



Powerful, Intuitive,
Affordable Wi-Fi

CLOUD WI-FI FOR SMALL, MEDIUM AND DISTRIBUTED ENTERPRISE

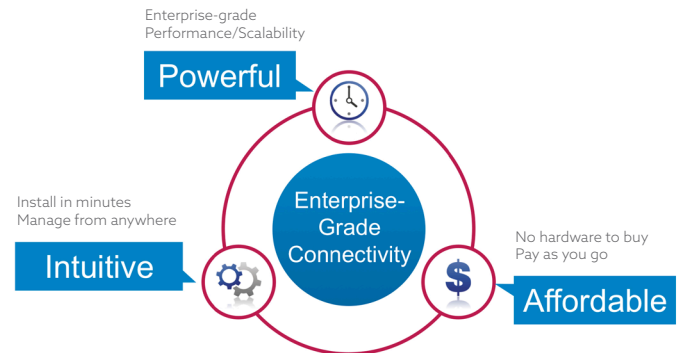
The Meru XPress Cloud service catalyzes the migration to Cloud Managed Wi-Fi by delivering ease of deployment with gigabit performance. XPress Cloud is a cost-effective solution designed to meet the connectivity demands of small to medium enterprises, branch offices, schools, health clinics, boutique hotels, and retail stores.

POWERFUL

Meru 802.11ac access points are the fastest in the industry. The XP8i includes dual-radios, 2x2 MIMO and 2 spatial streams delivering a data rate up to 1.2 Gbps for demanding mobile applications such as video, voice and data. The XPress Cloud hosting platform is built on a robust cloud infrastructure, with multiple data centers worldwide for redundancy and resiliency. XPress Cloud also keeps your WLAN secure and private. Only management information for configuring and monitoring your network is transmitted over the cloud, never your data.

INTUITIVE

XPress Cloud provides intuitive tools, automated provisioning, and management services to simplify your network setup. A free, web-based configuration tool enables you to quickly plan a Wi-Fi deployment. Upload or create a floor plan to estimate how many APs are needed and where they should be installed. Once your access points are in place, your WLAN deploys in minutes, not hours. Self-forming AP clusters automate channel and power selection so there is no need to manually configure each AP. Control your WLAN from anywhere with an intuitive, cloud-based dashboard designed with service provider and customer views. Configuration, monitoring, and troubleshooting are available at every level. Do it yourself or use a managed service provider.



AFFORDABLE

With the XPress Cloud subscription service option there are no upfront capital expenses. The subscription service bundles access points, WLAN software plus 24x7 enterprise-class support. Simple on-site deployment saves time and reduces the need for technical resources at remote locations. With cloud-based configuration and management, XPress Cloud operates without a controller—further reducing cost and complexity.

Protects Your Investment

XPress Cloud provides an economical and safe growth path that is easy on the budget. Upgrade your network to an 802.11ac enterprise-grade solution without an upfront access point investment. As your need for wireless connectivity grows, migrate to the Meru controller based solution. With a simple software upgrade, your existing access points are already in place to provide more wireless capacity, performance and services.

Features	Benefits
The industry's fastest 802.11ac access points	Gigabit data rates for mobile voice, video and data
Self-Forming AP Clusters	Automates configuration with "1-click" set up
Controller-less operation	Reduces investment costs and resources
Upgradeable to the Meru controller-based solution	Future proofs network investments with a pay-as-you-grow solution
Bundled AP and subscription service option	Zero-upfront cost with AP, software and 24x7 support bundled into one simple price
Managed services for deployment, management and troubleshooting	Free up valuable IT resources while improving uptime and reliability

Managed Service Providers (MSP)

XPress Cloud provides a complete platform for Service Providers to deliver managed Wi-Fi services to all their customers. With complete and secure network control and visibility, XPress Cloud customers can depend on their IT partner for all WLAN deployment, monitoring, and troubleshooting.

XP8i 802.11AC ACCESS POINT



The XP8i access point uses Meru 802.11ac technology to deliver gigabit performance, security and reliability. It seamlessly integrates with XPress Cloud network management, eliminating the need for a WLAN controller. The XP8i is an enterprise-class AP with an extensive feature set:

- Simultaneous operation in the 2.4 GHz and 5 GHz bands. The AP delivers an aggregate data rate up to 1.2 Gbps, for demanding applications such as video and voice.
- 802.11ac MIMO enables each radio to use multiple antennas to simultaneously transmit and receive packets over multiple channels. Support for 2:2 MIMO means improved link quality, reliability and network throughput—enhancing overall WLAN performance.
- Support for two spatial streams provides gigabit data rates for each client.
- Internal antennas provide a sleek design to operate and blend in to indoor environments such as offices, classrooms and public spaces.

