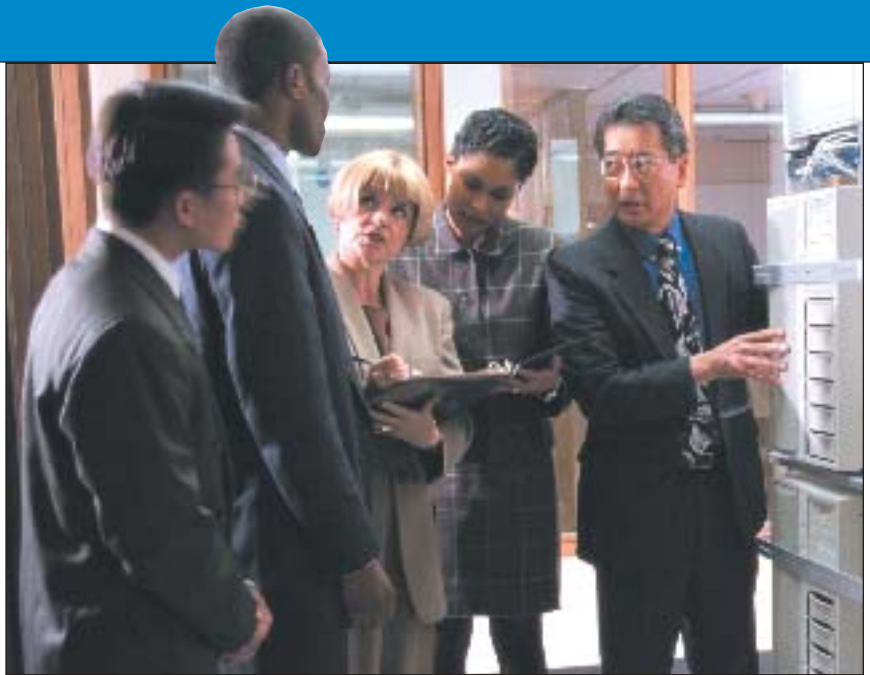
*"We are extremely pleased with our APC equipment. We're currently in the middle of a home remodeling project and you can bet that we'll be adding more APC products to protect our equipment."*

**Claude Felizardo, Monrovia, California**



# Business and Enterprise Power Protection

One of APC's core competencies is UPS protection for the wide-ranging IT applications of today's businesses. Whether you need power protection for a few servers or for a large data center installation, APC has the optimal UPS for your specific IT environment. Offering scalable, redundant power protection for both single- and three-phase applications, APC's modular UPS solutions provide the foundation of building and scaling near-continuous availability power systems with a flexible range of power capacities.



## Protection for Servers and Networks

### Smart-UPS® Performance power protection for servers and networks



- Protects your data by supplying network-grade battery back-up when power fails
- Tower and rack-mounted models
- Robust diagnostics allow network administrators to solve problems before users know they exist
- XL and RMXL models allow increased runtime with the addition of battery packs
- 208 Volt models for high-powered servers and telecom equipment
- Rack-mount models take as little as 1U of rack space and offer all Smart-UPS features

### APC Matrix-UPS® Modular power protection for servers, midrange systems, and business-critical applications



- Low lifecycle cost, optimized design, and high efficiency protect both your data center and your bottom line
- Matrix components can be swapped out or repaired without load interruption

### Symmetra® Scalable, redundant power protection for centralized servers, data centers, and high availability applications



- N+1 redundancy design ensures continuous availability
- Modular design allows customers to build and scale power systems with a flexible range of power capacity
- Hot-swap serviceability keeps loads up and running
- Tower and rack-mounted models

## Protection for Data Centers and Facilities

### Symmetra® PX Scalable, redundant three-phase protection for IT equipment in medium to large data centers



- Three-phase input/three-phase output (3:3) is a single unit, composed of modular components
- Packages the high availability requirements of easy power and runtime scalability into a very small footprint

### Symmetra® MW Fault-tolerant, modular, on-line UPS for facilities, data centers, and other mission-critical applications



- Features enhanced Delta Conversion On-line™ topology, offering the highest available efficiency and lowest operating costs
- Modular design offers N+1 fault tolerance
- Self-diagnosing, providing automatic, early-warning notification of possible problems

### APC Silcon® Three-phase, on-line power protection for data centers, facilities, and high-availability applications



- Delta Conversion On-line™ offers high efficiency (97%) and low input current harmonics (3%) in one package
- Built-in N+1 capability and scalability
- Lowest three-phase operating and installation costs



*"The demands placed on the U.S. Postal Service for rapid and efficient delivery of both domestic and international mail has never been greater. We handle 630 million pieces of mail every day. Twenty-five high reliability Symmetra® Power Array™ units were brought in as well as two Silcon® units to accommodate our 3-phase requirements. Today we have a guaranteed runtime of no less than 30 minutes on all of our devices. This will help us greatly in the event we experience a real disaster."*

**David Stevenson, Program Manager, United States Postal Service, Washington, D.C.**



# Racks, Enclosures and Power Distribution

Organize and secure valuable IT equipment in high-quality enclosures, ranging from economical 2-post racks to state-of-the-art enclosures proactively designed to accommodate today's heavier loads and complex configurations.

