



## SuperMesh 8000

## Outdoor Mesh Router

### Rugged Outdoor Wireless Mesh

The ValuePoint SuperMesh™ 8000 creates a self-configuring and self-healing Ethernet mesh network over the 5 GHz, 4.9 GHz, 2.4 GHz, or 900MHz spectrums. The SuperMesh 8000 is a high-powered 600mWatt outdoor router with weatherized Ethernet and power-out connectors for co-locating client Access Points, security devices, or other network hardware on the pole. A single PoE connection powers both devices. Multiple SuperMeshes automatically create a wireless network that is reliable, efficient, and responsive to environmental changes, reducing support call and onsite visits.

Pricing for the SuperMesh 8000 will dramatically lower your infrastructure costs, making previously unreachable venues affordable and increasing your Return on Investment.



### Wireless Mesh

Self-configuring Mesh is scalable, flexible, and reliable. Deployed 8000's automatically negotiate optimal routes with neighboring and distant peers to provide efficient, but also redundant, LAN networking for voice, data, and video. Multiple ISP WAN connections into the mesh are supported as well, increasing reliability still further and boosting available bandwidth.

A single local mesh supports up to 50 nodes, and multiple local meshes can be interlinked without limit. The dynamic nature of the mesh allows it to adapt quickly to service outages, introduced interference, or changes in line-of-site caused by season or movement.



### Easily Connect Network Devices

Power and data out to any device

SuperMesh 8000 has three (3) weatherized NEMA4 RJ45 connectors to connect to Ethernet devices. One (1) has POE OUT to connect to and power ValuePoint SuperAP Access Points or any other Ethernet device such as Video cameras, IR or 900 Mhz bridges. A single PoE Ethernet cable supplies the power and data for the whole installation. The third Ethernet connection can be connected to a wired LAN, or used to daisy chain additional Mesh nodes or Access Points.

### Secure and Manageable

Flexible Management options

SuperMesh 8000 is fully manageable via Telnet, SNMP, or a user-friendly HTTP web interface. Data in the mesh can be 128bit encrypted and VLAN or VPN protected.

### Technical Specifications

#### Wireless

<b>IEEE 802.11a (5 GHz)</b>		
<b>Chipset</b>	Atheros, 6th Generation, AR514 with SuperA Turbo Support	
<b>Peak Power</b>	600 mW / 28 dBm	
<b>Data Rates</b>	6, 9, 12, 24, 36, 48, 54 Mbps	
<b>TX Specifications</b>	<b>Data Rate</b>	<b>Avg. Power</b>
802.11a OFDM	6 Mbps	28 dBm
	9 Mbps	28 dBm
	12 Mbps	28 dBm
	18 Mbps	28 dBm
	24 Mbps	28 dBm
	36 Mbps	26 dBm
	48 Mbps	24 dBm
	54 Mbps	23 dBm
<b>RX Specifications</b>	<b>Data Rate</b>	<b>Sensitivity</b>
802.11a OFDM	6 Mbps	-94 dBm
	9 Mbps	-93 dBm
	12 Mbps	-91 dBm
	18 Mbps	-90 dBm
	24 Mbps	-86 dBm
	36 Mbps	-83 dBm
	48 Mbps	-77 dBm
	54 Mbps	-74 dBm



<b>4.9 GHz</b>		
<b>Chipset</b>	Proprietary 4.9 GHz based on OFDM 802.11a with QPSK/16QAM/64QAM	
<b>Peak Power</b>	400 mW / 26 dBm	
<b>Data Rates</b>	6, 9, 12, 24, 36, 48, 54 Mbps	
<b>TX Specifications</b>	<b>Data Rate</b>	<b>Avg. Power</b>
4.9 GHz OFDM	6 Mbps	26 dBm
	9 Mbps	26 dBm
	12 Mbps	26 dBm
	18 Mbps	26 dBm
	24 Mbps	26 dBm
	36 Mbps	24 dBm
	48 Mbps	23 dBm
	54 Mbps	22 dBm
<b>RX Specifications</b>	<b>Data Rate</b>	<b>Sensitivity</b>
4.9 GHz OFDM	6 Mbps	-94 dBm
	9 Mbps	-93 dBm
	12 Mbps	-91 dBm
	18 Mbps	-90 dBm
	24 Mbps	-86 dBm
	36 Mbps	-83 dBm
	48 Mbps	-77 dBm
	54 Mbps	-74 dBm