ACCESS POINT CLUSTERING

Meru clustering technology automates WLAN provisioning. XP8i access points deployed in the same layer-2 domain share firmware and configuration settings. Once a "master" AP is set-up via the XPress Cloud GUI it automatically pushes the configuration to all the access points in the cluster. With clustering, there is no single point of failure in case an access point goes off-line.

Clustering provides dynamic channel selection to enable the best possible Wi-Fi user experience. If an access point discovers RF interference on one channel, it automatically adjusts itself to a better channel. Alternatively, APs will adjust transmit-power settings to boost signal strength in weak areas.

XPRESS CLOUD SOLUTION COMPONENTS

XPRESS CLOUD MANAGED SUBSCRIPTION SERVICE

There are two different purchase and license options for XPress Cloud designed to best fit your needs.

1. With a traditional purchase option access points are bought and owned by the customer. A per AP software license and support contract are purchased separately.
2. With a subscription service option, the total XPress solution including access points, software and support is licensed vs. purchased. You pay a monthly service fee to your IT partner or MSP.

The XPress Cloud purchase option enables you to acquire XP8i access points and associated support and service from your Meru Networks reseller. The XPress managed service subscription is contracted separately with and delivered by your channel partner or other MSP. This is a great choice if your Wireless LAN budget supports a capital expenditure or alternative financing options are available.

The XPress Cloud subscription option bundles a complete Wireless LAN solution into a single service fee per access point. This means you can deploy pervasive Wi-Fi coverage with no upfront costs. It is an affordable way to upgrade out-of-date or unreliable access points to gigabit Wi-Fi—with instant ROI.

With either option you benefit from a complete cloud managed WLAN service.

- Free up valuable IT resources by taking advantage of your service partner's WLAN management and troubleshooting expertise.
- Improve user productivity by reducing network downtime. The XPress Cloud management portal enables your service provider to catch and resolve access point and client issues before they become a problem.
- Deploy a "future-proofed" network that is upgradeable to the Meru Controller based solution as your mobile applications and coverage needs expand.

MULTI-LEVEL SECURITY

There are four levels of Wi-Fi security for network and data protection.

- Standards based authentication and encryption with full support for WPA2 Enterprise, WPA2-PSK and IEEE 802.1X.
- Rogue device protection detects and mitigates rogue devices and continuously scans for intruders.
- Integrated captive portal functionality allows for secure access for guests and personal devices (BYOD).
- Up to 4 SSIDs per AP.

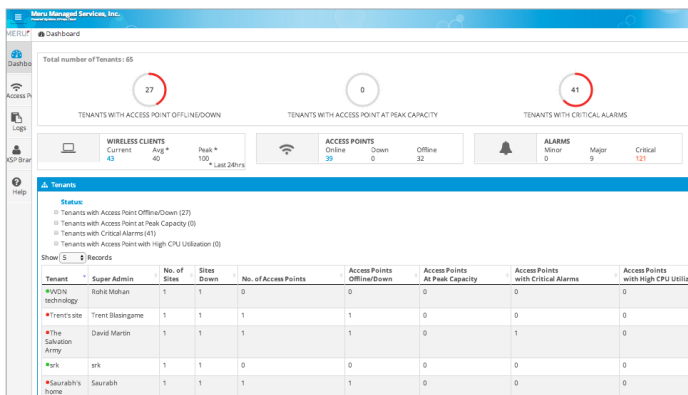
In addition, the XPress Cloud network remains secure and private because data remains on site and is not transmitted over the cloud.

XPRESS CLOUD MANAGEMENT PORTAL

Express Cloud is specifically designed to allow service providers to centrally manage end-customer networks over the web, while still maintaining logical isolation and security of each customer network. The intuitive, cloud based dashboard enables network control from anywhere.

There are two levels of service enablement. Each level includes management tools for XPress Cloud deployment, network configuration, monitoring, troubleshooting, and applications with both service provider and customer views.

