





## Key Features

- ✓ Multiple frequency bands 4,9 - 6,05 GHz and 6,05 - 6,4 GHz
- ✓ Base station sector capacity 240 Mbps using 40 MHz channel
- ✓ Supports channel width 5, 10, 20, 40 MHz
- ✓ Advanced network features VLAN, 16 priority QoS
- ✓ Enhanced Non Line of Sight range
- ✓ Integrated sector antenna base stations allows maximum performance and quick and easy installation
- ✓ Wide range of subscriber terminals with license upgrade option

## Features

### RADIO

- ✓ Voice/RTP Aware Superpacketting
- ✓ DFS
- ✓ Automatic Bitrate Control
- ✓ Automatic Transmit Power Control
- ✓ Automatic Distance Learning
- ✓ Channel Time Adjustment
- ✓ Spectrum Analyzer mode
- ✓ Channel testing tools

### ENVIRONMENTAL

- ✓ **Outdoor Units:** -40..+60°C,  
100% humidity, condensing
- ✓ **Indoor Unit:** 0..+40°C,  
95% humidity, non-condensing

### NETWORKING

- ✓ Ethernet-over-IP tunneling
- ✓ ARP protocol support
- ✓ MAC/IP filtering
- ✓ Full-fledged 2nd layer switch
- ✓ RIPv2 / OSPFv2 /static routing
- ✓ Tunneling (Ethernet-over-IP, IP-over-IP)
- ✓ L2/L3 Firewall
- ✓ NAT (multipool, H.323-aware)
- ✓ DHCP client/server/relay

### QUALITY-OF-SERVICE

- ✓ 16 priority queues
- ✓ IEEE 802.1p support
- ✓ IP TOS / DiffServ support
- ✓ Full voice support
- ✓ Traffic limitin  
(absolute, relative, mixed)
- ✓ Traffic edirection

### STANDARD COMPLIANCE

- ✓ **Radio**
  - EN 301 893 v.1.7.1
  - EN 302 502 v.1.2.1
  - FCC part 15.247
- ✓ **EMC**
  - EN 301 489-1
  - EN 301 489-17
  - FCC Part 15 Class B
- ✓ **Safety**
  - ETSI EN 60 950-1:2006
- ✓ **RoHS**
  - Directive 2002/95/EC

### SECURITY FEATURES

- ✓ Storm / flood protection
- ✓ Password protection
- ✓ Secure command-line access
- ✓ via SSH protocol

SYSTEM COMPONENT	EC-Multipoint Base Stations		
Model	H5B-A	H5B-C	S5B-A
<b>Antenna</b>	<ul style="list-style-type: none"> <li>16 dBi dual-pol integrated 90 degrees antenna</li> </ul>	<ul style="list-style-type: none"> <li>2 x N-type (Female) connectors</li> </ul>	<ul style="list-style-type: none"> <li>16 dBi dual-pol integrated 90 degrees antenna</li> </ul>
<b>Performance</b>	Up to 240 Mbps sector net throughput		Up to 150 Mbps sector net throughput
<b>Distance</b>	Middle-to-long range (35+ km)	Middle-to-long range (20+ km)	Middle range (up to 15-20 km)
<b>Frequency Bands / Antennae</b>	<ul style="list-style-type: none"> <li>4.9 – 6.0 GHz / Integrated 16 dBi dual-pol integrated 90 degrees sector antenna</li> <li>6.0 – 6.4 GHz / Integrated 16 dBi dual-pol integrated 90° sector antenna</li> </ul>	<ul style="list-style-type: none"> <li>4.9 – 6.0 GHz / Connectorised Antenna (2 x N-type (Female) connectors)</li> <li>6.0 – 6.4 GHz / Connectorised Antenna (2 x N-type (Female) connectors)</li> </ul>	<ul style="list-style-type: none"> <li>4.9 – 6.0 GHz / Integrated 16 dBi dual-pol integrated 90° sector antenna</li> </ul>
<b>Radio</b>	<ul style="list-style-type: none"> <li>Radio technology: MIMO 2x2 with OFDM 64/128</li> <li>Modulation types: BPSK ½ to QAM64 5/6</li> <li>Duplex method: TDD</li> <li>Transmit power: up to 23 dBm</li> <li>Receiver sensitivity: -67..-97 dBm</li> <li>Channel bandwidth: 5/10/20/40 MHz</li> </ul>		<ul style="list-style-type: none"> <li>Radio technology: MIMO 2x2 with OFDM 64/128</li> <li>Modulation types: BPSK ½ to QAM64 5/6</li> <li>Duplex method:TDD</li> <li>Transmit power: up to 18 or 23 dBm (model-dependent)</li> </ul>
<b>Wired interfaces</b>	<ul style="list-style-type: none"> <li>Gigabit Ethernet port (10/100/1000 Base-T) RJ-45 connector</li> <li>Serial port (RS-232)</li> </ul>		<ul style="list-style-type: none"> <li>2 x Fast Ethernet (10/100 Base-T) RJ-45 connector</li> <li>PoE output at the second Ethernet port</li> </ul>
<b>Power consumption</b>	<ul style="list-style-type: none"> <li>Consumption: Up to 12 Watts</li> <li>Power options: 110-240 VAC @ 50/60 Hz ±43..56 VDC IEEE 802.3 at</li> </ul>		<ul style="list-style-type: none"> <li>Consumption: Up to 7 Watts</li> <li>Power options: 110-240 VAC @ 50/60 Hz +9..56 VDC</li> </ul>

