

Firmware 8.1.1 Release Notes

Release Date: Jan 12, 2021

Devices Supported

This firmware release supports the following devices:

X Series	EPX / SDX Pro / SDX / PDX / MBX / 580X / 380X / 310X / 20X
Balance	20X / 20 / 30 / 30 LTE / 30 Pro / 50 / One / Two / 210 / 310 / 310X / 305 HW2 / 380 HW6 / 580 HW2-3 / 710 HW3 / 1350 HW2 / 2500
MAX	BR1 MK2 / BR1 HW2-3 / BR1 Slim / BR1 Mini / BR1 M2M / BR1 ENT / BR1 PRO / BR1 IP67 / BR2 / BR1 IP55 HW2-4 / BR2 IP55 HW2-3 / HD2 / HD2 IP67 / HD2 Mini / HD1 Dome / HD2 Dome / HD4 / HD4 IP67 / Transit / Transit Duo / Transit Mini / Hotspot / On-The-Go HW2 / 700
UBR	UBR LTE
Surf	SOHO HW2 / SOHO MK3
MediaFast	200 / 500 / 750 / HD2 / HD4
SpeedFusion Engine	SFE / SFE CAM
FusionHub	FusionHub

Important Notices

- For the following models, the unit must be upgraded to [Firmware 7.1.2](#) first before upgrading to 8.0.0 or above.

Product	Hardware Revision
MAX BR1	HW2-3
MAX BR1 IP67	HW1
MAX BR1 Mini	HW1-2
MAX BR1 Pro	HW2,4-5
MAX BR1 Slim	HW1
MAX BR2	HW2
SOHO	HW2

- PepVPN backward compatibility option is no longer available. By deprecating the old firmware versions, we now have a more secure handshake channel as the default setting, only TLS 1.2 will be accepted, no more TLS 1.0 and 1.1 for the old devices. Thus, if you are using devices running Firmware 6.1 or older, you will no longer be able to form PepVPN tunnels with those devices unless the firmware is updated.
- Please note that the “High Application Compatibility” and “Normal Application Compatibility” settings in “Outbound Policy” have been deprecated. Both options still work, if you set up a Custom Outbound Policy, you cannot change them back.
- Internet Explorer 11 is no longer supported by Web Admin.
- Updated minimum version of supported browser:
 - Mozilla Firefox 54
 - Google Chrome 51
 - Safari 10
 - Microsoft Edge 15

New Features

Reference	Description	Device Supported
23267	[20X / 380X / 580X] Added support for Flex Module Mini VDSL	X Series: 20X, 380X, 580X
23245	[Firewall] Added support for firewall filtering by DSCP	All Models
2861	[Outbound Policy] Added support for Outbound Policy by DSCP	All Models (Except FusionHub)
23959	[SpeedFusion Cloud] Added the ability to select Cloud Applications for the SpeedFusion Cloud	All Models (Except FusionHub)

Improvements

Reference	Description	Device Supported
23227	[Air Monitor] Added support for Wi-Fi "Air Monitoring Mode". The report can be viewed under InControl 2 > Reports > AirProbe Reports.	Balance: 30 Pro, One MAX: BR1 MK2, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: 200, HD2/4 X Series: PDX, MBX, 20X Surf SOHO: SOHO MK3
22229	[AP Controller] Added ability to "Set Firmware" directly in "AP > Controller Status > Access Point"	Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX
23364	[AP Controller] Added support for AP Mesh Configuration and Status reporting for AP One. Mesh combination below: - Balance/MAX/Surf SOHO MK3 (Build-in Wi-Fi) to AP One (Bridge Mode) - AP One (Bridge Mode) to AP One (Bridge Mode)	Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX
23030	[API / PoE] Added the ability to turn PoE ports on or off	Balance: 30 Pro MAX: BR1 ENT, HD2/4 MediaFast: HD2/4 X Series: EPX, SDX Pro, SDX, PDX, MBX

