



Powering and Protecting Nutanix Appliances with Lenovo UPS Units
















Positioning Information

Lenovo ThinkAgile HX Series appliances combine industry-leading hyperconvergence software from Nutanix with Lenovo enterprise platforms. These appliances deliver the industry’s most feature-rich hyperconverged infrastructure to enterprise datacenters, bringing the benefits of web-scale technologies to enterprise applications through enterprise storage, data protection, infrastructure resilience, management and analytics, and security.

UPS Selector for HX Appliances

Lenovo offers a portfolio of Uninterruptible Power Supply (UPS) units to provide electrical power protection to the ThinkAgile appliances and other IT infrastructure building blocks.

Table 1. UPS Selector for HX Appliances

	1U	2U	2U	2U-4N	>2U
Lenovo HX Series	HX1320, HX2320, HX3320	HX5520, HX7520	HX3520-G	HX3720	HX7820
					
Lenovo UPS model	RT2.2KVA	RT2.2KVA	RT3KVA	RT5KVA	RT6kVA
Lenovo UPS	55942AX or 55942KX	55942AX or 55942KX	55943KX	55945KX	55946KX
					
Lenovo Extended Battery Module	55942BX	55942BX	55943BX	55946BX	55946BX
					
Network Management Card	46M4110	46M4110	46M4110	Included with UPS	Included with UPS
Lenovo UPM software*	00YE4655	00YE4655	00YE4655	00YE4655	00YE4655

* Power management and shutdown with Nutanix AHV requires a gold license for UPM version 1.57, silver license for version 1.65 and later.

UPS specifications





The following tables summarize the specifications of the Lenovo UPS portfolio.

Table 2. UPS specifications (Up to 6KVA)

Model Number	RT2.2KVA (100-125 VAC)	RT2.2KVA (200-240 VAC)	RT3KVA (200-240 VAC)	RT5KVA (200-240 VAC)	RT6KVA (200-240 VAC)
					
Part Number	55942AX	55942KX	55943KX	55945KX	55946KX
VA/Watts Rating	1950 VA/1920W	2200 VA/1980W	3000 VA/2700W	5000 VA/4500W	6000 VA/ 5400W
Height (Rack units)	2U	2U	2U	3U	3U
Input Voltage	100-125 Vac	100-125 Vac	200-240 Vac	200-240 Vac	200-240 Vac
Input Connector	NEMA 5-20P	IEC 320 C20 (16A)	IEC 320 C20 (16A)	Proprietary	Hardwired Terminal Block
Input Line Cord	Fixed 2.5m (8 ft)	Optional	Optional	Optional	Onsite wiring required
Output Connectors	(8) NEMA 5-20R (16A)	(8) IEC 320 C13 (10A), (1) IEC 320 C19 (16A)	(8) IEC 320 C13 (10A), (1) IEC 320 C19 (16A)	(2) IEC 320 C19 (16A), (8) IEC 320 C13 (10A)	(2) C19, (8) C13
Network Management Card	46M4110	46M4110	46M4110	Included	Included
External Battery Module	Up to four 55942BX	Up to four 55942BX	Up to four 55943BX	Up to four 55946BX	Up to four 55946BX
Environmental Monitoring Probe (Optional)	46M4113	46M4113	46M4113	46M4113	46M4113
Power Management software*	00YE4655	00YE4655	00YE4655	00YE4655	00YE4655

* Power management and shutdown with Nutanix AHV requires a gold license for UPM version 1.57, silver license for version 1.65 and later.

Table 3. UPS specifications (8KVA and 11KVA)

Model Number	RT8kVA (200-240 VAC)	RT11kVA (200-240 VAC)	RT8kVA 3:1 Phase (380-415 VAC)	RT11kVA 3:1 Phase (380-415 VAC)
				
Part Number	55948KX	55949KX	55948PX	55949PX
VA/Watts Rating	8000 VA/7200W	11000 VA/10000W	8000 VA/7200W	11000 VA/10000W
Height (Rack units)	6U	6U	6U	6U
Input Voltage	200-240 Vac, Single-phase	200-240 Vac, Single-phase	380-415 Vac, 3-phase	380-415 Vac, 3-phase
Input Connector	Hardwired terminal block	Hardwired terminal block	Hardwired terminal block	Hardwired terminal block
Input Line Cord	Onsite wiring required	Onsite wiring required	Onsite wiring required	Onsite wiring required
Output Connectors	(4) IEC 320 C19 (16A) on the MBP	(4) IEC 320 C19 (16A) on the MBP	(4) IEC 320 C19 (16A) on the MBP	(4) IEC 320 C19 (16A) on the MBP
Network Management Card	Included	Included	Included	Included
External Battery Module	Up to four 55949BX	Up to four 55949BX	Up to four 55949BX	Up to four 55949BX
Environmental Monitoring Probe (Optional)	46M4113	46M4113	46M4113	46M4113
Power Management software*	00YE4655	00YE4655	00YE4655	00YE4655

* Power management and shutdown with Nutanix AHV requires a gold license for UPM version 1.57, silver license for version 1.65 and later.

