



# **MasterSwitch VM**

## Power Distribution Unit

AP9221X166  
AP9221EXP166

User Guide



**APC®**

Raritan v. Server Technology

## Thank You!

---

Thank you for selecting APC's MasterSwitch VM (vertical-mount) power distribution unit (PDU). It has been designed for many years of reliable, maintenance-free service. APC is dedicated to the development of high-performance electrical power conversion and control products. We hope that you will find this product a valuable, convenient addition to your system.

**Please read this manual!** It provides important configuration and operating instructions that will help you get the most from your MasterSwitch VM power distribution unit. See the *Installation Manual* included with MasterSwitch VM and on this CD for more detailed information on installing and setting up the unit.

# **APC® MasterSwitch VM**

## **Contents**

### **Chapter 1—Introduction ..... 1**

#### **Product Description ..... 1**

- Overview 1
- MasterSwitch VM 2
- MasterSwitch VM Controller 3
- LEDs 5

#### **Operating MasterSwitch VM. .... 6**

- Overview 6
- Initial setup 6
- Configuring outlets for operation 6
- Current sensing 11
- Overload Outlet Restrictions 11
- Overload Audible Alarm 11
- Low Current Threshold 11

### **Chapter 2—Managing MasterSwitch VM..... 12**

#### **Introduction ..... 12**

- Overview 12
- Contents 12

#### **Management Interfaces..... 13**

- Overview 13
- Web interface 13
- Web interface: accessing 13
- Web interface: logging on 14
- Control Console interface 14
- Control Console: accessing 15
- Control Console: structure 15

## **Contents, continued**

---

### **Password-Protected Accounts ..... 16**

- Overview 16
- Account access 16
- Administrator 17
- Device Manager 18
- Outlet User 19

### **Chapter 3—Menu Items ..... 20**

#### **Introduction ..... 20**

- Overview 20

#### **Outlets ..... 21**

- Overview 21
- Control actions 21
- Synchronization set configuration 22

#### **MasterSwitch VM ..... 23**

- Overview 23
- Unit Configuration 23
- Outlet Configuration 24

#### **Network ..... 25**

- TCP/IP 25
- TFTP/FTP 26
- Telnet/Web 26
- SNMP 27

#### **System ..... 29**

- Overview 29
- User Manager 29
- Outlet User Manager 30
- Identification 31
- Date/Time 31
- File Transfer 32
- Tools 33
- Links 33

**- ii -**

## **Contents, continued**

---

<b>Help .....</b>	<b>34</b>
Overview	34
Contents	34
Interactive Assistant	34
About Card	34
 <b>Chapter 4—Security .....</b>	 <b>35</b>
 <b>Security Features .....</b>	 <b>35</b>
Overview	35
Port assignments	35
User names, passwords and community names	35
 <b>Authentication.....</b>	 <b>36</b>
Authentication versus encryption	36
MD5 authentication	36
Interface MD5 authentication	37
 <b>Chapter 5—Product Information .....</b>	 <b>38</b>
 <b>Warranty Information .....</b>	 <b>38</b>
Limited warranty	38
Obtaining service	38
Warranty limitations	38
 <b>Troubleshooting.....</b>	 <b>39</b>
Overview	39
Troubleshooting suggestions	39
If problems persist	40
 <b>Life-Support Policy.....</b>	 <b>41</b>
General policy	41
Examples of life-support devices	41
 <b>Specifications .....</b>	 <b>42</b>
Product specifications (AP9221X166)	42
Product specifications (AP9221NX166)	43

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

### LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

### FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

### E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.