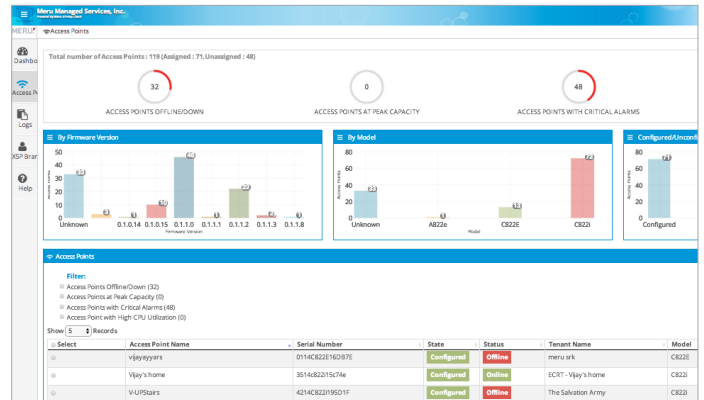
CLIENT VIEW



For XPress Cloud customers, the management portal provides a complete site view and full control of the wireless network.

- The Site Dashboard provides an overall view of network and AP utilization, capacity, alarms and clients connected.
- A detailed Access Point view provides a more in depth view of each access point and the ability to take actions such as troubleshooting, adding or taking APs off-line.
- Site reports and logs.

SERVICE PROVIDER VIEW



The XPress Cloud portal for MSPs provides detailed access and control with an overall tenant view in order to concurrently monitor and manage client networks. This view enables MSPs to be proactive in preventing problems at customer sites and take actions before a network issue impacts customer network uptime.

MSPs have the equivalent of the tenant view for each XPress Cloud client. This functionality enables XPress Cloud customers to benefit from a complete WLAN managed service, eliminating the challenges of network maintenance while freeing up internal resources.

With a managed partnership between the service provider and client, proactive decisions can be made about adding mobile applications, maintaining full network security, and planning for continuous quality and network expansion.

ORDERING INFORMATION

Model Number	License Subscription Option - AP Purchased Separately
XP8i	Dual-radio 2x2-stream 802.11a/b/g/n/ac XPress Cloud Access Point with integrated antennas. Includes mounting bracket and screws. Additional Mounting brackets and accessories (e.g. power supply) optional.
XPRESS-MGMT-1	XPress Cloud Management License Subscription & 24x7 support with advanced hardware exchange for 1 Access Point - Duration 1 year
XPRESS-MGMT-3	XPress Cloud Management License Subscription & 24x7 support with advanced hardware exchange for 1 Access Point - Duration 3 years
XPRESS-MGMT-5	XPress Cloud Management License Subscription & 24x7 support with advanced hardware exchange for 1 Access Point - Duration 5 years

TECHNICAL SPECIFICATIONS

DESCRIPTION

Cloud XPress 802.11ac dual radio access point

STANDARDS BASED SECURITY

- WEP, WPA-PSK, WPA-TKIP, WPA2-AES, 802.11i, 802.1X (EAP-TLS, EAP-TTLS, PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-AKA, and EAP-MD5)
- 802.1X and captive portal authentication against local database on the controller, RADIUS, and Active Directory
- RADIUS-assisted per-user and per-ESSID access control via MAC filtering

SUPPORTED RADIO TECHNOLOGIES

- 2x2:2SS (two spatial streams)
- 2.4 GHz and 5.x GHz for dual-band, dual-radio operation, data rate up to 1.2 Mbps
- 802.11n/a/g/ac- with Orthogonal Frequency Division Multiplexing (OFDM)
- 802.11b with 5 MHz channels and Direct Sequence Spread Spectrum (DSSS)
- 802.11ac WAVE1 with 20/40/80 MHz (HT20/HT40/VHT80) channel width
- 802.11n with 40 MHz (HT40) channel width
- 802.11a/g with 20 MHz channel

SUPPORTED MODULATION

- 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, and 256-QAM
- 802.11a/g/n: BPSK, QPSK, 16-QAM, and 64-QAM
- 802.11b: BPSK, QPSK, CCK

FREQUENCY BANDS

- 2.400 ~ 2.4835 GHz (ISM)
- 5.150 ~ 5.250 GHz (UNII-1)
- 5.250 ~ 5.350 GHz (UNII-2, upon DFS approval)
- 5.470 ~ 5.725 GHz (UNII-2 Extended, upon DFS approval)
- 5.725 ~ 5.825 GHz (UNII-3)
- Country-specific restrictions apply

