

CERTIFICATE

Certificate Id: 2PAA113760_ABB_800xA_Networks_RaMa_19P-4FG-7RG

Category:	Managed Switch
Product Name:	RaMa 19P-4FG-7RG
Vendor:	ABB AB
Certification Test Report:	3BSE080753
Certification reference:	System 800xA Version 4.x, 5.x
Restrictions:	-

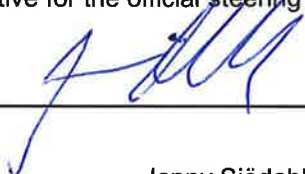
The certificate states that the product specified above has passed the test towards the specified integration category. The certification has been performed by an official certification center, approved by the official steering body for the Industrial IT Certification.

The basis for the certificate is documented according to the Industrial IT Certification – Document Number 3BSE037356. The certificate is valid for the above mentioned Product versions until the next major release of the certified product or the certification reference system with a major release of the certified product or the reference system, a new certification is required to keep the certificate current.

ABB AB
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Date: 2014-10-15

Representative for the official steering body for the Industrial IT Certification



Jenny Sjö Dahl

ABB 800xA Networks RaMa 19P-4FG-7RG

Industrial^{IT} Certification



Managed Switch

The RaMa 19P-4FG-7RG is a high performance layer 2 industrial Ethernet switch designed for high network traffic applications. Various port configurations are available with SFP transceivers. RaMa is powered by the ABB NEOS network operating system.

High performance and configurable

- 19 ports including 11 gigabit ports
- Powerful dual core CPU
- Advanced NEOS layer 2 functionality

Designed for demanding Edge Network applications

- Low power consumption AC power supply
- Highly configurable fault I/O contact
- Ultra-robust IP 40 19" rack/wall-mount housing

Robust and reliable for long service life

- 123 000 hours MTBF to MIL-HDBK-217K
- -40 to +70°C without ventilation holes
- Industrial and trackside type tested

Unique future proof industrial networking solutions

- Simple web configuration with professional CLI
- Network IP Security and remote access
- Multiple network resilience solutions

Certification results and product details are summarized below:

Product Overview

Family name	800xA Networks
Ethernet	7 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 4 x 100 or 1000 Mbit/s, pluggable connections, Ethernet FX or TX SFP 8 x 10/100 Mbit/s, Ethernet TX, RJ-45
Digital I/O	1 x 4-position detachable screw terminal
Console	1 x USB Micro-B connector
USB	1 x USB 2.0 host interface
Operating voltage	90 to 264VAC 47 to 63 Hz (120 to 370VDC)
Operating temperature	-40 - +70°C
Storage & Transport temperature	-40 - +85°C
Degree of protection	IP 40
Dimension W x H x D	466x258x43 mm

Engineering

Configuration and installation	Web server or terminal interface.
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Designed for Industrial Applications

RaMa 19P-4FG-7RG is designed for 19" cabinet according to ETSI standard making it suitable for use in control room networks. RaMa is designed to run efficiently from an AC power supply, the unit is also equipped with configurable I/O fault contact that make it ideal for easy installation and monitoring in industrial applications.

Only industrial grade components are used which gives the RaMa 19P-4FG-7RG an MTBF of 123 000 hours and ensures a long service life. A wide operating temperature range -40 to $+70^{\circ}\text{C}$ (-40 to $+158^{\circ}\text{F}$) can be achieved with no moving parts or cooling holes in the case. RaMa has been tested both by ABB and external test houses to meet many EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments and rail trackside application.

NEOS has been developed by ABB to allow us to offer cross platform and future proof solutions. NEOS can deliver 20 ms ring recovery performance even for networks with video or EtherNet/IP traffic.

The ABB 800xA Networks RaMa 19P-4FG-7RG switches closely supports the 800xA Extended Automation System Value Propositions as noted below:

800xA Value Proposition Mapping

✓	Reducing Time to Decision and Action <ul style="list-style-type: none">- Detailed performance information can be retrieved from the management interface- Easy to use
✓	Reducing Risk through High Integrity Automation <ul style="list-style-type: none">- Adapted for Industrial Ethernet- Mechanical form factor improves lifetime
✓	Integrating Information for Improved Visibility <ul style="list-style-type: none">- Diagnostic information available via web interface- Highly configurable fault I/O contact
✓	Investment Enhancement through Evolution <ul style="list-style-type: none">- Continuation in product development- Low power consumption AC power supply