The constantly changing requirements of today's networks demand flexible power control and distribution. Increase the availability of critical loads both big and small with APC's wide variety of power distribution units (PDUs) from the Basic Rack PDU to the InfraStruXure™ PDU.

## Power Distribution

### Switched Rack Power Distribution Unit

Remotely control power to individual outlets and monitor the aggregate power consumption via local and remote displays



### Basic Rack Power Distribution Unit

Provides power outlets for rack-mount equipment



### Metered Rack Power Distribution Unit

Monitor the aggregate power consumption via digital display



### Rack Automatic Transfer Switch

Provides redundant power to single-corded equipment



### InfraStruXure™ Power Distribution Units

APC's InfraStruXure PDU can be designed, implemented, and maintained to exactly meet your requirements for high availability, quick cycle time, and lower cost of ownership



### Stationary Power Distribution Units

APC's space-saving, 3-phase Power Distribution Units were designed to efficiently and effectively fit into data center and IT environments



### Step-Down Transformer

The Step-Down Transformer converts high voltage (208 or 200 VAC) output into low voltage (120 or 100 VAC) output for powering low voltage AC equipment



## Enclosures and Racks

### NetShelter® VX Enclosures

Next generation, high quality enclosures designed to meet the needs of today's and tomorrow's networking environment

- Deep form-factor (42"/1070mm) accommodates deeper equipment
- Optimized for enhanced cooling up to 5500 watts per rack
- Power distribution channels provide seamless compatibility with a robust line of rack-mount PDUs
- Rear cabling channels for vertical cable management in zero U of space
- Multi-vendor equipment compatibility meets or exceeds major server OEM requirements
- Static and dynamic loading of up to 2,000 lbs. of equipment weight
- Wide model (29.5"/750mm) available with expanded cable management for 19" distribution applications or 23" telco gear
- Available in two heights, 42U and 47U



### NetShelter® VS Enclosures

900mm (35.5in.) deep rack enclosures with advanced cooling and security features for server, networking, and telecom applications in IT environments

- Minimized depth (35.5"/900mm) to accommodate most legacy equipment
- Vendor-neutral frame and rail design maintains compatibility with most third-party rack-mounted equipment
- Static and dynamic loading of up to 2,000 lbs. of equipment weight
- Available in two heights, 25U and 42U



### NetShelter® ES Enclosures

864mm (34in.) deep rack enclosure for light duty server, networking and telecom applications in IT environments

- Basic, economically priced enclosure
- Static loading up to 1,000 lbs.
- 76-inch (1930mm) height to fit through standard 2M doorways
- Tempered safety glass front door option



### NetShelter® WX Enclosures

Wall-mount enclosures provide secure wiring and storage of network equipment in space-constrained environments

- Ideal for small hubs and LAN applications
- Mounts directly to walls, saving valuable floor space
- Reversible 19" mounting rails provide flexibility for cage nuts or #12-24 threaded holes
- Double-hinge frame construction provides easy access to front and rear of rack-mounted equipment



### NetShelter® 4-Post Racks

Economical racks for wiring closets and data center networking applications

- Low cost solution for rack-mounting servers and other rack-mounted equipment
- 43U high, steel frame, open rack design
- Static loading up to 1,000 lbs.
- InfraStruXure™ compatible (see page 8)
- Ships unassembled, saving freight costs



### NetShelter® 2-Post Racks

Two-post racks for networking applications in IT environments

- Low cost rack-mount solution
- 45U high, aluminum frame, open rack design
- Static loading up to 750 lbs.
- Ships unassembled, saving freight costs



### NetShelter® Rack Accessories

Rack accessories designed to organize equipment within a rack environment.

- Rack accessories include light and heavy-duty shelves, patch cord organizers, vertical and horizontal cable organizers

### NetShelter® Enclosure Accessories

- Cable management accessories, thermal management accessories, shelving, mounting hardware, keyboards, keyboard drawers, and stabilization accessories required for a complete enclosure solution