SYSTEM COMPONENT	EC-Multipoint Subscriber Terminals		
Model	S5-A	S5-C	S5T-A
<b>Frequency Bands / Antenna</b>	<ul style="list-style-type: none"> <li>4.9 – 6.0 GHz / Integrated 21, 23 or 28 dBi Dual-polarization Antenna</li> <li>6.0 – 6.4 GHz / Integrated 24 or 27 dBi Dual-polarization Antenna</li> </ul>	<ul style="list-style-type: none"> <li>4.9 – 6.0 GHz / Connectorised Antenna (2 x N-type connectors)</li> <li>6.0 – 6.4 GHz / Connectorised Antenna (2 x N-type connectors)</li> </ul>	<ul style="list-style-type: none"> <li>4.9 – 6.0 GHz / Integrated 19 dBi Dual-polarization Antenna</li> <li>6.0 – 6.4 GHz / Integrated 19 dBi Dual-polarization Antenna</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>8 Mbps (up to 8 Mbps net)</li> <li>50 Mbps (up to 50 Mbps net)</li> <li>300 Mbps (up to 180 Mbps net)</li> <li>License upgradeable</li> </ul>		
<b>Distance</b>	<ul style="list-style-type: none"> <li>21 dBi antenna: middle range (up to 8-10 km)</li> <li>23 or 24 dBi antenna: middle-to-long range (10-12 km)</li> <li>28 dBi antenna: long range (15-25 km)</li> </ul>	<ul style="list-style-type: none"> <li>Middle-to-long range (35+ km with external high-gain antenna)</li> </ul>	<ul style="list-style-type: none"> <li>Short-to-middle range (up to 5-7 km)</li> </ul>
<b>Radio</b>	<ul style="list-style-type: none"> <li>Radio technology: MIMO 2x2 with OFDM 64/128</li> <li>Modulation types: BPSK ½ to QAM64 5/6</li> <li>Duplex method: TDD</li> <li>Transmit power: <ul style="list-style-type: none"> <li>- Up to 18 or 23 dBm (4.9-6.0 GHz models)</li> <li>- Up to 23 dBm (6.0-6.4 GHz models)</li> </ul> </li> <li>Receiver sensitivity: -67..-97 dBm</li> <li>Frequency bands: 4.9-6.0 GHz and 6.0-6.4 GHz</li> <li>Channel bandwidth: 5/10/20/40 MHz</li> </ul>		
<b>Wired interfaces</b>	<ul style="list-style-type: none"> <li>2 x Fast Ethernet (10/100 Base-T) RJ-45 connector</li> <li>PoE output at the second Ethernet port</li> </ul>	<ul style="list-style-type: none"> <li>1 x Fast Ethernet (10/100 Base-T) RJ-45 connector</li> </ul>	
<b>Power consumption</b>	<ul style="list-style-type: none"> <li>Consumption: Up to 7 Watts</li> <li>Power options: 110-240 VAC @ 50/60 Hz +9..56 VDC</li> </ul>		