Connectors

This section describes the connectors on each UPS and extended battery module.

RT2.2KVA (100-125 Vac)

The following figure shows the rear view of the RT2.2kVA 2U Rack UPS (100-125VAC) (55942AX).

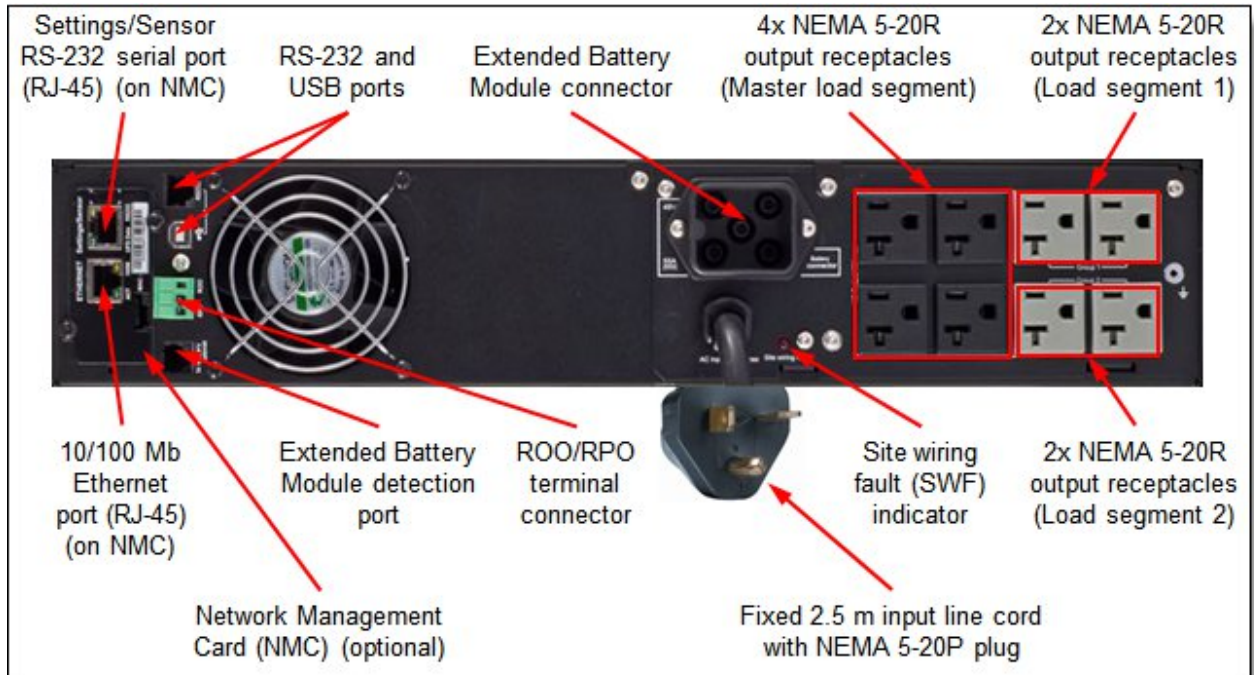


Figure 1. Rear view of the RT2.2kVA 2U Rack UPS (100-125VAC) (55942AX)

RT3KVA (200-240 Vac)

The following figure shows the rear view of the RT3kVA 2U Rack UPS (200-240VAC) (55943KX).



Figure 2. Rear view of the RT3kVA 2U Rack UPS (200-240VAC) (55943KX)

RT2.2KVA (200-240 Vac)

The following figure shows the rear view of the RT2.2kVA 2U Rack UPS (200-240VAC) (55942KX).