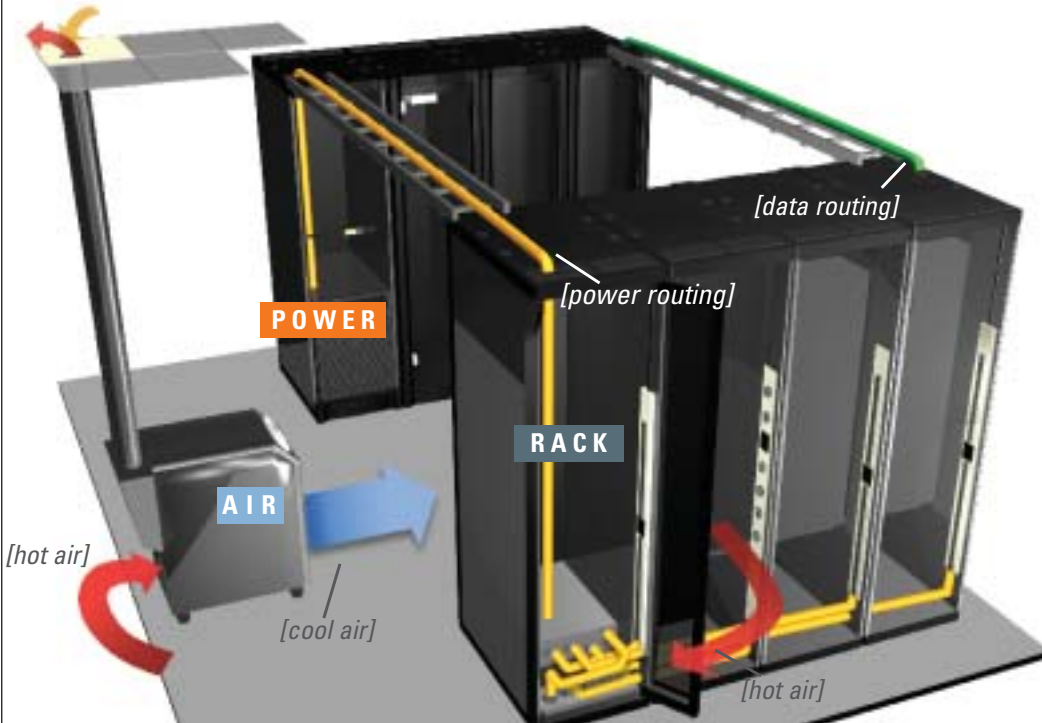
# InfraStruXure™

APC InfraStruXure™ architecture is the industry's new benchmark for on-demand network-critical physical infrastructure (NCPI). The foundation of IT networks, NCPI consists of power, power distribution, racks, cabling, cable distribution, cooling, and cooling distribution. Strong NCPI defends your IT networks against security and availability problems.

Complementing these benefits of strong NCPI is InfraStruXure's open, adaptable, integrated approach, which ensures optimal performance and lower upfront and operating costs. InfraStruXure fully integrates power, cooling, management and services within a rack-optimized design.



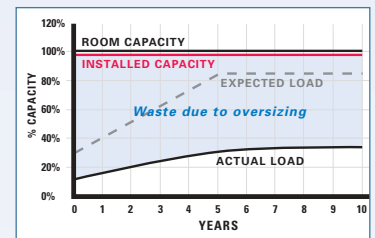
## TYPICAL CONFIGURATION TYPE A UP TO 10 RACKS



POWER	RACK	AIR	MANAGEMENT	SERVICES
Smart-UPS® RM UPS or Symmetra® RM UPS <i>(see p. 6 for more information)</i>	NetShelter® VX Rack-mountable PDU Power Cable Troughs Data Partitions Cable Ladders <i>(see p. 7 for more information)</i>	Air Removal Unit (ARU) with Ducting Kit NetworkAIR™ PA 4000 <i>(see p. 11 for more information)</i>	Network Management Card with Environmental Monitoring APC Enterprise Manager <i>(see p. 10 for more information)</i>	A full range of system- and component-based services are available <i>(see p. 15 for more information)</i>

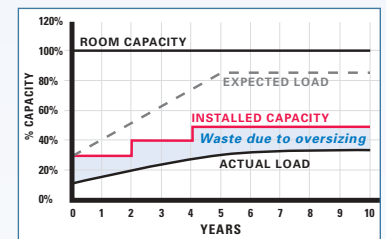


## The Cost of Oversizing with Room-level Design vs. the Benefits of Right-sizing with Rack-optimized Design



### The Cost of Oversizing: Room-level Design

Room-level design requires full initial build-out based upon uncertain estimates of future capacity. It can be as costly to leave demands unmet due to under-capacity as to incur high overhead due to overcapacity and low utilization rates.



### The Benefits of Right-sizing: Rack-optimized Design

A rack-optimized power and cooling solution with proactive system-wide management allows you to target availability, pay as you grow, adapt to change, maximize efficiency, and minimize installation, operating, service, and maintenance costs.



## The benefits of pre-engineered design

**Standardization** Standardization reduces human error, the leading cause of downtime, by effectively lowering the learning curve of system operators.

**Management** Integrated components for proactive monitoring and management of entire system.

**Maximum availability per total cost of ownership dollar** Load-driven expandable capacity and built-in N+1 redundancy lessens the total cost of ownership through lower initial capital expenditure and operating costs over time.

**Security** Low maintenance, modular components limit unnecessary access in a centralized location that is more easily secured.

**Ability to target availability** Pinpoint higher levels of availability to mission-critical applications.

**Portability** Integrated, modular components can be easily deployed and redistributed as needed.

**Accelerated speed of deployment** Electrical and physical modularity speeds deployment with minimal engineering.

**Quick disaster recovery** Pre-engineered, modular design provides a shorter cycle time to recovery.

**Efficient, cost-effective cooling** Integrated approach to cooling at the rack, row and room level without extensive engineering or heavy service requirements.

