## NanoStation5 Datasheet

### System Information

<table>
<thead>
<tr>
<th>Processor Specs</th>
<th>Atheros AR2313 SOC, MIPS 4KC, 180MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory Information</td>
<td>16MB SDRAM, 4MB Flash</td>
</tr>
<tr>
<td>Networking Interface</td>
<td>10/100 BASE-TX (Cat. 5, RJ-45) Ethernet Interface</td>
</tr>
</tbody>
</table>

### Regulatory / Compliance Information

<table>
<thead>
<tr>
<th>Wireless Modular Approvals</th>
<th>FCC Part 15.247, IC RS210, CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoHS Compliance</td>
<td>YES</td>
</tr>
</tbody>
</table>

### Radio Operating Frequency 5.475-5.825GHz

<table>
<thead>
<tr>
<th>DataRate</th>
<th>Avg.Power</th>
<th>Sensitivity</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6Mbps</td>
<td>24 dBm</td>
<td>-94 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>9Mbps</td>
<td>24 dBm</td>
<td>-93 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>12Mbps</td>
<td>24 dBm</td>
<td>-91 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>18Mbps</td>
<td>24 dBm</td>
<td>-90 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>24Mbps</td>
<td>24 dBm</td>
<td>-86 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>36Mbps</td>
<td>22 dBm</td>
<td>-83 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>48Mbps</td>
<td>21 dBm</td>
<td>-77 dBm</td>
<td>+/-1.5dB</td>
</tr>
<tr>
<td>54Mbps</td>
<td>19 dBm</td>
<td>-74 dBm</td>
<td>+/-1.5dB</td>
</tr>
</tbody>
</table>

### Adjustable Channel Size Support

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>TX Specifications</th>
<th>RX Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>5MHz</td>
<td>10MHz</td>
<td>20MHz</td>
</tr>
</tbody>
</table>

### Range Performance

Outdoor (BaseStation Antenna Dependent): Over 10km

### Integrated Adaptive Antenna Polarity + External Antenna Support (4 Options Total)

<table>
<thead>
<tr>
<th>Gain</th>
<th>14dB</th>
<th>External Connector</th>
<th>RP-SMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polarization</td>
<td>Multi-Polarized</td>
<td>VSWR</td>
<td>1.4:1</td>
</tr>
<tr>
<td>Polarization Selection</td>
<td>Software Controlled</td>
<td>Front to Back Ratio</td>
<td>30dB+</td>
</tr>
<tr>
<td>3dB Beamwidth Azimuth</td>
<td>55 degrees</td>
<td>3dB Beamwidth Elevation</td>
<td>18 degrees</td>
</tr>
</tbody>
</table>

### Physical / Electrical / Environmental

<table>
<thead>
<tr>
<th>Enclosure Size</th>
<th>26.4 cm x 8 cm x 3cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>0.4kg</td>
</tr>
<tr>
<td>Enclosure Characteristics</td>
<td>Outdoor UV Stabalized Plastic</td>
</tr>
<tr>
<td>Mounting Kit</td>
<td>Pole Mounting Kit included</td>
</tr>
<tr>
<td>Max Power Consumption</td>
<td>5 Watts</td>
</tr>
<tr>
<td>Power Supply</td>
<td>12V, 1A (12 Watts). Supply and injector included</td>
</tr>
<tr>
<td>Power Method</td>
<td>Passive Power over Ethernet (pairs 4,5+; 7,8 return)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20C to +70C</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>5 to 95% Condensing</td>
</tr>
<tr>
<td>Shock and Vibration</td>
<td>ETSI300-019-1.4</td>
</tr>
</tbody>
</table>

### Software

AirOS by Ubiquiti Networks

Visit www.ubnt.com/airos
Air OS is an intuitive, versatile, highly developed Ubiquiti firmware technology that is included with NanoStation.

It is exceptionally intuitive and was designed to require no training to operate. Behind the user interface is a powerful firmware architecture which enables hi-performance outdoor multipoint networking.

NanoStation utilizes Adaptive Antenna Polarity technology, which can statically or dynamically software switch antenna polarities to optimize your connections.

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### Package Contents

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NanoStation 1 (Qty.)</td>
<td></td>
</tr>
<tr>
<td>Plastic Straps 2 (Qty.)</td>
<td></td>
</tr>
<tr>
<td>PoE Injector 1 (Qty.)</td>
<td></td>
</tr>
<tr>
<td>AC Adapter 1 (Qty.)</td>
<td></td>
</tr>
</tbody>
</table>

### Mounting Options

1. Pole Mount (Standard)
2. Wall Mount (optional)
3. Window Mount (optional)

### Specifications

<table>
<thead>
<tr>
<th>CPU</th>
<th>Atheros 180MHz MIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM</td>
<td>16MB RAM</td>
</tr>
<tr>
<td>Flash</td>
<td>4MB FLASH</td>
</tr>
<tr>
<td>Wireless</td>
<td>5GHz, 802.11a</td>
</tr>
<tr>
<td>Channel width</td>
<td>5/10/20/40MHz</td>
</tr>
<tr>
<td>Antenna Gain</td>
<td>14dBi x2</td>
</tr>
<tr>
<td>Polarity</td>
<td>Adaptive Vertical/Horizontal</td>
</tr>
<tr>
<td>Ext. Ant. Option</td>
<td>Yes, RP-SMA Connector</td>
</tr>
<tr>
<td>Range</td>
<td>10km+ (100km using ext ant.)</td>
</tr>
<tr>
<td>Throughput</td>
<td>25Mbps+ TCP/IP</td>
</tr>
<tr>
<td>Mounting</td>
<td>Pole Mount (straps included)</td>
</tr>
<tr>
<td>Accessories</td>
<td>Ubiquiti Window/Wall Mount (sold seperately)</td>
</tr>
<tr>
<td>Size</td>
<td>26.4cm x 8cm x 3cm</td>
</tr>
<tr>
<td>Weight</td>
<td>0.4 kg</td>
</tr>
<tr>
<td>Power Supply</td>
<td>12V, 1A POE (included)</td>
</tr>
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<td>FCC 15.247, IC, CE</td>
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</tbody>
</table>