

Network Management Card 3

Introduction & Frequently Asked Questions

Summary

Network Management Cards 3 is the latest generation of Network Management offer from APC by Schneider Electric, replacing the Network Management Card 2. This document addresses the frequently asked questions about the capabilities of the new generation of Network Management Card and the differences between the multiple generations. Additionally, this document also answers questions about transition to the new generation.

Questions

1. What are the main benefits of the Network Management Card 3 (NMC 3)?.....	2
2. How do I know whether I have received NMC 2 or NMC 3?.....	2
3. What are the security features in the latest NMC 2 and NMC 3 firmware?.....	2
4. Can an existing NMC 2 be swapped with an NMC 3?.....	2
5. When is the End of sale and support of NMC 2?.....	3

1. What are the main benefits of the Network Management Card 3 (NMC 3)?

NMC 3 offers enhanced security, faster communication and increased space for data and event logs.

	NMC 2	NMC 3
Offer security	Secure firmware ¹	Security chip onboard for full secure boot with Root of Trust
Ethernet communication support	100 Mbps (RJ-45 10/100 Base-T)	Gigabit Ethernet - 1Gbps (RJ-45 10/100/1000 Base-T)
User available memory	Limited data & event logs	Increased data & event logs storage space
Local configuration	Serial based console – limited for troubleshooting	Micro-USB based console – troubleshooting and configuration

NMC 3 retains all the benefits (listed below) of NMC 2, providing a faster and more secure experience.

- Extensible Authentication Protocol (EAP) over LAN (EAPoL) protocol support to authenticate network devices with a RADIUS server.
- RADIUS based remote authentication support, in addition to a selection of security protocols including TLS, SCP, for secure monitoring and control of network managed device via web browser, command line interface, or SNMP
- Supports Modbus, BACnet (BTL² Certified)
- Increased security (up to 2048-bit encryption)
- The documentation supported in multiple languages
- IPv6 Ready
- Console port for local configuration
- Responsive web UI for mobile friendly user experience.

2. How do I know whether I have received NMC 2 or NMC 3?

The SmartSlot NMC2 and NMC3 are identifiable by their unique SKU numbers, AP9630/AP9631 and AP9640/AP9641 respectively.

In case of Smart-UPS that come embedded with an NMC, the packaging explicitly calls out “NMC 3 Inside”, to indicate NMC3 shipment.

3. What are the security features in the latest NMC 2 and NMC 3 firmware?

The security features in both the NMC 2 (v6.8 and above) and NMC 3 firmware include,

- a. All protocols disabled by default, except the HTTPS and SSH; A new protocol overview screen in web User interface and a banner in Command line Interface for the user to review and enable/disable (Please refer to “Cyber Security” section @ <https://www.apc.com/secure-nmc> for further details)
- b. TLS 1.2 support for safe NMC access
- c. User accounts shipped on the device are disabled by default and cannot be enabled until the password for each user account is changed.
- d. RADIUS support
- e. SMTP Authentication - e-mail
- f. HTTPS
- g. IPv6 Ready
- h. SSH Up to 2048 bit Public/Private Key Encryption
- i. User selectable active cipher suites, mitigating ROBOT vulnerability

4. Can an existing NMC 2 be swapped with an NMC 3?

¹ NMC firmware update v6.8+ is with all protocols disabled by default except https & SSH

² BACnet Testing Laboratories

In case of Smart-UPS, NMC 2 in a SmartSlot can be swapped with an NMC 3 SKU in most cases. Please refer to FAQ <https://www.apc.com/us/en/faqs/FA237786> to check whether your UPS is on the supported list. However, in case of a device that ships with a network port (with embedded NMC), the NMC is not swappable and an upgraded device is to be purchased to experience NMC 3.

5. When is the End of sale and support of NMC 2?

NMC 2 (SmartSlot Card) end of sales date is 12 months from the date of launch of NMC 3, however security related firmware updates will be provided for an additional 12 months. In case of devices where the NMC is built in (like Smart-UPS with a network port or rPDU), the support period of the device supersedes the support period of the NMC. The detailed End-of-Life (EoL) policy is published in the Support section @ <https://www.apc.com/secure-nmc>.