**Space utilization** Innovative rack-based technology frees up space previously needed for infrastructure support.

# InfraStruXure™

**POWER** **RACK** **AIR**

Open, adaptable and integrated architecture for on-demand network-critical physical infrastructure



*"If I had purchased the incumbent vendor's 3-phase upgrade model, I would have paid 75% more in service costs over the next four years and I would have had to utilize 50% more of my precious floor space."*

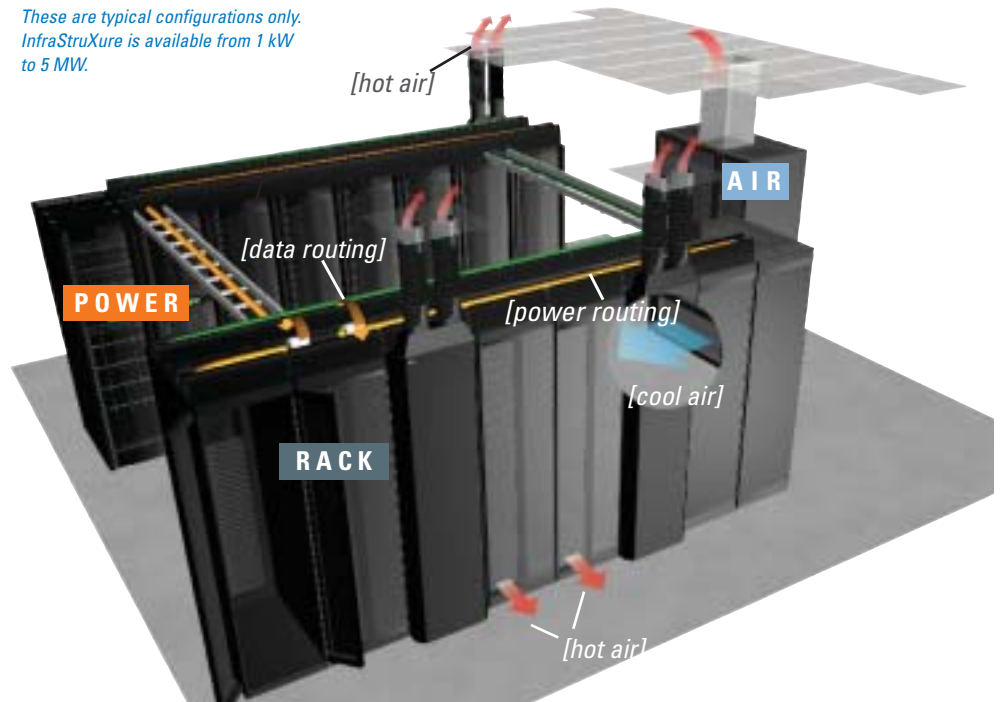
Captain Timothy Riley,  
Support Services Division  
City of Newport Beach Police Department

### Learn More on the Web

In Amsterdam you can find one of the most advanced, best-equipped and most secure IT centers in the world: the Deloitte & Touche Cyber Center. Although conceived some four years ago, Deloitte's extensive planning and its utilization of the latest advances in InfraStruXure technology resulted in the center being constructed in just four months. View the video testimonial "Standardizing the Centralized IT Environment" online. Eric Ubels, CIO, and Guus van Velzen, Principal Architect, tell the story of the Deloitte & Touche Cyber Center from project conception to project completion. Just go to [www.apc.com](http://www.apc.com) and click on "Video Testimonial" under the Testimonial section.

## TYPICAL CONFIGURATION TYPE B 10-60+ RACKS

*These are typical configurations only. InfraStruXure is available from 1 kW to 5 MW.*



POWER	RACK	AIR	MANAGEMENT	SERVICES
Symmetra® PX UPS Power Distribution Unit XR Battery Pack <i>(see p. 6-7 for more information)</i>	NetShelter® VX Rack-mountable PDU Environmental Monitoring Unit Power Cable Troughs Data Partitions Cable Ladders <i>(see p. 7 for more information)</i>	NetworkAir™ FM Air Removal Unit (ARU) with Ducting Kit Air Distribution Unit (ADU) <i>(see p. 11 for more information)</i>	APC Enterprise Manager InfraStruXure Manager <i>(see p. 10 for more information)</i>	A full range of system- and component-based services are available <i>(see p. 15 for more information)</i>

power routing cold air hot air data routing

# Power Management

Whether your network calls for UPS management accessories or an environmental monitoring system, APC offers the degree of flexibility in power management hardware that today's complex IT environment require. APC's UPS management software increases the value of your initial investment in APC UPS solutions by allowing you to save time and benefit from more effective network management.