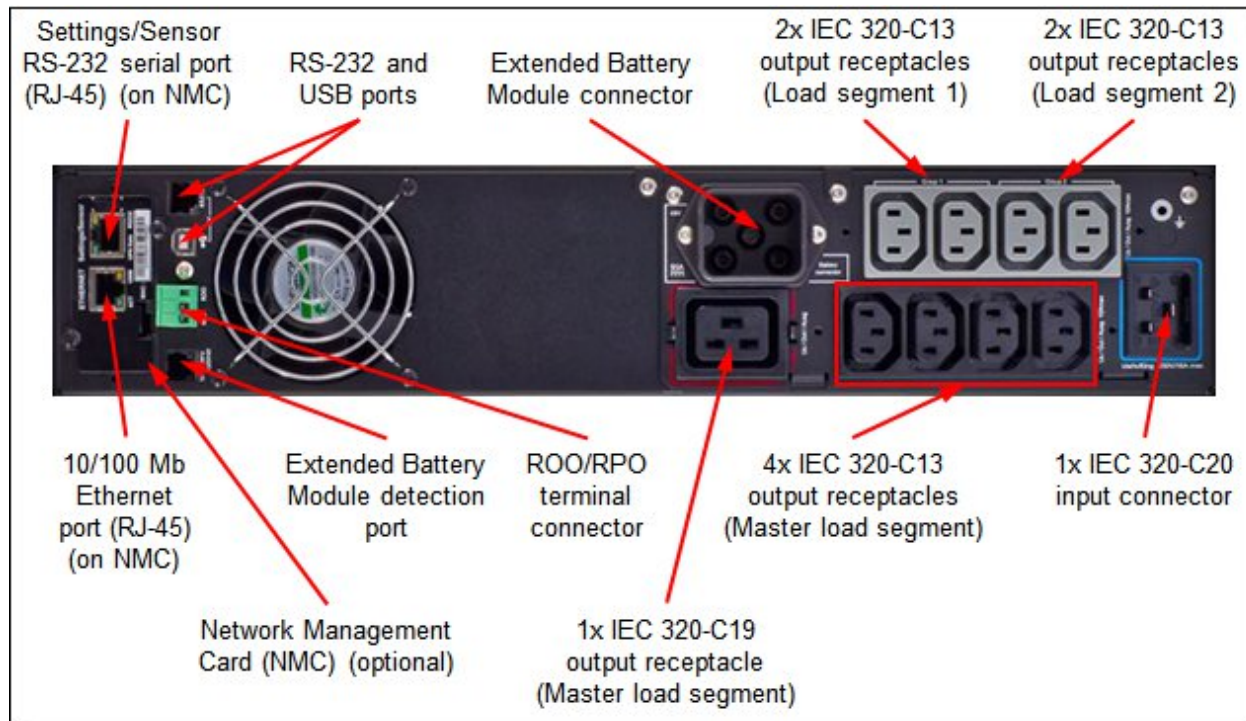


Figure 3. Rear view of the RT2.2kVA 2U Rack UPS (200-240VAC) (55942KX)

2.2KVA and 3KVA Extended Battery Modules

The following figure shows the rear view of the 2.2kVA (top) and 3kVA (bottom) 2U Rack Extended Battery Modules.

