PTP/PTMP IP Radios for Backhaul to Last Mile

PTP/PTMP IP RADIOS

Evolution and expansion of cellular networks and internet has lead to an increased demand for all encompassing coverage. To meet these requirements, Operators and ISP's must deploy networks rapidly without losing time-to-market and at the same time ensuring high availability and QoS to its customers. In areas where optical fiber or copper backhaul is not feasible, Radio backhaul provides a viable option of economical & fast roll out and profitable scaling in both urban and rural areas.

Omoco’s integrated IP Radio solution provides a reliable & secure backhaul to last mile connectivity for voice, data and video with its portfolio of high capacity Point-to-Point and Point-to-Multipoint Radio.

HIGHLIGHTS

- Complies to the Indian Telecom Standards of TEC Generic Requirement
- Available in License Exempt and Licensed Frequency Bands (Sub 6 GHz)
- External and Integrated Antenna Options
- Carrier Grade Performance
- Net Aggregate User Throughput Up to 200 Mbps
- Long Range – 10/100+ kms
- Inbuilt Surge Suppression
- MIMO and OFDMA Technologies
- Asymmetric Throughput for Different Bandwidth Requirements
- Operational in nLOS, High Interference and Harsh Weather Conditions
- TDD - TDMA Duplex Technique
- Enhanced Security – AES Encryption
- Traffic Prioritization
- Extremely Simple to Install and Maintain
- Supports Site Sync to Eliminate Collocation Interference
- Automatic Channel Selection
- Dynamic Frequency Selection

APPLICATION

- Backhaul for 2G, 3G & 4G
- Backhaul for Broadband
- Backhaul for IP Surveillance network
- Backhaul for Enterprise Data
- SWAN
- Last Mile Connectivity

Omoco Radio Backhaul Applications
UNIFIED NETWORK MANAGEMENT PLATFORM

UNMP is a scalable NMS platform for configuring and monitoring of the IP Radio's and Access Point's the network. UNMP automatically provisions the newly installed network elements, with the option of profiling and grouping based upon location and type without any limitation. In addition, to the central monitoring UNMP also supports core management of the network elements like performance monitoring with log, health monitoring and comprehensive report generation.

<table>
<thead>
<tr>
<th></th>
<th>RM-ULTRA</th>
<th>RM-COMPACT</th>
<th>RM-MAX</th>
<th>RM-EXTREME</th>
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<tbody>
<tr>
<td>Frequency Band (GHz)</td>
<td>2.4/5.8*</td>
<td>2.4/5.8*</td>
<td>2.4/5.8</td>
<td>2.4/5.8*</td>
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<tr>
<td>TX Power (dBm)</td>
<td>25</td>
<td>25</td>
<td>22</td>
<td>30 (2.4G), 25 (5.8G)</td>
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<tr>
<td>Rx Sensitivity (dBm)</td>
<td></td>
<td>BPSK: - 90, QPSK: - 88, 16 QAM: - 85, 64 QAM: - 75</td>
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<tr>
<td>Net Aggregate User Throughput (Mbps)</td>
<td>40</td>
<td>40</td>
<td>100/200</td>
<td>100/200</td>
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<tr>
<td>Range (Kms)</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>100</td>
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<td>Ethernet Ports</td>
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<td>2</td>
<td>1</td>
<td>2</td>
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<td>Out of Band Interference Rejection</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<tr>
<td>Integrated Antenna Gain (dBi)</td>
<td>9 (2.4G), 13 (5.8G)</td>
<td>19 (2.4G), 23 (5.8G)</td>
<td>19 (2.4G), 23 (5.8G)</td>
<td>-</td>
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<tr>
<td>External Antenna Connector</td>
<td>2 x SMA</td>
<td>-</td>
<td>2 x N</td>
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<td>Integrated Managed Ethernet Switch</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
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<td>Water and Dust Protection</td>
<td>IP55</td>
<td>IP65</td>
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</table>

KEY FEATURES

- Realtime centralized monitoring of all IP-based devices
- Centralized configuration of all IP-based devices
- Scalability, small to large distributed monitoring
- Hierarchical notification system
- Automatic discovery of network elements
- Web based User Interface
- Reporting and trending