

# Federal Communication Commission Interference Statement (FCC ID: TV7R2SHPN)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **IMPORTANT: Exposure to Radio Frequency Radiation.**

The maximum permissible exposure report has been created for this module, which shows the minimum distances for public use as 142 cm when using a 24-dBi gain antenna. Under such configuration, the FCC radiation exposure limits set forth for a general population/uncontrolled environment can be satisfied.

**OEM statement. This product is intended for OEM installations only. As such the OEM** integrator is responsible for ensuring that the end-user has no manual instructions to remove install or modify the device. This product is limited to installations in mobile or fixed applications. OEM integrators may utilize antennas of like and equal or lesser gain as appearing in the table below (reference 47 CFR, paragraph 15.204(c)(4) for further information on this topic. The MikroTik OEM product complies with Part 15 of the FCC rules and regulations.

OEM product have been authorized by the FCC for use when placed inside computer enclosure. Additional testing or approval may be required for other operating configurations including portable configurations with respect to 47CFR paragraph 2.1093 and different antenna configurations. The OEM is required to comply with all 47CFR labeling instructions and requirements for the finished products.

Changes or modifications not expressly approved by MikroTik could void the authority to install or operate the equipment. OEMs must test their final product to comply with unintentional radiators (FCC section 15.107 and 15.109) before declaring compliance of their final product to Part 15 of the FCC Rules.

**WARNING:** the OEM must ensure that the FCC labeling requirements are met. Labeling and text information should be of a size and of type large enough to be readily legible, consistent with the dimensions of the equipment and the label.

**WARNING:** This device has been tested with a MMCX connector and antennas as listed in the table below. When integrated into the OEM products, these fixed antennas require professional installation. Preventing end users from replacing them with non-compliant antennas.

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

**List of approved antennas:**

- Omni Directional, 130K-D-1131-150K(WS), 2dBi;
- Omni Directional, WLO-2450-15, 15 dBi;
- Omni Directional HP, ODH 24-13, 13dBi;
- Panel, WLP-2450-20, 20 dBi;
- Sector, SA-24-90-17-WB, 17 dBi;
- Dish, DC 24-HD-PFIP, 24 dBi;

Antennas of same type and lower gain than those listed above may be used in compliance with certification.

**Antenna Installation**

**WARNING:** It is installer's responsibility to ensure that when using the authorized antennas in the United States (or where FCC rules apply); only those antennas certified with the product are used. The use of any antenna other than those certified with the product is expressly forbidden in accordance to FCC rules CFR47 part 15.204. The installer should configure the output power level of antennas, according to country regulations and per antenna type.

Professional installation is required of equipment with connectors to ensure compliance with health and safety issues. For transmitter settings when using the above listed antennas it is important to include the additional reduction of cable loss.

Antenna	Model	Gain (dBi)	Maximum Transmit Power Setting (dBm)
Gain antenna below 6 dBi	130K-D-1131-150K(WS)	2	28
Omni Directional	WLO-2450-15	15	25
Omni Directional HP	ODH 24-13	13	26
Panel	WLP-2450-20	20	23
Sector	SA 24-90-17-WB	17	24
Dish	DC 24-HD-PFIP	24	22