DATA RATES (MBPS)

- 802.11ac two streams: 13.0 ~ 866.7 Mbps (MCS0-HT20 @ 800 nS-MCS9-VHT80 @ 400 nS)
- 802.11ac Draft per stream: 6.5 ~ 433.3 Mbps (MCS0-HT20 @ 800 nS ~ MCS9-VHT80 @ 400 nS)
- 802.11n Two streams: 13.0 ~ 300.0 Mbps (MCS8-HT20@800 nS to MCS15-HT40@400 nS)
- 802.11n per stream: 6.5 ~ 150.0 Mbps (MCS0-HT20 @ 800 nS to MCS7-HT40@400 nS)
- 802.11a/g: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
- 802.11b: 1, 2, 5.5, and 11 Mbps

TRANSMIT POWER (TX) AND RECEIVE SENSITIVITY (RX) PER STREAM

Configuration	Maximum conductive point transmit power per stream (dBm)	Maximum EIRP per stream (dBm), Internal Antenna	RX (dBm)
802.11b	21.0	24.0	-85
802.11g	20.0	23.0	-70
802.11n, 2.4 GHz HT20	19.0	22.0	-65
802.11n, 2.4 GHz HT40	18.0	21.0	-64
802.11a	18.0	22.0	-69
802.11n, 5 GHz, HT20	17.0	21.0	-67
802.11n, 5 GHz, HT40	16.0	20.0	-64
802.11ac Draft, 5 GHz, HT20	17.0	21.0	-69
802.11ac Draft, 5 GHz, HT40	16.0	20.0	-67
802.11ac Draft, 5 GHz, VHT80	16.0	20.0	-64

POWER

- Operates with IEEE Std 802.3af power. Powered by PoE (Power over Ethernet) injector or PoE switch
- 12V external power adapter (sold separately)

OTHER INTERFACES

- Networks: One 10/100/1000 BASE-T Ethernet RJ45 uplink (G1), one 10/100/1000 BASE-T Ethernet RJ45 (G2) (disabled), auto-sensing link speed and MDI/MDX
- One RJ45 port (G1) support IEEE Std 802.3af or at PoE
- One USB 2.0 port (Type-A) (disabled)
- One console port
- One reset button
- One Kensington security slot

LED INDICATORS

- One tri-color LED over facade for AP status
- Additional LEDs for Ethernet activity over two RJ45 ports (G1 & G2)

MOUNTING

- Wall, desktop, or ceiling mount
- Three mounting kits included with access point:
 - o 650-00232, 15/16" T-bar & wall-mount combo adapter
 - o 650-00233, 9/16" T-bar adapter
 - o Flat-surface wall-mount bracket (used with 650-00232)
 - o 840-00126, Wall Mount Hardware Kit (including to 669-00004 space, 665-00085 M3x10 screws, & 665-00102-M3x30 screws)
- Option (ordered separately)
 - o CBL-SERIAL-DB9-35, DB9-stereo console cable
 - o CBL-RJ45-ADAPT-X5, GbE extension adapter
 - o MNT-FEET-SET-X5, rubber feet for desktop staging

DIMENSIONS

- XP8i (with mounting bracket): 7.1" x 7.1" x 2.7" (18.0 cm x 18.0 cm x 6.8 cm)

WEIGHT

- XP8i (with mounting bracket): 2.3 lb (1.1 kg)

ENVIRONMENTAL

- Operating temperature: 32° F to 122° F (0° C to 50° C)
- Operating humidity: 5-95% (non-condensing)
- Storage temperature: -40° F to 185° F (-40° C to 70° C) ambient
- Storage humidity: 5-95% (non-condensing)

REGULATORY APPROVAL

- FCC (United States of America)
- CE Mark (European Community)
- Industry Canada (Canada)
- TELEC (Japan)
- Safety Approval (worldwide)

For more country-specific regulatory approval, please contact your Meru representative

CERTIFICATIONS

- Wi-Fi CERTIFIED™
- EU RoHS
- CB Report

WARRANTY

- Limited lifetime warranty

Meru delivers an all-wireless network that fully supports the enterprise, delivering a consistent, interactive experience for all users. No matter what applications they are running. No matter how many other users are on the network. For more information, visit www.merunetworks.com or email your questions to: meruinfo@merunetworks.com.

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