Eaton 5PX and 9PX UPS





Eaton UPSs Energy-efficient power protection for virtualized IT environments

Eaton's best in class backup power UPS solutions keep your business running without interruption, offering superior flexibility, optimum efficiency and reliability. They give you the peace-of-mind knowing equipment is power-protected 24/7.

Protect your IT applications:

- Eaton 5PX UPS is the ideal solution for protection of IT closet equipment including servers and network devices such as switches and routers
- Eaton 9PX UPS is the excellent solution for protection of mission critical IT applications including virtual servers, data storages and hyper-converged infrastructure solutions

The Eaton 5PX and 9PX UPSs enable you to:

- Secure mission-critical applications
- Reduce energy consumption and costs
- Optimize power density, minimize capital and operating expenditure

Protect more equipment

 With at least 0.9 power factor (and even 1 power factor on 9PX 2.2 & 3kVA); the 5PX and 9PX deliver more real output power (Watts)

Use your U space for IT equipment

 With market-leading energy density, the 5PX and 9PX enable power up to 3kW in only 2U, 5.4kW in 3U and 10kW in only 6U

Reduce cooling and utility costs

 Energy Star qualified 5PX and 9PX UPSs provide unmatched energy efficiency for significantly reduced energy bills.











Extend UPS runtime

 Adding external hotswappable battery modules, the UPS will run systems for hours if necessary

Configure and check status in a second

 Graphical LCD provides clear information on UPS status, measurements and parameters

Additional features of the 9PX UPS (5-11kVA)

- The 9PX can be paralleled to achieve twice the power of unitary product using HotSync technology, without extra cost on the initial purchase
- The 9PX internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available (as standard on 8kVA and 11kVA) for easy replacement of the UPS without powering down critical systems

Powering virtualized environments

5PX and 9PX Netpack versions are delivered with network connectivity. When paired with Eaton Intelligent Power Manager software they can be easily integrated into your virtualization platform:





- · Monitor and manage UPSs from a virtualization dashboard
- Suspend non-critical virtual machines, consolidate critical virtual machines and shut down unused servers to extend battery runtime
- Automate disaster avoidance with a planned migration application, such as VMware Site Recovery Manager and Microsoft Live Migration
- Gracefully shut down virtual machines in case of prolonged outages





Intelligent Power Manager capability by license

Intelligent Power Manager software offers three versions - a Basic edition, Silver license and Gold license.

The Gold license - our premium offering - provides the most complete set of capabilities including the ability to create business continuity policies triggered by third-party power devices in addition to Eaton equipment. The table below outlines the capabilities of each license.

Standard Power Management Features	Basic [Free] (Up to 10 Power Devices)	Silver (Up to 100 Power Devices)	Gold (More than 100 Power Devices)	Benefits	
Protected Servers (IPP) and Virtual Servers	•	•	•	Gracefully shutdown servers	
Storage Shutdown Module	•	•	•	Remotely shutdown select storage devices	
Generic Drivers and Third Party Devices	•	•	•	Monitor 3rd party devices via a generic SNMP driver	
Configuration Policy	•	•	•	Create power & environmental event business continuity policies for groups of devices	
Control ePDU outlets	•	•	•	Enable policy based control of ePDU outlets	
Advanced Event Action with Standard Events	•	•	•	Use standard power events in configuration policies	
Advanced Event Action with Custom Events	-	•	•	Use custom user defined events in configuration policies	
Generic SSH action	-	•	•	Easily configure custom actions on any SSH enabled device	
3rd party power device support	-	-	•	Create business continuity policies on events generated by supported 3rd party devices	

Virtual Infrastructure Features	Basic [Free] (Up to 10 Power Devices)	Silver (Up to 100 Power Devices)	Gold (More than 100 Power Devices)	Benefits	
Plugin for VMware vCenter	•	•	•	Integrate power management into your vCenter environment	
Plugin for Citrix XenCenter	•	•	•	Integrate power management into your XenCenter environment	
Basic Power Actions: • Shutdown Storage Devices • Shutdown Virtual Hosts • Shutdown Virtual Machines • Enter/Exit Maintenance Mode	••	••		Perform basic graceful shutdown actions in business continuity policies by shutting down virtual machines, virtual hosts, shutting down select storage devices and/or by entering/exiting maintenance mode	
Advanced Power Actions: For VM/Volume: • Load shedding • Shutdown Targeted Virtual Machines • Migrate Virtual Machines to Targeted Hosts		•.		Reduce power load by integrating policy driven VM load shedding into your business continuity policies Target a specific VM or groups of VMs for shutdown and/ or migration in load shedding policies	
For Hosts: • Shutdown VMware vApp • Automate VMware SRM Recovery Plan				Target VMware vApps for shutdown in load shedding policies Automatically trigger the execution of your VMware SRM Recovery Plan when runtime hits a predefined threshold	
Virtual IT Infrastructure Level: • Fully virtualized cluster shutdown	-	•.	•	Enable 100% safe shutdown and restore of VMs and host servers in high availability environments	