## Power Management Software

### PowerChute® Personal Edition

An easy-to-use, safe system shutdown software with sophisticated power management functions for APC battery backups

- Provides UPS manageability and safe system shutdown for desktops, workstations and servers protected by APC UPSs
- Enables you to monitor and control any APC UPS that has a serial interface port



### PowerChute® Business Edition

Department-level management software, enabling IT administrators to provide safe system shutdown and UPS management for servers and workstations

- Centrally manage up to 25 UPSs simultaneously over a network
- Recommended Actions speeds troubleshooting
- Mass configuration makes UPS configuration fast and easy
- Power Analysis alerts users to unusual power situations



## Power Management Hardware

### Network Management

- Network interface cards that provide standards-based remote management of UPSs



### Environmental Monitoring

- Comprehensive environmental management for data center, branch office and rack applications



### Interface Expanders

- Data protection for multiple servers on one UPS



### Out-of-Band Management

- UPS card for network administrators to manage UPSs remotely via modem throughout the network



### Building Management Integration

- Integrates Silcon to a building management system



### Dry-Contact Management

- UPS card for network administrators to control and monitor power through a dry-contact interface in rack, computer room, and data center environments



### SmartSlot Expansion Chassis

- UPS card chassis for network administrators that provides an additional slot in Smart-UPS, Matrix-UPS, Symmetra Power Array, and Silcon UPSs



### Displays

- Hand-held control panel for network administrators that configures and controls UPSs in rack, computer room, and data center environments



### Remote Power-Off

- Remote Power-Off device for network administrators that immediately turns off the output of a connected APC UPS in computer room and data center environments



### Network Hubs

- Expand or create a local network without utilizing valuable U-space in a rack-mount environment



### Environmental Management System

- Comprehensive environmental management for data centers, facilities, telecommunications and broadband (CATV) power systems
- Monitor temperature and humidity, vibration, access
- Additional sensors for smoke, motion, leaks, temperature and humidity for additional locations
- 1U rack-mountable
- Network accessible using Web browser, Telnet, or SNMP
- E-mail alarm notification





## Cooling Solutions

APC cooling solutions address customer needs for a wide variety of applications, from air distribution within your enclosures to room-level precision air conditioning. By providing the environmental stability that sensitive electronics need to function optimally, APC cooling solutions can help your business avoid system shutdowns and component failures that can cause expensive downtime.

### Computer Room Air Conditioning

#### NetworkAIR™ FM Modular floor mount precision air conditioning for environmentally sensitive equipment areas

- Air, water, and glycol cooled models
- Economizer and Multicool (secondary chilled water) options available
- Upflow or downflow discharge patterns
- Front access facilitates service
- Dedicated dehumidification cycle improves efficiency



#### NetworkAIR™ CM Above-the-ceiling precision air conditioning.

- 3.5 kW - 17.5 kW capacities
- Air, water, glycol cooled and chilled water systems
- Precision temperature and humidity control
- Ceiling suspended, saving valuable floor space
- Spot & ducted air patterns



#### NetworkAIR™ PA Portable and compact solutions, providing localized cooling for small rooms and data closets

- Compact footprint utilizes minimal floor space
- Programmable on/off feature
- Auto restart after power failure



#### NetworkAIR™ AFX Leading-edge precision air conditioning for an array of environmentally sensitive equipment areas

- 21 kW - 105 kW capacities
- Air, water, and glycol cooled systems
- Optional remote condensing
- Precision temperature and humidity control
- Downflow and upflow discharge air patterns



#### NetworkAIR™ CW Precision air conditioning using chilled water

- 35 kW - 210 kW capacities
- 2-way or 3-way chilled water valve standard
- Precision temperature and humidity control
- Front access – minimal floor space required
- Downflow and upflow discharge air patterns



#### NetworkAIR™ TC Precision air conditioning with a compact footprint

- Air, water, and glycol cooled configurations
- Full service access



### Air Distribution/Fans

#### Rack Air Distribution Air distribution for power dense enclosures and low pressure areas

- Delivers equalized airflow from the bottom to the top of the rack enclosure
- Dual fans and A-B power input feeds provide redundancy, ensuring maximum uptime and continuous availability
- Adds 30% efficiency air filtration to supply air for equipment intake
- Adjustable to fit APC's NetShelter® enclosure or other 19" EIA-310-D enclosure



#### Rack Air Removal Unit Heat removal for enclosures in IT rooms and data center hot spots

- Redundant fan maintains airflow
- Ducted exhaust system
- Requires zero U – mounts to back of the rack



"We have recently installed APC's new DC power plant and NetworkAIR air conditioning solutions into our sites. The NetworkAIR (formerly Airflow) cooling equipment is able to keep our colocation sites at a safe temperature while taking up very little floor space."

Marcel Matteau

VP Engineering & Operations –  
Colocation Services,  
BridgePoint International



# DC Power Systems and Broadband Power Systems

APC's full line of integrated DC power systems, modular TSP backup, and enclosures ensure complete power management in telecom, datacom, and networking applications. Safeguard your communication systems and access networks that provide the vital link to the Internet.



*"In the telecommunications industry, the systems availability requirement is 100 percent uptime. In order to maintain continuous availability, the system design, battery selection and regular preventive maintenance must be flawless. At many of our customers, APC DC products are supporting a wide range of PBX telephone switching equipment, telecommunications equipment and fiber optic systems."*

Dave Crome, Director  
Static Power Conversion  
Services, Inc.

