

Power Supply, Distribution, & Environmental Monitoring Solutions for Cell Sites

Raycap's Power Distribution (PDU), Power Supply (PSU), Environmental Monitoring (EMU), and Power Protection Cabinet (PPC) designs, along with the PowerPlus series, are now available to telecom operators in North America.

These solutions save carriers time and money as new-generation equipment gets installed in remote locations.

Environmental Monitoring Units (EMUs)

The remote management of critical operations at telecom sites enhances operational efficiency, helps



reduce downtime, and also increases site safety. Ravcap's EMU operates on a powerful Linux software platform and connects with other devices installed at a macro cell site, enabling the remote monitoring and control of systems at the site.

The EMU is a 1U rack-mount system designed to be installed in remote shelters, cabinets, or enclosures. It features a multitude of built-in I/Os and various sensors, with the expansion capacity through an expansion port.

Data acquisition and configuration settings can be implemented via many different protocols, and data access is also available via a remote Ethernet port, enabling real-time monitoring. In the event of an internet connection loss. the EMU is capable of communicating remotely via optional 4G/5G expansion modules for redundancy.



Power Supply Units (PSUs)

PDU / PSU

Raycap's DC Power Supply units provide excellent rackmounted power solutions for cell sites. They are intended for installation in shelters, equipment cabinets or enclosures to power up critical telecom equipment.



With a wide input voltage and hot-pluggable, high-efficiency rectifier modules and controller units, and pluggable breakers for in-field replacements, these solutions are an excellent choice for carriers installing new, higher-powered equipment at existing or new sites.

Power supplies and EMUs have different features and options. Contact Raycap for more information.

EMU / PowerPlus



Click below for a detailed infographic explaining RaySite Environmental Monitoring Units (EMUs). LEARN MORE

Power Distribution Units (PDUs)

Raycap PDU systems are 2RU rack-mounted DC surge suppression and power distribution products employing Raycap's unique Strikesorb[®] Surge Protective Device (SPD) technology.



They are designed for use in Remote Radio Head (RRH) and multiple-circuit distributed antenna systems.

- Strikesorb is a Class I SPD, certified by VDE per the IEC 61643-11 standard as suitable for installation in areas where direct lightning exposure is expected
- Strikesorb is fully recognized to the UL 1449 5th Edition
- Our PDU units are designed to protect six, nine, or 12 radios
- Units use "AM" style breakers, and flexible and upgradable designs are offered.

Power Protection Cabinets (PPCs)

Our PPC solutions combine multiple power functionality such as the main disconnect, manual transfer switch, load

center, surge protection, and cam lock generator interface into a single, compact cost effective solution.

- 12.5 kA (10/350 μs) 140 kA (8/20 μs) Strikesorb Surge Protection
- 65 kAIC fault current rated
- 24 position load center
- 200A/200A main/ generator breakers
- Suitable for use as service entrance equipment (SUSE).



PowerPlus™ Intelligent Power Management System

Raycap's PowerPlus DC to DC, power conversion system is installed at the power supply unit output at the base station to help



cell tower sites manage the additional power needed when upgrading a cell site with newer generation, high-power remote radio heads (RRH).

The system provides intelligent power transmission in tandem with a tower-top Raycap OVP equipped with a voltage meter circuit. The output voltage dynamically adjusts to keep the input voltage at each connected RRH constant during variations in the RRH's power demand.

Setting up the PowerPlus at the cell site is straightforward, and Raycap's built-in PowerMap Plus technology helps technicians avoid wiring mistakes that can often plague tower sites. PowerPlus eliminates the need to install larger cables for long DC cable runs at upgraded cell sites.

Raycap PDUs can also feature power cycling or load disconnect functions based on voltage level, time, priority or other criteria

Raycap OVPs Overvoltage Protection + Cable Distribution

Raycap's OVP and connectivity enclosure product line, equipped with its flagship Strikesorb surge protection solutions have been protecting towers and rooftop sites worldwide for more than 20 years.



These solutions give operators the peace of mind that their remote radios

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will not be damaged by direct or induced lightning surges, and that the surge protection performance will not be affected, even after a surge.

Strikesorb is the most reliable surge protection device known and ensures that critical electronic equipment will remain protected at all times. For more information on the benefits of Strikesorb please visit our <u>website</u>.

OVPs, PPCs, PDUs and PowerPlus Systems have different features and options. Contact Raycap for more information.

Contact us today at info@raycap.com

or visit our website at www.raycap.com



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