	Basic [Free] (Up to 10	Silver (Up to 100	Gold (More than 100		
3rd Party IT Solution Connectors	Power Devices)	Power Devices)	Power Devices)	Benefits	
Cisco UCS Manager	•	•	•	Dynamically power cap Cisco UCS devices in your business continuity policies	
NetApp Storage	•	•	Trigger the shutdown of NetApp storage devices in your business continuity policies		
CA Nimsoft	•	•	•	Open IPM from directly within Nimsoft	

	Basic [Free]	Silver	Gold	
	(Up to 10		(More than 100	
Management Packs	Power Devices)	Power Devices)	Power Devices)	Benefits Benefits
Eaton IPM Management Pack for VMware vRealize Operations Manager	-	•	•	Monitor and analyze power information directly from within VMware vRealize

^{*} Not included for Eaton Essential UPS Models (9E and 93E) and all non Eaton UPS Models. Competitor UPS customers need to purchase Gold License to enable Basic and Advanced virtualization features.

To learn more about Intelligent Power Manager, visit www.eaton.eu/IntelligentPower

Eaton 5PX/9PX UPS Technical Specification

Technical Specifications	5PX 1500-3000	9PX 2200-3000	9PX 5000-11000				
Power factor	0.9	1	0.9				
Electrical characteristics							
Technology	Line-Interactive High Frequency (Pure Sinewave, Booster + Fader)	On-line double conversion with Power Factor	or Correction (PFC) system				
Input voltage range	160V-294V (adjustable to 150V-294V)						
Efficiency	up to 99%	up to 94%	up to 95%				
Connections			<u>'</u>				
Input	1500VA: IEC C14 (10A) 2200/3000: IEC C20 (16A)	IEC C20 (16A)	Terminal block (Harwired)				
Outputs	1500VA: 8 IEC C13 (10A) 2200/3000: 8 IEC C13 (10A) + 1 IEC C19 (16A)	8 IEC C13 (10A) +2 IEC C19 (16A)	5-6kVA: Terminal+ 8IEC C13 (10A) + 2 IEC C19 (16A) 8-11kVA: Terminal block + 4 IEC C19 (16A)				
Switched Outlet Group	2 groups	2 groups	2 goups (5 & 6kVA only)				
Batteries							
Battery management		ABM® and temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units.					
Communication							
Communication ports	1 USB port, 1 RS232 serial port, dry contacts, term	1 USB port, 1 RS232 serial port, dry contacts, terminal block for remote On/Off and remote power Off					
Communication slot	Network-MS card as standard	Network-MS card as standard					
Operating conditions, standards and ap	pprovals						
Operating temperature	0 to 40°C continuous						
Performance – Safety – EMC	IEC/EN 62040-1 (Safety), IEC/EN 62040-2 (EMC), IE	IEC/EN 62040-1 (Safety), IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance)					
Approvals	CE, CB report (TUV), UL (9PX only), Energy Star	CE, CB report (TUV), UL (9PX only), Energy Star					
Dimensions H x W x D in mm/Weight							
Nb of U	2U	2U	3U at 5 & 6kVA 6U at 8 & 11kVA				
Part Numbers	5PX	9PX 2200-3000	9PX 5000-11000				
·	1500VA: 5PX1500iRTN		5kVA:9PX5KiRTN				
	2200VA: 5PX2200iRTN	2200VA: 9PX2200IRTN	6kVA: 9PX6KiRTN				
	3000VA: 5PX3000iRTN	3000VA: 9PX3000IRTN	8kVA: 9PX8KiRTNBP				
			11kVA: 9PX11KiRTNBP				

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