## DC Power Systems

### DC Wall Mount Systems

#### ■ WS200

Wall-mountable, redundant DC power system for low-powered points of presence (POP's), data communications and customer premises applications

- Wall or rack mountable
- Dual redundant convection cooled rectifiers
- Integral battery, controller, distribution, and LVD
- 115V or 230V versions available
- Up to 7.5 amps at -48 Vdc (400 Watts)



### DC Rack-mount Rectifier Subsystems

#### ■ Magnum VS

Modular, rack-mountable DC power plant for low power wireless/cellular, customer premises and distributed network applications

- Provides up to 100 amps of -48 vdc power
- Low profile 19" or 23" rack mountable
- InfraStruXure compatible
- Wide input voltage
- Designed for both indoor and outdoor use.
- Flexible distribution
- Remote monitoring via a web browser or SNMP management system.



### DC Integrated Power Systems

#### ■ MX28B200/400/600

Modular, scalable DC power systems for mid-sized wireless/cellular, cable and telecommunications applications

- Provides up to 600 amps of -48 vdc power
- Flexible Output Distribution
- Designed for both indoor and outdoor use.
- Hot swappable controller/rectifiers
- Easy installation
- Remote monitoring via a web browser or SNMP management system



### DC Large Power Systems

#### ■ MX28B1200/2400/3600/4800

Modular, scalable DC power plant for large-sized wireless/cellular, co-location, cable and telecommunications applications

- Provides up to 4,800 amps of -48 vdc power
- Flexible Primary and Secondary Distribution
- Hot swappable controller/rectifiers
- Remote monitoring via a web browser or SNMP management system.



### DC Rectifiers

#### ■ MRF2800

2800W telecom rectifiers for network, datacom, PSTN, central office and distributed power applications

- Can be used as either stand-alone, N+1 redundant, hot-plug rectifiers or integrated into complete power systems



#### ■ TWF0500

Low-profile, 500/600W rectifiers for rack-mount applications

- Can be used as either standalone, N+1 redundant, hot-plug rectifiers or integrated into complete power systems



## Broadband Power Systems

#### ■ PowerShield

Local powering solution for cable telephony, wireless local loop, fiber-to-the-home, VoIP and VoDSL

- Wall-mount and desktop models available
- Indoor and outdoor models available
- MDT/MTU models also available



■ **Total System Power**  
Modular backup for power distributed over cable lines upgrades from non-standby to standby power

- Ideal for broadband and telephony applications



#### ■ Outdoor Enclosures

- APC offers a full product line of Outdoor enclosures for Distributed and Centralized cable network power applications.



#### ■ FLM Series

Provides 60 volt powering for broadband hybrid fiber/coax systems

- Ideal for use when standby power is not required for essential services or in areas not prone to utility outages
- Plug-in modules allow operators to adjust amperage based on each locations' needs



#### ■ SLM/FLM Series

Provides 60 volt powering for broadband hybrid fiber/coax systems

- Ideal for use when standby power is required for essential services or in areas that are prone to power outages
- 9 and 15A modules available
- Easy-to-install aluminum enclosure
- Pole, wall or ground mountable
- Power supply features underground placement of batteries and smallest cabinet footprint available



■ **FRP/Ferroresonant Power Supply**  
Provides 60 and 90 volt powering for broadband hybrid fiber/coax systems

- Innovative cabinet design dissipates heat, extending product life
- Pole, wall or ground mountable
- Easily accessible on/off switch
- Front user accessible
- Exterior status lamp and security locks





# Connectivity and Ancillary Power Equipment

APC offers a broad selection of both standard and custom cables for network and desktop solutions, ranging from USB solutions for the home/small office market to fiber optic cables commonly used in Internet, telecommunications, and storage area network (SAN) infrastructures. APC also carries a full line of KVM server management switches, used to manage multiple servers from a single monitor.



APC has a wide variety of cables for all your connectivity needs. Our online Cable Selector ([http://www.apc.com/tools/cable\\_selector](http://www.apc.com/tools/cable_selector)) can help you find the exact cabling solution you require. Just select the device you want to connect to (including computers, hubs, routers, information outlets, stereo equipment, and televisions).

Choose from parallel, serial, internal/ external SCSI, USB, Ethernet, fiber optic, Cisco, Bay Networks/Nortel, Firewire, keyboard/mouse, power cord or monitor VGA configurations.

