



CompactLink PDH 13 - 38 GHz Radio Relay Equipment



The CompactLink is a high performance, economical digital point to point microwave radio from Nera designed for short-haul applications.

The CompactLink operates in the frequency bands, 13 GHz up to 40 GHz and is available in both ANSI and ETSI data rates. CompactLink radios are available in non-protected and protected system configurations. Protected systems provide fully redundant transmitter and receiver components. The Radio Frequency Unit (RFU) is rugged, weather tight, light weight, and low profile. It contains a direct mounting antenna interface that eliminates the need for a feeder between the RFU and the antenna, easing installation and minimizing losses. Antenna polarity is adjusted by simply rotating the RFU 90 degrees on the antenna mount. The RFU interface will support antennas from 1ft to 4ft in diameter and mounts directly to a pole up to 5.5 inches in diameter.

The Digital Interface Unit (DIU), mounted indoors in a single rack unit, provides the interface between user equipment and the RFU. The DIU performs all digital processing functions and system monitoring, and requires no adjustments or tuning during or after installation. A single coaxial cable is used to connect the DIU to the RFU reducing installation time and operational costs.

For ease of installation, Nera digital microwave radios are fully configured and plant tested. The need for external test equipment is virtually eliminated by an array of built-in test capabilities. Built-in tests and indicators include: G.821 Parameters, Bit Error Ratio (BER), Errored Seconds (ES), Severely Errored Seconds (SES), Received Signal Level (RSL), Data Input, Data Output, and internal and external Local and Remote Loopbacks.

Applications

- PCS and Cellular Backhaul
- Intranetwork Connections
- Infrastructure Support

Benefits

- Integrated antenna and RFU eliminates expensive wave guide runs
- Extensive embedded diagnostics and configuration systems reduce operation costs.
- Extensive use of ASIC extends MTBF and reduces operational costs
- Common Digital Interface Unit reduces sparing requirements
- Reduced MTTR extended through the use of extensive diagnostic systems and open network management architecture

Features:

- Frequency Bands: 13, 15, 18, 23, 26, and 38 GHz
- Data Rates - ETSI: 2,4,8,16E1 and E3 - ANSI: 2,4,8,16DS1 and DS3
- Reversible Rack Mounting DIU
- Modular Design, Built-In Diagnostic and Test Capabilities
- DS3/E3 Versions Include a Separate DS1/E1 Wayside Channel
- Single Cable Connection Between DIU and RFU
- Forward Error Correction
- Frequency Agile
- Password Protection
- Wide Dynamic Range Receiver
- Digital Orderwire
- Open Architecture Network Management Including TBOS or SNMP
- Data Rate Independent RFU
- User Configured Data Scrambler
- MHSB with Errorless Switching