<b>IEEE 802.11b/g (2.4 GHz)</b>		
<b>Chipset</b>	Atheros, 6th Generation, AR5414	
<b>Peak Power</b>	600 mW / 28 dBm	
<b>Data Rates</b>	1, 2, 5.5, 11 (802.11b) 6, 9, 12, 24, 36, 48, 54 Mbps (802.11g)	
<b>TX Specifications</b>	<b>Data Rate</b>	<b>Avg. Power</b>
802.11b	1 Mbps	28 dBm
	2 Mbps	28 dBm
	5.5 Mbps	28 dBm
	11 Mbps	28 dBm
802.11g OFDM	6 Mbps	28 dBm
	9 Mbps	28 dBm
	12 Mbps	28 dBm
	18 Mbps	28 dBm
	24 Mbps	28 dBm
	36 Mbps	26 dBm
	48 Mbps	25 dBm
	54 Mbps	24 dBm
<b>RX Specifications</b>	<b>Data Rate</b>	<b>Sensitivity</b>
802.11b	1 Mbps	-97 dBm
	2 Mbps	-96 dBm
	5.5 Mbps	-95 dBm
	11 Mbps	-92 dBm
802.11g OFDM	6 Mbps	-94 dBm
	9 Mbps	-93 dBm
	12 Mbps	-91 dBm
	18 Mbps	-90 dBm
	24 Mbps	-86 dBm
	36 Mbps	-83 dBm
	54 Mbps	-77 dBm



<b>900 MHz</b>		
<b>Chipset</b>	Proprietary 900 MHz based on 802.11b/g CCK/OFDM	
<b>Peak Power</b>	700 mW / 28 dBm	
<b>Data Rates</b>	1, 2, 5.5, 11 (802.11b) 6, 9, 12, 24, 36, 48, 54 Mbps (802.11g)	
<b>TX Specifications</b>	<b>Data Rate</b>	<b>Avg. Power</b>
802.11b	1 Mbps	28 dBm
	2 Mbps	28 dBm
	5.5 Mbps	28 dBm
	11 Mbps	28 dBm
802.11g OFDM	6 Mbps	28 dBm
	9 Mbps	28 dBm
	12 Mbps	28 dBm
	18 Mbps	28 dBm
	24 Mbps	28 dBm
	36 Mbps	26 dBm
	48 Mbps	23 dBm
54 Mbps	21 dBm	
<b>RX Specifications</b>	<b>Data Rate</b>	<b>Sensitivity</b>
802.11b	1 Mbps	-93 dBm
	2 Mbps	-92 dBm
	5.5 Mbps	-91 dBm
	11 Mbps	-88 dBm
802.11g OFDM	6 Mbps	-91 dBm
	9 Mbps	-90 dBm
	12 Mbps	-88 dBm
	18 Mbps	-87 dBm
	24 Mbps	-83 dBm
	36 Mbps	-83 dBm
	48 Mbps	-74 dBm
54 Mbps	-71 dBm	

### Networking

- IEEE 802.3
- Telnet, SNMP, Web manageable
- Voice and Video support
- Powered by PoE-1 injector
- Ethernet – Mesh bridging
- VPN Pass-through
- SNMP MIB II



### Mesh

- Up to 50 Nodes per local mesh
- Multiple WAN connections
- OLSR Mesh Routing
- Up to 25Mbps throughput
- Up to 6 WiFi links per node
- Dynamic Self-configuration

### Security and Management

- SNMP MIB II
- Payload Encryption
- VPN IPSEC in Each Node
- VLAN and VPN Passthrough
- 40 (64) or 128 bit WEP
- Web Based Management
- Remote Firmware Upgrade

### Hardware

- Dual RJ45 weatherized Ethernet out
- 3 Switched 10/100M Fast Ethernet LAN ports
- Humidity: Max. 95% non-condensing
- NEMA4 Rugged Enclosure
- 10.8 x 8.3 x 4 In. / 3.6 Lbs.
- POE out to power attached AP
- Operating Temperature: -20 to 55 C
- Pole Mounting Kit
- Power: PoE-1

### Certification and Approval

- FCC part 15 Class B
- CE Mark
- VCCI Class B
- UL

### Warranty

- One year parts and labor
- 30 day satisfaction guaranteed

### About ValuePoint Networks

ValuePoint Networks is the foremost manufacturer of price leading Gateway controllers, Rugged Access Points, and Mesh gear. ValuePoint products are used in Hospitality, MTU/MDU, industrial, WISP, outdoor, hotspot, municipal, and enterprise applications. Light up more for less, reduce your capital expenditures and improve your Return on Investment with ValuePoint gear. For more information, please visit us online.

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