<table>
<thead>
<tr>
<th><strong>Description</strong></th>
<th>ECM-P5G-A28R150, 5 GHz point-to-point unit, net throughput up to 1000 Mbps, integrated dual-pol antenna, 28 dBi, 5x5 deg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net throughput</strong></td>
<td>up to 1000 Mbps</td>
</tr>
<tr>
<td><strong>Recommended distances</strong></td>
<td>up to 50 km</td>
</tr>
<tr>
<td><strong>Radio technology</strong></td>
<td>MIMO 2x2, Cyclic single carrier</td>
</tr>
<tr>
<td><strong>Modulation coding schemes</strong></td>
<td>from QPSK 1/4 to QAM256 30/32</td>
</tr>
<tr>
<td><strong>Transmit power</strong></td>
<td>up to 22 dBm</td>
</tr>
<tr>
<td><strong>Receiver sensitivity</strong></td>
<td>down to -93 dBm</td>
</tr>
<tr>
<td><strong>Frequency range</strong></td>
<td>4900-6000 MHz</td>
</tr>
<tr>
<td><strong>Channel width</strong></td>
<td>2x10, 2x20, 2x40 MHz</td>
</tr>
<tr>
<td><strong>Center frequency adjustment step</strong></td>
<td>1 Mhz</td>
</tr>
<tr>
<td><strong>Duplex scheme</strong></td>
<td>TDD, Hybrid-FDD</td>
</tr>
<tr>
<td><strong>Antenna</strong></td>
<td>28 dBi</td>
</tr>
<tr>
<td><strong>Wired Interfaces</strong></td>
<td>2x GigabitEthernet, SFP</td>
</tr>
<tr>
<td><strong>Consumption</strong></td>
<td>up to 55 W</td>
</tr>
<tr>
<td><strong>Power options</strong></td>
<td>90-240 VAC @ 50/60 Hz, 43..56 VDC</td>
</tr>
<tr>
<td><strong>Outdoor Unit (ODU)</strong></td>
<td>600 x 600 x 74 mm, 6.3 kg</td>
</tr>
</tbody>
</table>
Features

RADIO
✓ Best-in-breed spectral efficiency
  – up to 14 bps/Hz
✓ Flexible frequency planning
  – utilizing two non-adjacent frequency channels
  – support of TDD and Hybrid-FDD
✓ Reliable signal receiving in both LOS and NLOS conditions
✓ TDD synchronization using a built-in GNSS receiver

NETWORKING
✓ Built-in full-fledged L2 switch supporting VLAN and STP
✓ Transparent L2 transport for Ethernet traffic of any type
✓ Timing transport using precision time protocol (IEEE 1588v2) support
  – transparent clock mode supported

MANAGEMENT FEATURES
✓ Web-based graphical user interface
✓ Command line interface
✓ SNMP v1/2c/3 support (MIB-II and proprietary MIBs)
✓ Centralized monitoring

QUALITY-OF-SERVICE
✓ QoS support
  – 4 priority queues: strict and weighted prioritisation
  – Classification based on IEEE 802.1p
  – Egress rate limiting on each network port

INSTALLATION AND DIAGNOSTIC TOOLS
✓ LED indication
  – power status
  – wired and wireless link status
  – received signal strength indication
  – TDD sync status
✓ Web GUI tools
  – antenna alignment tool
  – spectrum analyzer

ENVIRONMENTAL
✓ Outdoor unit:
  – Operating temperature range –40..+60º C
  – IP66/IP67 compliant water and dust protection
✓ Indoor unit:
  – 90-240 VAC @ 50/60 Hz or ±43..±56 VDC
  – Power consumption up to 60 W

STANDARD COMPLIANCE
✓ Safety:
  – EN 60950-1:2006, UL 60950-1 2nd ed.
✓ Radio (pending):
  – EN 301 893 v.1.8.1, EN 302 502, v.1.2.1, FCC part 15.247
✓ EMC:
  – ETSI EN 301 489-1, ETSI EN 301 489-17, FCC Part 15 Class B
✓ RoHS:
  – Directive 2011/65/EU