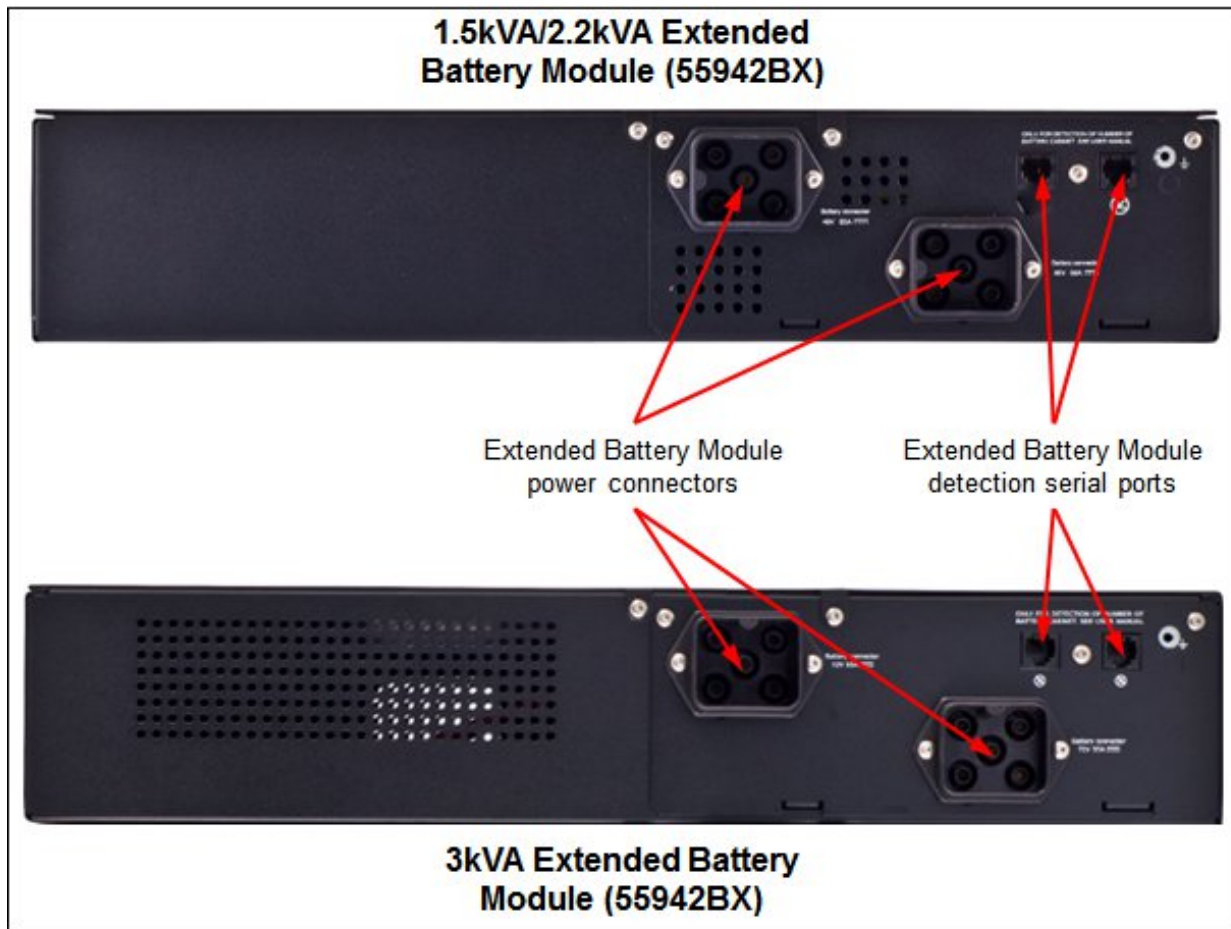


Figure 4. Rear view of the 1.5kVA/2.2kVA (top) and 3kVA (bottom) 2U Rack Extended Battery Modules

RT5KVA (200-240 Vac)

The following figure shows the rear view of the RT5kVA 3U Rack UPS (200-240VAC) (55945KX).

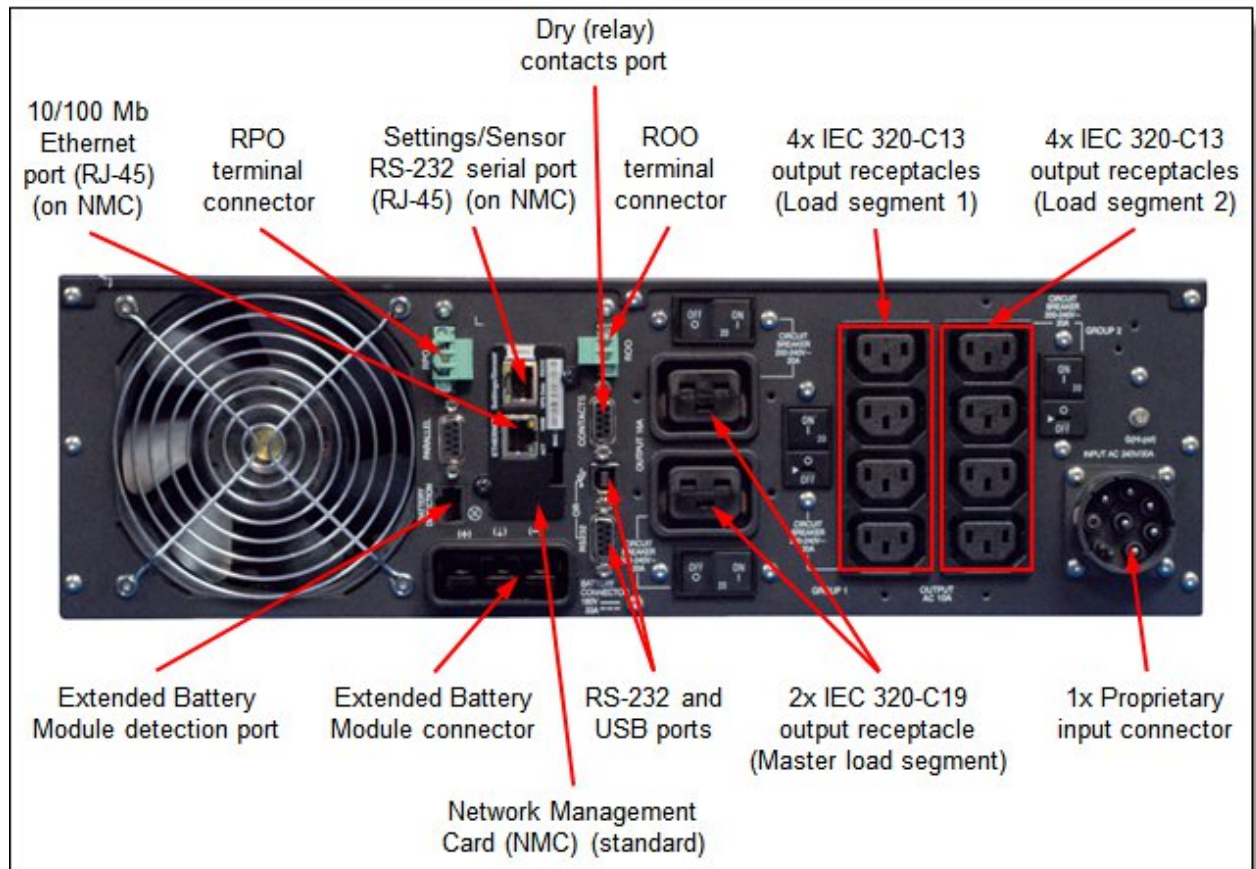


Figure 5. Rear view of the RT5kVA 3U Rack UPS (200-240VAC) (55945KX)

RT6KVA (200-240 Vac)

The following figure shows the rear view of the RT6kVA 3U Rack UPS (200-240VAC) (55946KX).