## Connectivity Solutions

### PC Cables and Related Products Cable and connectivity solutions for notebook, desktop, and server applications

- Custom and standard cable assemblies including: Fiber, Video, Channel, SCSI, LAN, Parallel, and Serial
- USB and IEEE-1394 FireWire solutions including cables, hubs, converters, and switches
- KVM server management switches allow multiple PCs to be controlled from one monitor, keyboard, and mouse
- Gender changers, adapters, terminators, power cables, CD audio cables, and Apple cables

### Networking Products Cables, Transceivers, Converters and Hubs

- Cat. 5e and Cat6 patch cables, fiber optics, and Telco cables
- Fiber distribution units, Cat. 5e patch panels, fast Ethernet hubs and switches, relay racks and shelving
- Token Ring media filters, fast Ethernet transceivers, velcro tie wraps, keystone jacks and tools
- Custom fiber cables, built to the length and style needed

### Peripheral Switching & Sharing Products Switches, extenders, converters, splitters, and manual switch boxes

- MasterView KVM switches save money and space by eliminating the need for extra keyboards, monitors, and mice
- 1 user-2 ports, 1 user-4 ports, 1 user-8 ports, 2 users-1 port, and 6 users-1 port
- ServerSwitch for Sun™ workstations and system console switches
- PS/2 and PC/AT sharing devices, console extenders and converters, video splitters, parallel auto switches, serial auto switches, and manual switch boxes

## Ancillary Power Equipment

### Bypass Panel

- Allows proactive UPS maintenance without having to shut down the load
- Fast, easy switching to and from bypass operation
- Capable of withstanding 200 percent overload capacity for up to 60 seconds
- Front and side access



### 3-phase UPS Switchgear

- Designed to address the key requirements of UPS systems
- Can enhance any system's availability, serviceability, and installation integrity



### External Maintenance External Battery Cabinets

- Wide range of models to cover numerous power options
- Achieve desired runtime by selecting an appropriate number of cabinets and battery strings relative to their operational mode
- Can be paralleled to create redundant strings



# Mobile Solutions

In today's networked world, your day doesn't end at 5 o'clock. Your mobile phone and notebook become your extended office and your lifeline to business. Whether you're on a plane, car, train or in the airport, your mobile office is always with you. You check stock prices over breakfast, write presentations from the airport and send e-mails late at night from your hotel. Now you can protect that lifeline with APC power protection and connectivity solutions designed specifically for mobile users.



## Mobile Computing Solutions

### Notebook Battery Cartridges

Portable computer batteries for the leading brands of notebook computers

- Meets or exceeds all manufacturers' specifications
- Full one-year product warranty



### SurgeArrest® Notebook

Reliable power protection for Notebook computers, fax and answering machines

- SurgeArrest Notebook protects equipment from AC and phone line surges
- SurgeArrest Notebook Pro provides worldwide advanced AC and telephone line protection and warns against potential modem damage



### TravelPower™ Case

Innovative carrying case designed for easy access to all your mobile devices

- Charge and power all your mobile devices from one single power source – air, auto, or standard AC outlet
- Six-sided notebook protection
- Available in 6 new styles and sizes



### Notebook Security

Complete line of notebook security products for home and business use

- Produced by APC and Kryptonite, the premier producer of portable security systems
- Line of notebook security devices includes combination cable locks, key cable locks, motion sensor alarms, and the Vault Lock



### USB Travel Hub

Portable USB 2.0 hub provides additional USB ports

- USB-IF approved
- Two-year product warranty



## Power Adapters and Chargers

### Air/Auto DC to AC Adaptor

Portable, compact 75 watt DC/AC Power Inverter for the mobile professional

- Built-in circuit protection
- Automatic shutdown
- Status indicator LEDs



### Auto DC to AC Adaptor

Portable, compact 140 watt and 350 watt DC/AC Power Inverter for the mobile user

- Audible alarm notifies you when to begin saving data and recharge your battery
- Low voltage disconnect prevents car battery from fully draining



### USB Mobile Phone Chargers

Quickly and easily charge your mobile phone through any USB port

- Connect and charge; no software needed
- Compact and lightweight
- PC and Mac compatible
- Mobile phone and notebook computer charging with one outlet



### USB Handheld Charger and Sync Cables

Charge and sync your handheld devices through any USB port

- Works with APC TravelPower™ Case
- For international travelers, eliminates need for a separate AC adapter



### Notebook Power Adapter

Portable, reliable power source for the leading brands of notebook computers.

- Meets or exceeds OEM specifications
- Two-year product warranty



## Learn More on the Web

Use our TravelPower Case and Accessory Configurator to help you find the right case to fit your lifestyle and our Notebook Battery Selector to help you find the exact replacement battery solution you require. Go to [www.apc.com/sizing/mobile\\_computing\\_selector.cfm](http://www.apc.com/sizing/mobile_computing_selector.cfm)





## Global Services

APC Global Services augments your power protection solution with comprehensive service and support that includes

- Proper installation and proactive maintenance,
- Solutions tailored to meet your specific requirements, and
- Cost-effective services focusing specifically on power quality.

APC Service Engineers are available any time of the day or night, seven days a week, 365 days a year, wherever you do business.

## Professional Consulting Services

### Needs Assessment Services

Poorly designed power and environmental facilities can have a major impact on the day-to-day operation and overall life expectancy of network-critical physical infrastructure components. Purchasing any of our APC Needs Assessment services gives you peace of mind, knowing your facilities have been designed for optimal performance, extending the life of your hardware, and ensuring the highest level of network availability. APC Authorized Field Service Engineer will visit your site and collect data pertaining to electrical loads, wiring practices, power quality, existing power protection equipment and environmental conditions. With this data, a customized report will be developed which includes the ideal facility plan for the site.

