<table>
<thead>
<tr>
<th>Description</th>
<th>ECM-P2-A19R500, 2 GHz point-to-point unit, net throughput up to 500 Mbps, integrated dual-pol antenna, 19 dBi, 17x17 deg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net throughput</td>
<td>up to 500 Mbps</td>
</tr>
<tr>
<td>Recommended distances</td>
<td>up to 30 km</td>
</tr>
<tr>
<td>Radio technology</td>
<td>MIMO 2x2, Cyclic single carrier</td>
</tr>
<tr>
<td>Modulation coding schemes</td>
<td>from QPSK 1/4 to QAM1024 8/10</td>
</tr>
<tr>
<td>Transmit power</td>
<td>up to 27 dBm</td>
</tr>
<tr>
<td>Receiver sensitivity</td>
<td>down to -94 dBm</td>
</tr>
<tr>
<td>Frequency range</td>
<td>2300-2900 MHz</td>
</tr>
<tr>
<td>Channel width</td>
<td>10, 20, 40 MHz</td>
</tr>
<tr>
<td>Center frequency adjustment step</td>
<td>1MHz</td>
</tr>
<tr>
<td>Duplex scheme</td>
<td>TDD, Hybrid-FDD</td>
</tr>
<tr>
<td>Antenna</td>
<td>19 dBi</td>
</tr>
<tr>
<td>Wired Interfaces</td>
<td>2x Gigabit Ethernet, SFP</td>
</tr>
<tr>
<td>Consumption</td>
<td>up to 30 W</td>
</tr>
<tr>
<td>Power options</td>
<td>90-240 VAC @ 50/60 Hz, 43..56 VDC (802.3at compliant)</td>
</tr>
<tr>
<td>Outdoor Unit (ODU)</td>
<td>371 x 371 x 89 mm, 3.3 kg</td>
</tr>
</tbody>
</table>
Features

RADIO

✓ Best-in-breed spectral efficiency
  – up to 14 bps/Hz
  – real throughput in excess of 130 Mbps in just 10 MHz of spectrum

✓ High transmit power and perfect sensitivity even at the highest-order modulations
  – Reliable signal receiving in both LOS and NLOS conditions

✓ Superior interference and noise immunity
  – High-selectivity receiver with channel filtering cuts off inband interference

✓ 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

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:
  – 100-240 VAC @ 50/60 Hz or ±43..±56 VDC, 802.3at compliant
  – Power consumption up to 60 W

STANDARD COMPLIANCE

✓ Safety:
  – EN 60950-1:2006, UL 60950-1 2nd ed.

✓ Radio (pending):
  – EN 302 326-2

✓ EMC:
  – ETSI EN 301 489-1, ETSI EN 301 489-17, FCC Part 15 Class B

✓ RoHS:
  – Directive 2011/65/EU