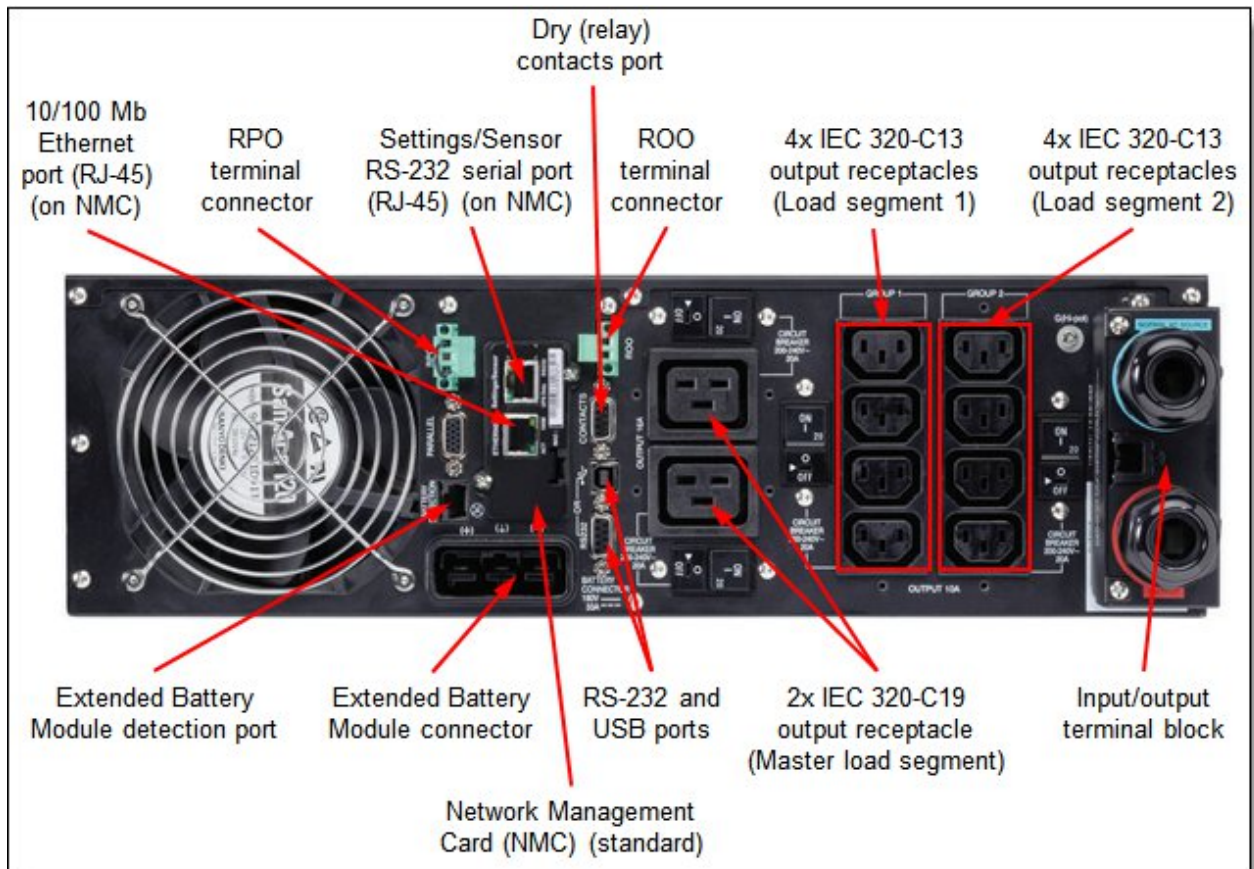


Figure 6. Rear view of the RT6kVA 3U Rack UPS (200-240VAC) (55946KX)

5KVA/6KVA Extended Battery Module

The following figure shows the rear view of the 5kVA/6kVA 3U Rack Extended Battery Module (55946BX).