18450	[API] Added new API to configure WAN Settings	All Models
23362	[API] Added support for get and update the GPIO	All Models
23096	[Captive Portal] Allowed Client supports Hostname.	All Models (Except FusionHub)
18749	[Cellular] Added the ability to define Upload & Download Bandwidth values on Cellular WAN.	Balance: 30 LTE/Pro MAX: BR1/2, HD2/4, Transit UBR: UBR LTE MediaFast: HD2/HD4 X Series: All
23422	[Cellular] SIM Toolkit page now shows the SMS Storage capacity	Balance: 30 LTE/Pro MAX: BR1/2, HD2/4, Transit UBR: UBR LTE MediaFast: HD2/HD4 X Series: All
23004	[CLI] Added RADIUS status supporting	All Models
23684	[Firewall] Added "KVM Management Port" and "KVM VNC Port" under Local Service Firewall Rules	All Models
23307	[FlexModule] Added the ability to enable PoE on FlexModule Ethernet ports when they are configured as WAN	X Series: EPX, SDX Pro, SDX
15769	[HA] The Web UI now shows the WAN connection & PepVPN status when the option "Establish Connections in Slave Role" is enabled	Balance: 210 or above MAX: BR1/2, HD2/4, Transit UBR: UBR LTE MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX, 310X
23309	[HD1 Dome] Added support for IP Passthrough	MAX: HD1 Dome
23316	[IPsec] The IPsec SA Lifetime is now supporting 31536000 seconds (365 days)	All Models
22481	[LAN] Added LACP Support for the SDX	X Series: All
23654	[NetFlow] Added options for additional NetFlow server, and Active/Inactive Flow Timeout values.	Balance: 30 LTE/Pro, One/Two, 210/310 HW4 or above, 305/380 or above MAX: BR1 ENT, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: All X Series: All FusionHub
22814	[NetFlow] Added support for NetFlow information	Balance: 30 LTE/Pro,

	retrieval via SNMP	One/Two, 210/310 HW4 or above, 305/380 or above MAX: BR1 ENT, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: All X Series: All FusionHub
18223	[OpenVPN WAN] Added support for OpenVPN as WAN. (license activated)	All Models (Except FusionHub)
23554	[OpenVPN WAN] Added the option to define a preferred DNS resolver.	All Models (Except FusionHub)
23414	[OpenVPN] Added the "Connection Security Refresh" option.	All Models
23839	[PDX, MBX, 310X] Added jumbo frame supporting.	X Series: PDX, MBX, 310X
23551	[PepVPN] Every new PepVPN handshake initiated or accepted by the device is now visible in the Event Log	All Models
23441	[PepVPN] For PepVPN/SpeedFusion traffic, remote Serial Number is now included in the Session Logging.	All Models
18550	[PepVPN] The PepVPN Log is now located in an individual tab under Event Log	All Models
23562	[PepVPN] The PepVPN Status and Dashboard now show the "OSPF Area mismatch" message if needed.	All Models
4828	[QoS] Added the ability to rename QoS User Groups	All Models
23513	[SpeedFusion Cloud] Added ability to configure WAN Smoothing on all devices.	All Models (Except FusionHub)
23963	[SpeedFusion Cloud] Added sub-tunnels on SpeedFusion Cloud > Connect Client to Cloud	All Models (Except FusionHub)
16476	[System] Added PCI Compliance Mode: disable TCP and ICMP timestamp responses for PCI Compliance tests.	All Models
23500	[System] Added RADIUS / TACACS+ authentication log	All Models
19180	[System] Added the ability to configure the session timeout value under support.cgi	All Models
23082	[System] Remote Syslog server address is now supporting broadcast address	All Models
23675	[System] The LAN's port name is now included in LAN Port Event Log	All Models

<p>23628</p>	<p>[UART] Renamed "UART" to "Serial" in the Web Admin / CLI / Event Logs</p>	<p>MAX: BR1 Slim/Mini/M2M/ENT, Transit, HD2 Mini</p>
<p>23852</p>	<p>[Wi-Fi Mesh] Added ability to accept incoming Mesh connection from AP One (Bridge Mode).</p>	<p>Balance: 30 Pro, One MAX: BR1 MK2, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: 200, HD2/4 X Series: PDX, MBX, 20X Surf SOHO: SOHO MK3</p>

