

## OS-GEMINI INTEGRATED

## OS-Gemini Components

Each end of an OS-Gemini link consists of an integrated outdoor unit (ODU) and a small powered indoor unit (PIDU), along with the required mounting equipment. The OS-Gemini also includes an embedded web server to manage the link either directly or remotely. Initial setup is easy: Simply install the units on their respective mountings and align the antennas. Each pair of ODUs comes preset with its own built-in IP address as well as the 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. Alignment is virtually "power up and point." Wide-beam (7°) antennas make it easy to establish the initial connection. The installer then aligns the antenna 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 an OS-Gemini enabled wireless Ethernet link. A single RJ-45 (CAT5) cable connects the ODU to the PIDU and supplies the ODU with both power and the Ethernet data to be communicated over the link.

The ODU is a small, lightweight transceiver that contains all the required radio and networking elements (including the multiple antennas and

other hardware needed for multi-beam space-time encoding). It comes with a mounting bracket and can be positioned easily and quickly on a pole or mast. The unit's small size and light weight make the ODU ideal for setup in space-constrained and aesthetically challenging environments.



## Powered Indoor Unit

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

The PIDU is a wall-mountable box about the size of a pocket dictionary. It weighs less than ten ounces and takes up no rack space. The PIDU 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 PIDU also provides the following interfaces.

**ODU** The cable from the outdoor unit is connected to the indoor box, sending power to the outdoor unit and carrying network traffic between the two units.

**Reset** The reset switch, used to restore factory defaults, is only used when reinstalling the link in a new location or resetting IP address information.

**LAN** This is a standard RJ-45 socket to connect the indoor unit to the LAN or router. The connection supports automatic detection of cable type for ease of connection to either a router or a PC.

**Power** A power cable supplied with a universal connector is provided with the PIDU.



**Network Management** OS-Gemini is configured and managed using a standard web browser, with both direct and remote management (including SNMP). Pictured are three examples of the many screen displays included — here showing status, configuration and performance information in real time.

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