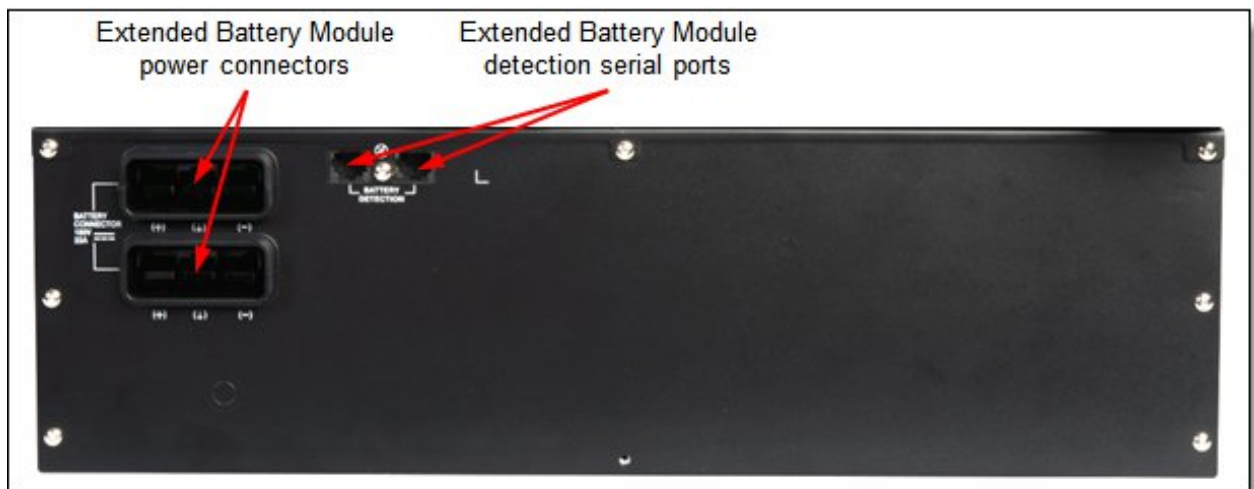


Figure 7. Rear view of the 5kVA/6kVA 3U Rack Extended Battery Module (55946BX)

RT8kVA and RT11kVA (200-240VAC)

The following figure shows the rear view of the RT8kVA and RT11kVA 6U Rack UPS (200-240VAC).