Resolved Issues

Reference	Description	Device Supported
23602	[AP Controller] Fixed an issue of HTTP to HTTPS Redirection does not work if the HTTPS port is not 443	Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX
23190	[AP Controller] Fixed an issue where the AP One 300M 5GHz does not work when both the 2.4GHz and 5GHz SSIDs are configured with same name	Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX
23373	[AP Controller] Fixed an issue where the Firmware Pack cannot be stored.	Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX
23771	[API / Cellular Cat-18] Fixed the issue where the device was unable to send SMS via API.	Integrated Cat-18 cellular models
23906	[B20X / BR1 IP55 HW4] Fixed an issue where the throughput is limited by the lowest speed port	MAX: BR1 IP55 HW4 X Series: 20X
24153	[B20X] Fixed an issue causing Bonjour Forwarding to not work on the B20X	X Series: 20X
23657	[B20X] Fixed an issue of where the LAN Interface numbers are not correct	X Series: 20X
23315	[Balance Two] Fixed an issue where VLAN Tagging does not work.	Balance: Two
22833	[Captive Portal] Fixed an issue where a blank page will be shown after logging into the Captive Portal via a second RADIUS server	All Models (Except FusionHub)
23638	[Captive Portal] Fixed an issue where Client Bandwidth Settings from RADIUS does not work when the Captive Portal is configured on VLAN	All Models (Except FusionHub)
23674	[Captive Portal] Fixed an issue where the Captive Portal is unstable when running for a long period of time	All Models (Except FusionHub)
23428	[Captive Portal] Fixed an vulnerability where a binary file will be returned on HTTP Port 80	All Models (Except FusionHub)
23919	[Client List] Fixed an issue where the Client List shows the download usage of offline devices.	All Models (Except FusionHub)

23620	[Drop-in Mode] Fixed an issue where the Static Route does not work if the Gateway is on the WAN side.	Balance: All MAX: All UBR: UBR LTE MediaFast: All X Series: All
23828	[Firewall] Fixed an issue of Firewall Log showing inconsistent date and time.	All Models
21263	[Firewall] Fixed an issue where "Local Service" under "Firewall Rule > Event Logging" malfunctions.	All Models
24184	[Firewall] Fixed the issue where Firewall Log is not kept across device reboot.	All Models
23369	[Firmware Upgrade] Fixed an issue causing Firmware upgrades does not work.	MAX: BR1/2 Series (Except ENT), 700 HW1-2, HD2 HW1-4 UBR: UBR LTE Surf SOHO: SOHO HW2 / MK3
23314	[FusionHub] Fixed an issue where URL Logging & Session Logging are missing in the Event Logs	FusionHub
22581	[HA] Fixed an issue where the Master device will keep its Master status even if the LAN ports are disconnected.	X Series: SDX, PDX, MBX, 310X
20874	[InControl 2] Fixed an issue where IC2 shows the incorrect APN if using Remote SIM	Integrated cellular models with Remote SIM supported
23749	[IP Passthrough] Fixed an issue where the client is unable to obtain a correct IP address after failover between IP Passthrough mode WANs	Balance: 30 Pro MAX: BR1, Transit UBR: UBR LTE Surf SOHO: SOHO HW2 / MK3 X Series: 20X
23804	[LAN] Fixed an issue where LAN broadcast packets are forwarded to the WAN	Balance: 20X MAX: BR1 IP55 HW4
22988	[LAN] Fixed the issue where LAN broadcast packets forwarded to the WAN	MAX: BR1 Classic, Mini, Pro, BR2 UBR: UBR LTE Surf SOHO: SOHO HW2
23243	[Management Port] Fixed an issue where the Management Port is considered as a LAN port during HA mode.	Balance: 305/380 or above MediaFast: 500, 750 X Series: EPX, SDX Pro, SDX, 580X, 380X
23732	[MediaFast & KVM] Fixed an issue where the Virtual	MediaFast: 500, 750

