# **Managed Wi-Fi Technical Specifications**

### **Access Points**

Ventus Managed NaaS for Wi-FI uses the Meraki MR series of access points. Designed for challenging enterprise environments, the MR access points use advanced 802.11ac and 802.11n technologies including MIMO, beam forming and channel bonding to deliver the throughput and reliable coverage required by demanding business applications.

	MR33	MR42	MR53	MR62	
Usage	General use 802.11ac Wave 2 wireless	High performance 802.11ac Wave 2 for high density campus and enterprise	Highest performance 802.11ac Wave 2 with Multigigabit for high density campus and enterprise	Rugged/outdoor WLAN, outdoor campuses, industrial, point to point links	AC Power
Radios	1 × 802.11b/g/n 1 × 802.11a/n/ac 1 × WIDS/WIPS 1 × Bluetooth 1.3 Gbit/sec max rate 2×2:2 MU-MIMO with beamforming	1 × 802.11b/g/n 1 × 802.11a/n/ac 1 × WIDS/WIPS 1 × Bluetooth 1.9 Gbit/sec max rate 3×3:3 MU-MIMO with beamforming	1 × 802.11b/g/n 1 × 802.11a/n/ac 1 × WIDS/WIPS 1 × Bluetooth 2.5 Gbit/sec max rate 4×4:4 MU-MIMO with beamforming	1 x 802.11b/g/n radio 300 Mbit/sec max rate	4.8" x 2.3" x 1.9" 0.36 lb 12V 2.5A DC
Interface	1 × Gigabit Ethernet port	1 × Gigabit Ethernet port	1 × 2.5Gbps Multigigabit Ethernet port 1 × Gigabit Ethernet port	1 × Gigabit Ethernet port  Two external N-type connectors (antennas sold separately)	PoE Power
Power	802.3af PoEbr DC power adaptor	802.3af PoEbr DC power adaptor	802.3af PoEbr DC power adaptor	802.3af Power over Ethernet	6.3" x 2.1" x 1.4" 0.46lb
Performance Features	2×2:2 MU-MIMO Priority Voice Power Save (802.11e/wMM)  Hardware- accelerated encryption  Band steering	3×3:3 MU-MIMO Priority Voice Power Save (802.11e/wMM)  Hardware- accelerated encryption  Band steering	4×4:4 MU-MIMO 160 Mhz Channels Priority Voice Power Save (802.11e/WMM)  Hardware- accelerated encryption  Band steering	Priority Voice (802.11e/WMM) Enterprise-grade CPU Hardware- accelerated encryption	Complies with 802.3at standard Backward compatibility with 802.3af MR-series access points



## **Security Appliances**

Ventus Managed NaaS for Wi-Fi uses Cisco Meraki MX Security Appliances that are ideal for organizations with large numbers of distributed sites. The MX has a comprehensive suite of network services including Layer 7 application firewall, content filtering, web search filtering, SNORT® based intrusion prevention, web caching, and Intelligent WAN with multiple uplinks.

	MX64	MX64W	MX65	MX65W	MX84
Max Clients	50	50	50	50	200
Interfaces	5 × GbE USB 3G/4G	5 × GbE 802.11ac WiFi USB 3G/4G	12 × GbE (2 PoE+) USB 3G/4G	12 × GbE (2 PoE+) 802.11ac WiFi USB 3G/4G	10 × GbE 2 × SFP USB 3G/4G
Stateful Firewall Throughput	250 Mbps	250 Mbps	250 Mbps	250 Mbps	500 Mbps
VPN Throughput per Tunnel	85 Mbps	85 Mbps	85 Mbps	85 Mbps	200 Mbps
VPN Spokes	_		_	_	100
Web caching					<b>✓</b>

# Lifetime warranty with next-day advanced replacement

#### **Switches**

Cisco Meraki access and aggregation layer switches provide the backbone for networks of every size, combining secure, and scalable, robust performance.

	MS225-24	MS350-24	
Interfaces	24x GbE 2x Stacking ports 1x Management w/ Auto MDIX	24x GbE 8x Stacking ports 1x Management w/ Auto MDIX	
Uplinks	4x 10G (SFP+) uplinks, dedicated	4x 10G (SFP+) uplinks, dedicated	
Power Configuration	Internal RPS Supported	Removable PSU Field Replaceable 250W PSU	
Available POE Power	370W (PoE, PoE+)	370W (PoE, PoE+)	
Switching Capability	128Gbps	128Gbps	
Routing Features Static routing only DHCP Relay		Static + Dynamic routing DHCP Server + DHCP Relay Warm Spare (VRRP)	
Routed Interfaces	16	8K 16K	

	MS220-8/8P	MS220-24/24P	
Interfaces	8x GbE 2x SFP	24x GbE 4x SFP	
Total PoE/ PoE+ Budget 124W (MS220-8P only)		370W (MS220-24P only)	
Switching 20 Gbps		48 Gbps	
Idle/Loaded power consumption	MS220-8: 5/10W MS220-8P: 10/149W	MS220-24: 18W Loaded MS220-24P: 467W Loaded	