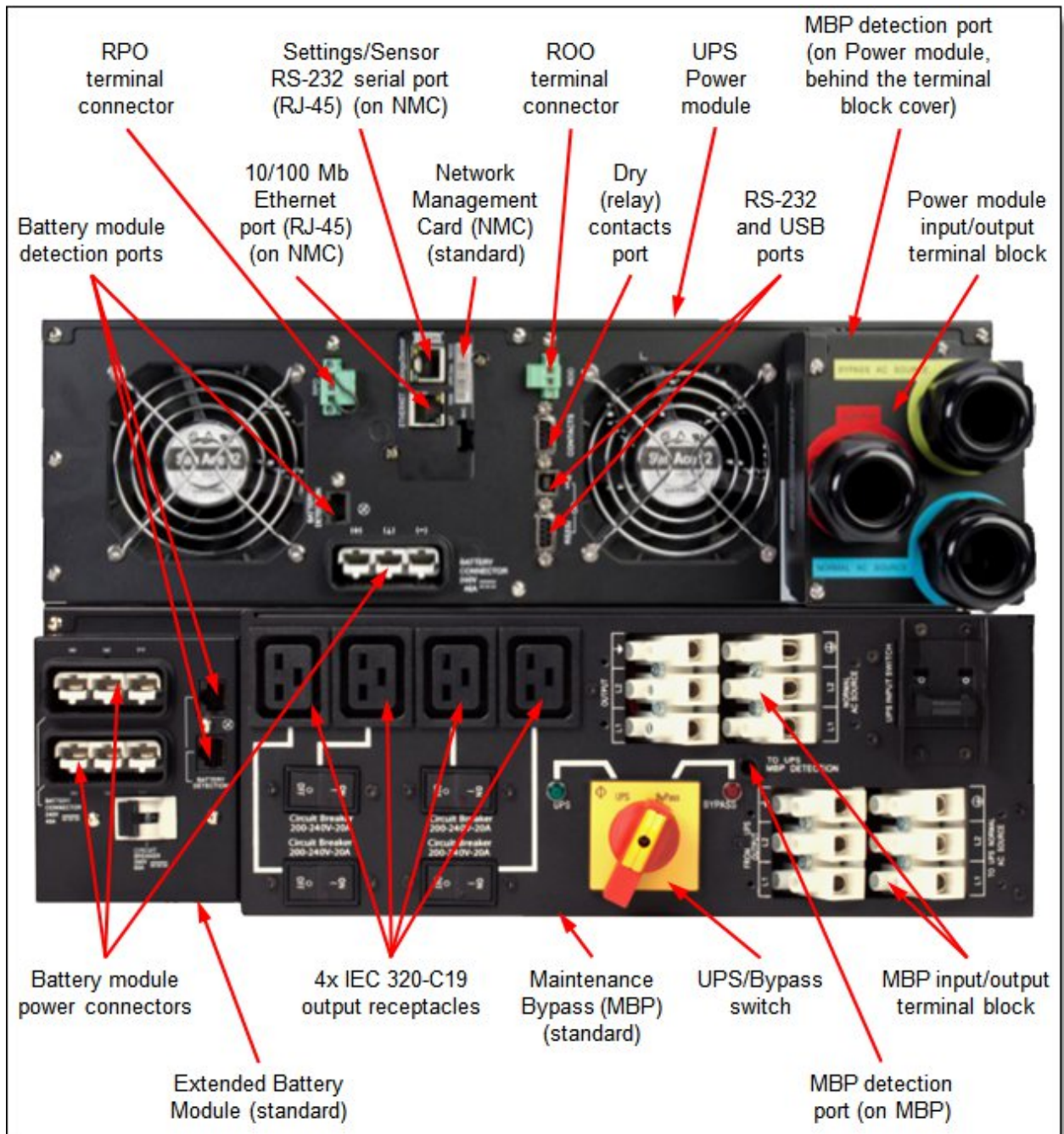


Figure 8. Rear view of the RT8kVA or RT11kVA 6U Rack UPS (200-240VAC)

RT8kVA and RT11kVA (380-415VAC)

The following figure shows the rear view of the RT8kVA or RT11kVA 6U 3:1 Phase Rack UPS (380-415VAC).

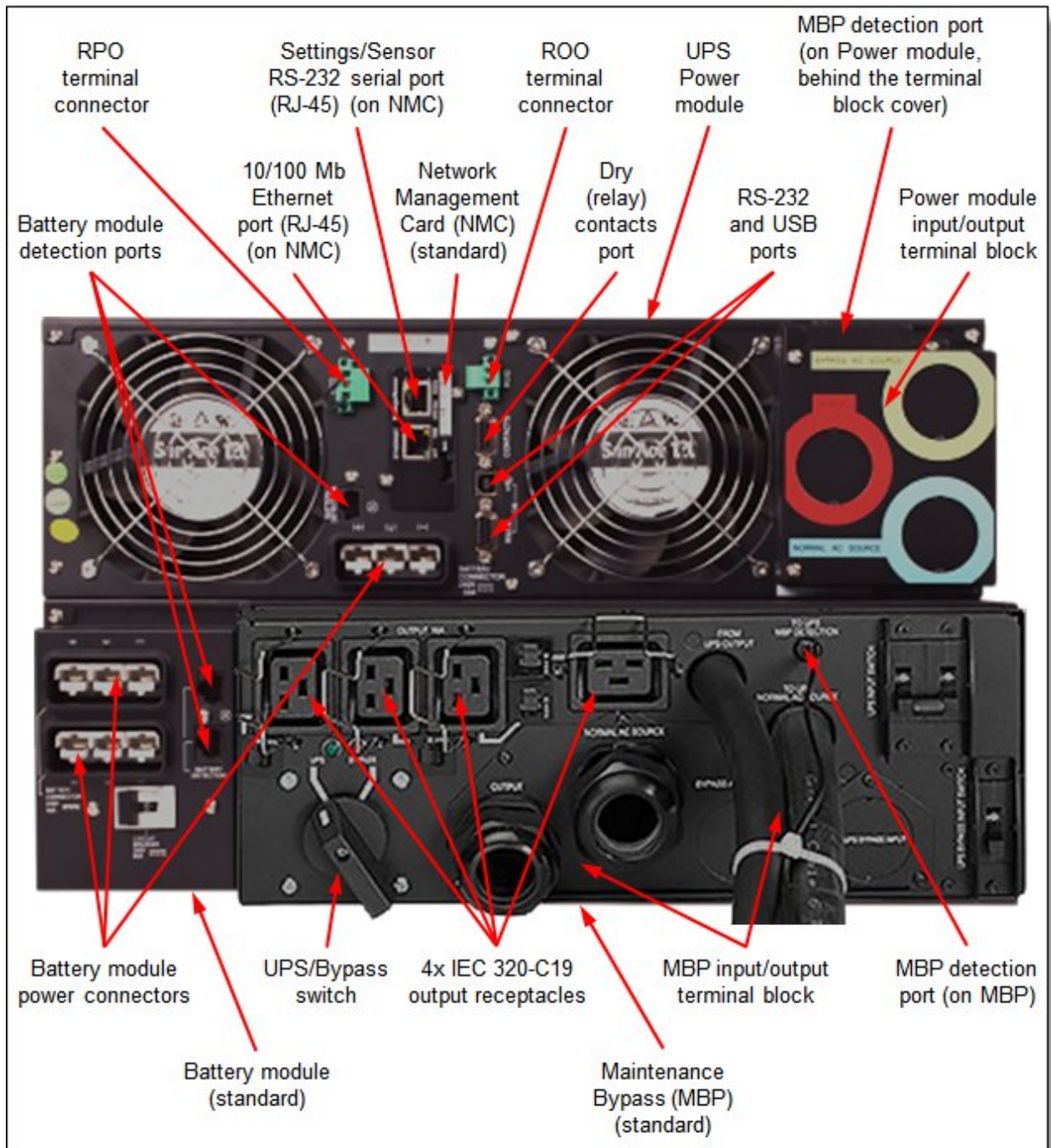


Figure 9. Rear view of the RT8kVA or RT11kVA 6U 3:1 Phase Rack UPS (380-415VAC)

