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Professional installation Guide

Product/s covered in this guide:

Model: MSR4K43N3-XXX is part of the **Aruba's** MSR4000 family, implementing quad radio cards each 2x2 MIMO supporting IEEE 802.11 a/b/g/n/j operation.

IMPORTANAT - Visit Aruba Support web page for the latest information and documentation related to this product.

IMPORTANAT – Please read this document before installing and using your product.

This device must be installed and used in strict accordance with the manufacturer's instructions. Only approved by the manufacturer power adapters must be used. For replacement, contact your supplier or distributor.

Installation of this product must comply with local regulations and codes. When this product is used with external antenna/s, please refer to the installation documentation provided for the antenna/s.

Changes or modifications to the device not approved by the manufacturer of the product could void the user's authority to operate the equipment and will void the warranty of the product. No user serviceable parts; all repairs and service must be handled by a qualified service center.

All products using external antennas must be professionally installed, and the transmit power of the system must be adjusted by the professional installer/s to ensure that the system's EIRP is in compliance with the limit specified by the regulatory authority of the country of deployment.

During deployment of the system and its initial setup, professional installer must ensure that the allowed EIRP limit is not exceeded (in the Country of exploitation of this equipment). To achieve this professional installer must use approved and recommended by the Manufacturer antennas,

Ap-ANT-80D (8dBi for 2.4GHz)
Ap-ANT-85 (15dBi for 2.4GHz)
Ap-ANT-2*2-5614 (14dBi for 5.8GHz)
Ap-ANT-86 (9dBi for 5.8GHz)

and enter Antenna gain in the software using to setup and mange the product. In additional attenuation between the device and antenna may have to be measured or calculated.

The following formula can be used to calculate from EIRP limit related RF power based on selected antennas (antenna gain) and feeder (Coaxial Cable loss):

$$\mathbf{EIRP = Tx\ RF\ Power\ (dBm) + G_A\ (dB) - F_L\ (dB);}$$

EIRP –> limit specific for each Country of deployment

Tx RF Power –> RF power measured at RF connector of the unit

$\mathbf{G_A}$ –> Antenna gain

$\mathbf{F_L}$ -> Feeder loss (including the connectors' loss)

Note: Antenna information provided above reflect approved antennas for initial release of the device. For full list of antennas approved/recommended by the Manufacture please visit the Aruba Networks Inc. web site.