



DATAPATH | Wireless Point-to-Point Link (WPPL)

WIRELESS MULTI-POINT, MULTI-BAND COMMUNICATIONS SYSTEM

Maximize the reach and use of available licensed and unlicensed spectrum

When secure, line-of-sight connectivity matters, DataPath delivers with a flexible wireless solution that is designed to extend your communications networks and the applications they support. With DataPath's Wireless Point-to-Point Link (WPPL), you can expand your connectivity via a high-speed wireless connection without incurring the expense or depending on the availability of satellite bandwidth.

The DataPath WPPL can provide point-to-multipoint, line-of-sight (LOS) and near-line-of-sight (NLOS) wireless communications capabilities over 30 miles. Its modular design is flexible and scalable to meet unique customer requirements.

Through its integrated multi-band capabilities, the DataPath WPPL can provide connectivity for demanding applications including VoIP; collaborative planning tools; Intelligence Surveillance and Reconnaissance (ISR) dissemination and streaming video. The system employs advanced technologies to operate on a number of licensed military and unlicensed commercial FCC approved frequencies. It can also provide wireless connectivity as a stand-alone system or operate in conjunction with existing 802.11x networks.

The DataPath WPPL is specifically designed for rapid deployment in fixed locations. The transceiver modem can be mounted on the mast without the use of tools. Also, its operational frequencies are software-selectable and can be changed with the press of a button to eliminate time-consuming and tedious hardware manipulation or frequency conversions. These convenient, time-saving features allow real-time frequency changes to dramatically reduce downtime and maximize connectivity.

AT A GLANCE ...

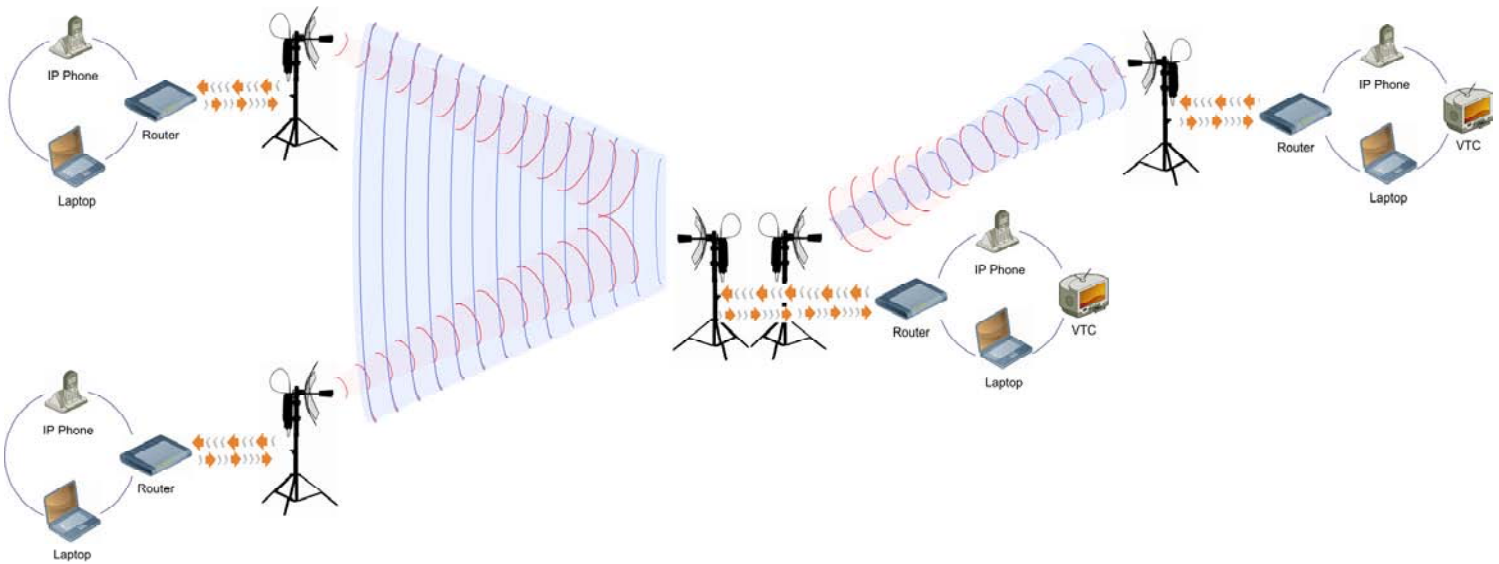
DataPath Wireless Point-to-Point Link (WPPL)

- Integrated multi-band antenna and transceiver modem
- 30+ miles LOS and NLOS range
- Point-to-point (PTP) and point-to-multi-point (PTMP)
- 68 Mbps throughput
- EoIP for voice, video and data
- Interface to existing 802.11x or 802.3 equipment
- Reduced logistical burden and equipment load
- Supported by MaxView® network management software



This DataPath WPPL configuration includes an integrated multi-band antenna and transceiver modem system mounted on a mast.

One of several possible WPPL configurations:



Key Features and Functionality

- **Multi-band radio capability** – Available at customer specified frequency bands including but not limited to:
 - > 2.4 GHz
 - > 5.2 GHz
 - > 5.8 GHz
- **Multi-band mesh antenna** – Utilizes a directional, wire parabolic mesh reflector. Benefits include; reduced visible target, reduced mast weight, reduced wind load. This single antenna is designed to support multi-band radio eliminating the need for multiple reflectors.
- **NTIA* Licensed Frequency range** – Tunable within 1755 to 1850 MHz and can be customized to transmit on other frequencies. (*National Telecommunications and Information Administration)
- **Low probability of intercept** – Designed to minimize the probability of detection and intercept by external sources. Configuration information is not maintained in non-volatile memory after power down.
- **Radio power output** – Extended to 5 watts to enhance system capability in environments of high radio frequency interference (RFI).
- **System transmission time** – Provides near real-time quality video, audio and data transmission with a delay of only 2 to 11 milliseconds.
- **On-board video compression** – Can be customized for multiple video applications and encoders.
- **Auxiliary power** – Integrated auxiliary power ports are provided for powering external third-party hardware.
- **Software** – Open source, non-proprietary and can communicate with 802.11x platforms.
- **Integrated router capability** – Creates the possibility of “repeater functionality” and “ad-hoc” network user support such as for convoys passing through the area.
- **High reliability** – Laser cut, hermetically sealed design for long-term performance in the harshest and most demanding environments. Gross and fine mass spectrometer leak detection down to 1 X 10⁻¹¹ atm cc/sec, certifiable to MIL-STD-883 and MIL-STD-202. Tested to military standards including MIL-STD-810 (e.g. salt, fog, blowing dust, fungus, humidity, water immersion, fluids exposure) and MIL-STD-464 (EMI/RFI exposure).