8kVA/11kVA Extended Battery Module

The following figure shows the rear view of the 8kVA/11kVA 3U Rack Extended Battery Module (55949BX).

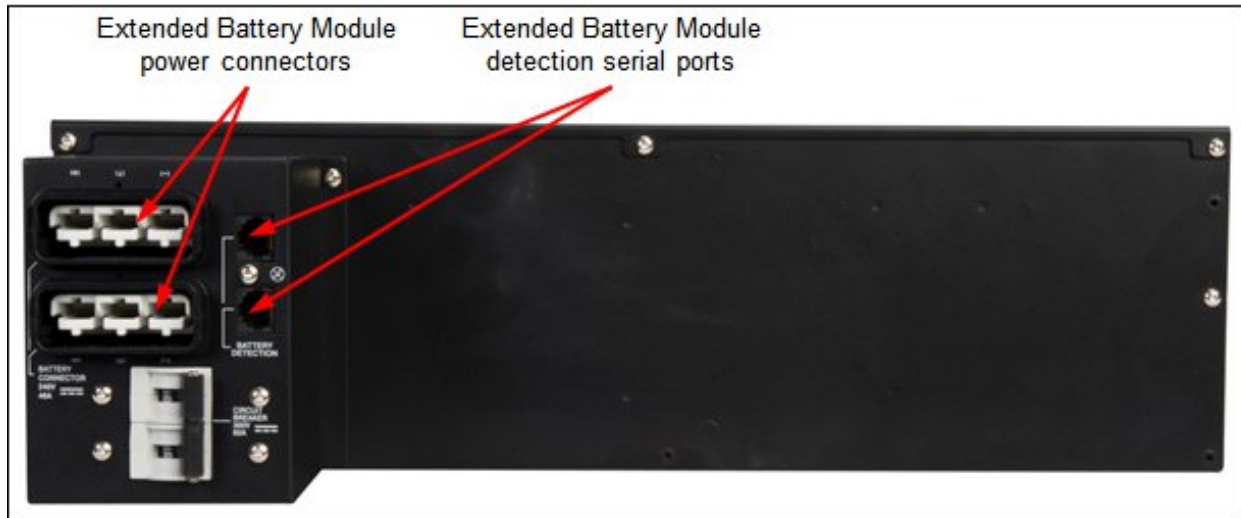


Figure 10. Rear view of the 8kVA/11kVA 3U Rack Extended Battery Module (55949BX)

Network Management Card

The Network Management Card (46M4110) provides convenient, over-the-network UPS remote monitoring and management through a standard web browser or UPS Power Manager software. It is optional with 2.2kVA and 3kVA models and standard with all other UPS models.



Figure 11. UPS Network Management Card

For more information

For more information on the ThinkAgile HX Appliances, see these resources:

- ThinkAgile HX Datasheet:
<https://lenovopress.com/ds0019-lenovo-thinkagile-hx-series>
- ThinkAgile HX Series Specifications Comparison:
<https://lenovopress.com/lp0873-thinkagile-hx-specs-comparison>
- ThinkAgile HX Product Guides:
<https://lenovopress.com/servers/thinkagile/hx-series>

For more information on the UPS offerings, see the product guides:

- RT1.5kVA, RT2.2kVA and RT3kVA 2U Uninterruptible Power Supplies
<https://lenovopress.com/tips1231-rt15kva-rt22kva-rt3kva-ups>
- RT5kVA and RT6kVA 3U Uninterruptible Power Supplies
<https://lenovopress.com/tips1232-rt5kva-rt6kva-ups>
- RT8kVA and RT11kVA 6U Uninterruptible Power Supplies
<https://lenovopress.com/tips1233-rt8kva-rt11kva-ups>

For more information about UPS Power Manager (UPM), see the following document:

- Power Management Using Lenovo UPS Power Protector (UPP) and UPS Power Manager (UPM)
<https://lenovopress.com/lp1076-power-management-using-lenovo-upp-and-upm>

Related product families

Product families related to this document are the following:

- [ThinkAgile HX Series for Nutanix](#)
- [Uninterruptible Power Supplies](#)

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This document, LP1277, was created or updated on January 19, 2020.

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