Connectorized

Integrated

PIDU Plus

Motorola PTP 400 Series

Easy "Power-up and Point" Setup

The Connectorized models accommodate external antennas for reliable communications over long distances, including open expanses of water and land.

System Components

Each end of a Motorola wi4 Fixed Point-to-Point (PTP) 400 Series Link consists of an outdoor unit (ODU), a powered indoor unit, called the PIDU Plus – PTP 400 Series – and the required mounting equipment. The high-availability wireless Ethernet bridges also contain embedded web servers to manage a link either locally or remotely. Because PTP 400 Series solutions consist of the same hardware components, upgrading the Lite versions of the 5.8, 5.4 and 4.9 GHz systems requires only a simple software upgrade.

PTP 400 Series solutions are included in Motorola's MOTOwi4 portfolio of innovative wireless broadband solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the MOTOwi4 portfolio includes wi4 Fixed, wi4 Mesh, wi4 Indoor and wi4 WiMAX solutions for high-speed connectivity over private and public networks.

System Setup

Initial setup is easy: Install the units on their respective mountings and align the antennas. Each pair of ODUs comes preset with an IP address and the Ethernet MAC address of the other ODU to which it will connect. The preset addresses enable the link's security features and allow the two units to communicate only with each other. Setup is simply "power up and point." The installer aligns the antennas using an audible signal that translates the received signal strength into an audio tone. When the tone is highest, the two connection points are optimally aligned.
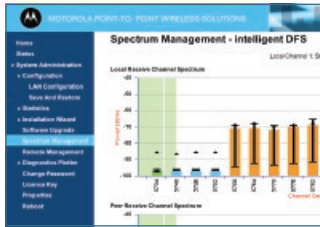
Outdoor Unit

The outdoor unit is one-half of each end of a PTP 400 Series-enabled wireless Ethernet link. A single RJ-45 (CAT5) cable connects the ODU to the PIDU Plus and supplies the ODU with both power and the Ethernet data to be communicated over the link.

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INTELLIGENT DYNAMIC
FREQUENCY SELECTION
(Performance information)

SYSTEM STATISTICS (Status)
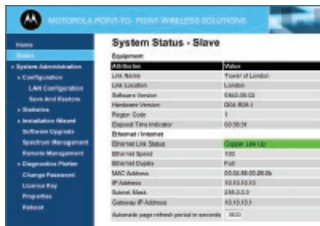

SYSTEM CONFIGURATION

The ODU, identical for both the full-speed and Lite versions, is a small, durable, lightweight transceiver that contains all the required radio and networking elements (including the multiple antennas and other hardware needed for Multiple-Input Multiple-Output capability).
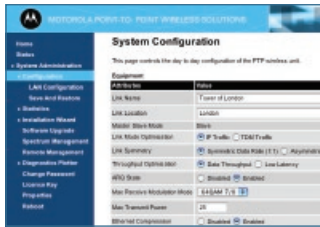
ODU Casing

The ODU's casing has an integrated safety and hoist loop that makes installation easy and provides extra protection against a fall. Casing webs increase the surface area to improve cooling and increase rigidity without adding extra weight. For quick positioning on a pole or mast, the ODU comes with a self-gripping "grip-tight" mounting bracket. When partially tightened, a "friction fit" between the bracket components allows fine tilt adjustments before final tightening. The bracket also enables simple, one-handed tightening and adjustment. The ODU's small size and light weight make it ideal for space-constrained and aesthetically challenging environments.

ODU Connectivity

A single drop cable (Power-over-Ethernet) configuration enhances simplicity of use and reduces cable cost.

PIDU Plus – PTP 400 Series

The PIDU Plus is one-half of each end of a PTP 400 Series-enabled wireless Ethernet link. A single RJ-45 terminated CAT5 cable connects the PIDU Plus to the ODU and carries both power and data. To guard against power and PIDU Plus failure, the PIDU Plus can be configured to provide redundant powering. About the size of a pocket dictionary, the lightweight PIDU has a rugged metal case that fits in a 1U high, rack-mount tray and operates reliably in temperatures from -40° F to +140° F (-40° C to +60° C).

Each PIDU Plus has two LEDs: a power LED that indicates the unit is powered up and working, and an Ethernet LED that indicates when data is being transferred. The unit also provides the following interfaces:

ODU: This is the RJ-45 connection to the ODU, carrying both power and data.

LAN: This is the RJ-45 connection to the user's data network. The connection supports automatic selection of speed setting, duplex setting and Tx/Rx pair swapping.

DC Out: DC-Out powers external boxes such as T1/E1 converters.

DC In: This connects the PIDU Plus to a battery or solar powering device.

Recovery: The Recovery switch is used to regain control of the system in the event of configuration errors or software image corruption.

Mains Power: A power cable supplied with a universal connector is provided with the PIDU Plus.

Network Management

Motorola's PTP 400 Series bridges are configured and managed either locally or remotely, using a standard web browser and SNMP or Canopy® Prizm. The screens pictured on the left are examples of the many screen displays provided for real-time network management.

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