### Installation Consulting Service

APC will provide guidelines for installation of any 3-phase product, from electrical installation to facilities issues such as floor weight capacity or how to manage positioning of the unit. APC Field Service Engineers will work on site with customer-appointed electrical contractors to ensure a smooth installation, bringing your network up and running as quickly as possible.

### Site Positioning Service

APC's Site Positioning Service helps manage the entire physical delivery of your system from factory to data center. Whether your computing environment is in the basement or on the top floor of a high-rise, APC will ensure that your system arrives intact, with minimal disruption to your routine work environment.

### APC Project Management

Services are designed to assist you with rollout of large scale projects, allowing you to focus on your core business objectives. Our industry-experienced project managers are trained to guide project coordination, communication, and project budget management, assuming your projects are completed on schedule and within budget.

### Installation Services

Installation services deliver the vital resources, expertise, and tools needed to quickly and efficiently implement your APC solution. Purchasing Installation Services from an APC certified field service engineer allows you to take advantage of project engineering expertise gained from years of experience designing and implementing complex infrastructure solutions. An APC certified installation and commissioning of your solution ensures your equipment is configured for optimal performance, saving you time and money and extending the life of your hardware solution.

### Network Integration

Allow APC Global Services to handle your transition from your existing solution to APC InfraStruXure from start to finish with APC Network Integration Services. APC Global Services Network Integration Engineers will help plan rack configuration and perform the actual server migration and cable management, ensuring your solution is configured for optimal airflow and performance. We will perform these services off hours and on the weekends to minimize the impact on your day-to-day operations. APC Global Services will cover the logistics and labor needed to complete the process with minimal downtime, while utilizing a fully tested cable management system for a professional look and feel.

### On-site Training

Learn from industry-proven professionals about topics ranging from operations to routine checks.

## Product-based Services

### 1 Year On-Site Service

- Provides an APC-Certified Field Service Engineer on location in a time frame compatible with your requirements. Available in 4-hour, next day, next business day, and best endeavor response times

### External Battery On-Site Service

- APC On-Site Service provides you with an APC-certified technician within the specified response time: Best endeavor, next business day, next day, 4-hour response

### 1-Year Extended Warranty

- An addition to the peace of mind already offered by APC's Legendary Reliability™

### External Battery Preventative Maintenance Visit

### External Battery Start-Up

### Preventative Maintenance Visit

- Keeps your systems operating at maximum efficiency, reducing the possibility of unnecessary downtime



# Users agree, APC InfraStruXure™ is . . .

## ...Pay as-you-grow

"Since it's very easy to add racks, power modules or battery modules to our InfraStruXure, we don't need to buy more equipment up front than what we currently need. InfraStruXure fits perfectly into our vision of a unique level of automation."

—Eric Ubels, CIO, and Guus Van Velzen,  
Principal Architect, Deloitte and Touche

## ...Highly adaptable

"InfraStruXure responds to today's business environment. It makes it easier for the data center manager to move fast and to be much more flexible with power architecture – all at a lower cost."

—Seth Sladek, Data Center Manager,  
Cambridge Health Alliance

## ...Simple to Service

"Today, our InfraStruXure architecture allows us to perform basic management and maintenance ourselves. Therefore, we save a significant amount of money on both upfront and long-term service costs. We are no longer at the mercy of an anonymous third party service person."

—Rob Leon, Technical Manager, China Motion Telecom

## ...Quick to Deploy

"Implementing InfraStruXure into our data center was also very time-efficient. What would normally require weeks of planning and installation construction now took days and hours."

—Cliff Rittel, Director of IT, ADCS, Inc.

InfraStruXure™

POWER RACK AIR

Open, adaptable and integrated  
architecture for on-demand  
network-critical physical infrastructure



APC's Manufacturing  
System is certified by  
ISO 9001 and ISO 14001  
Standards

For more information call:  
Tel: 800 800 4APC - US & Canada  
Tel: 401 789 0204 - Worldwide

**APC Corporate**  
APC North America & Latin  
America  
132 Fairgrounds Road,  
West Kingston, RI  
02892, USA  
Call: 800 800 4APC  
Fax: 401 789 3710

**APC Europe**  
APC Ireland  
Ballybrit Business Park, Galway,  
Ireland  
Call: +35 391 702000  
Fax: +35 391 756309

**APC Asia Pacific**  
APC Australia  
Level 13  
65 Berry Street  
North Sydney, NSW2060  
Call: +61 2 9955 5395  
Fax: +61 2 9955 2844

Visit: [www.apcc.com](http://www.apcc.com)  
E-mail: [specinfo@apcc.com](mailto:specinfo@apcc.com)  
Web Support: [support.apcc.com](http://support.apcc.com)  
PowerFax™: 800-347-FAXX