

Before you install

About this chapter

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Site planning and construction

Before installation, the site planner or installation manager must read the *IP-RN 8000 Site Planning Guide*. This guide explains all site requirements that must be met for a successful installation. These requirements include the following:

- Site construction, including the concrete pad or equivalent pad or floor that meets loading requirements
- Power supply
- Grounding infrastructure
- Backhaul link(s)
- Power and backhaul conduits
- Antenna configuration
- Global Positioning System (GPS) antenna(s)
- Primary external lightening/surge protection equipment

Planning the network

The network has to be planned. Network planning includes radio network planning, backhaul infrastructure planning, and IP address/network planning.

Receiving all shipping and materials

All expected crates and packages associated with the installation must be received at the installation site.

- All shipping containers must be present and accounted for.
- All shipping containers must be undamaged


Electro static discharge and GR-1089 compliance

The IP-RN 8000 complies with GR-1089 System Level Electrostatic Discharge with the door closed.

When the front door is open, an electro static discharge wrist strap must be worn and connected to the ESD jack on the Antenna Interface Unit prevent potential service disruption.



CAUTION

Wear an ESD strap () and connect the strap to the ESD jack in the Antenna Interface Unit whenever the front door is open. See [Understanding the Antenna Interface Unit module](#) on page 21.

Safety Recommendations and Warnings

The guidelines that follow help to ensure your safety and to protect the IP-RN 8000. These guidelines may not address all potentially hazardous situations in your working environment, so be alert, and exercise good judgement at all times.

- Keep the chassis area clear and dust-free before, during, and after installation.
- Keep tools away from walk areas where people could fall over them.
- Do not wear loose clothing or jewelry, such as rings, bracelets, or chains, which may become caught in the chassis.
- Wear safety glasses if you are working under any conditions that may be hazardous to your eyes.
- Do not perform any actions that create a potential hazard to people or make the equipment unsafe.
- Never attempt to lift an object that is too heavy for one person to handle.

Radiofrequency radiation exposure limits

Upon installation, this product is required to comply with the requirements of Federal Communications Commission 47CFR 1.1310, Radiofrequency radiation exposure limits. Care must be taken by the installer to insure that the antenna chosen along with its installation position and orientation does not violate these limits.

Maintaining Safety With Electricity

Before working on a chassis or working near power supplies, unplug the power cords on an AC-powered system. On a DC-powered system, disconnect the power at the circuit breakers. Follow these guidelines when working on equipment powered by electricity:

- Locate the emergency power-off switch for the area in which you are working. If an electrical accident occurs, you can quickly turn off the power.
- Do not work alone if potentially hazardous conditions exist anywhere in your work space.
- Never assume that power is disconnected from a circuit: always check the circuit.
- Carefully look for possible hazards in your work area, such as moist floors, ungrounded power extension cords, or missing safety grounds.
- If an electrical accident occurs:
 - Use caution. Do not let yourself become a victim.
 - Disconnect power from the system.
 - If possible, send another person to get medical aid. Otherwise, assess the condition of the victim then call for help.

Install the IP-RN 8000 following local, national, or international electrical codes:

- United States — National Fire Protection Association (NFPA70), United States National Electrical Code.
- Canada — Canadian Electrical Code, Part 1, CSA C22.1.
- Other countries — International Electromechanical Commission (IEC) 364, Part 1 through Part 7.

Warning Definition

Warning means danger. You are in a situation that could cause bodily injury or death. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

Product Disposal

Ultimate disposal of this product should be handled according to all national laws and regulations.

Lightning Activity Warning

Do not work on the system or connect or disconnect cables during periods of lightning activity.

Jewelry Removal Warning

Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.

Power Supply Warning

Do not touch the power supply when the power cord is connected. Line voltages are present within the power supply even when the power switch is off and the power cord is connected.

Power Supply Disconnection Warning

Before working on a chassis or working near power supplies, unplug the power cord on AC units; disconnect the power at the circuit breaker on DC units.

Power Disconnection Warning

Before working on a system that has an On/Off switch, turn OFF the power and unplug the power cord.

Grounded Equipment Warning

This equipment is intended to be grounded. Ensure that the IP-RN 8000 is connected to earth ground during normal use.

Installation Warning

Read the installation instructions before you connect the system to its power source.