	Machine Autostart does not work	
23144	[MediaFast] Fixed an issue where the Root CA certificate and key for ContentHub & MediaFast are stored on an unencrypted area of the firmware	MediaFast: All
23867	[OpenVPN WAN] Fixed an issue where the OpenVPN WAN accepted routes from the server	All Models (Except FusionHub)
23332	[Outbound Policy] "Normal and High Application Compatibility" have been deprecated	All Models (Except FusionHub)
23234	[Outbound Policy] Fixed an issue where the throughput performance will be degraded when an Outbound Policy by Domain Name has been applied.	All Models (Except FusionHub)
23547	[PepVPN] Fixed an issue causing the device to not apply MSS clamping if the FusionHub is running on KVM and if the PepVPN tunnel is unencrypted.	All Models
23676	[PepVPN] Fixed an issue where PepVPN does not work under Drop-in with a Shared IP	All Models
23733	[PepVPN] Fixed an issue where PepVPN may become stuck on the "Updating Routes" status.	All Models
23377	[PepVPN] Fixed an issue where PepVPN may cause system instability	All Models
22115	[PepVPN] Fixed an issue where PepVPN tunnels establish only one WAN when all WAN interfaces are using the same IP address.	All Models
23203	[PepVPN] Fixed an issue where the PepVPN Test shows empty Device Names	All Models
23792	[Remote SIM] Fixed an issue where the Remote SIM does not work after the WAN IP has been changed	MAX: HD2 Mini, HD1/2 Dome SFE: SFE UBR: UBR LTE X Series: PDX, MBX
23807	[Remote User Access] Fixed an issue where OpenVPN clients cannot route traffic to a different VLAN behind a Balance/MAX device.	All Models
23081	[Remote User Access] Fixed an issue where Remote Users may be disconnected after applying device configurations.	All Models
22952	[Security] Fixed the potential vulnerability of CSRF Protection	All Models
23723	[SpeedFusion Cloud] Fixed an issue where Dynamic Weighted Bonding does not work on the SpeedFusion	All Models (Except FusionHub)

	Cloud.	
23816	[System] Fixed a rare issue of the Client List that causes system instability.	All Models
23825	[System] Fixed an issue of TCP SYN and RST packets are forwarded to WAN without NAT.	All Models
21966	[System] Fixed an issue where UPnP / NAT-PMP does not work if OpenVPN is enabled.	All Models
23000	[System] Fixed CVE-2020-11022 & CVE-2020-11023	All Models
23898	[uPnP] Fixed the potential vulnerability	All Models (Except FusionHub)
23335	[WAN] Fixed an issue where the DNS-O-Matic service cannot be updated	All Models
24147	[Web UI] Fixed an issue where the icons and tooltips for the "Outbound Policy" and "Firewall Rules" features were displaying incorrect information if managed by InControl 2.	All Models
23409	[Wi-Fi AP & BR1 MK2 / SOHO MK3] Fixed an issue that causes system instability when using the Wi-Fi AP	MAX: BR1 MK2, Hotspot, IP55 HW2-3 Surf SOHO: SOHO MK3
23095	[Wi-Fi AP] Fixed an issue that causes the secondary RADIUS server to not work.	Balance: 30 Pro, One MAX: 700, BR1/2, HD2/4, Transit (Exclude: BR1 ENT, HD2 Mini, HD1/2 Dome) MediaFast: HD2/4 X Series: PDX, MBX, 20X Surf SOHO
23612	[Wi-Fi AP] Fixed an issue where the SSID does not broadcast	Balance: 20X MAX: BR1 IP55 HW4
23939	[WINS Server] Fixed an issue that causes system instability when using the LAN > WINS Server.	Balance: All (Except 20X) MAX: BR1 ENT, 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX

Known Issues

Reference	Description	Device Supported
24194	[PPPoE] For the PPPoE WAN, the Subnet Mask cannot be shown in Dashboard WAN details	All Models
24150	[QoS] The "IP Address / Subnet" setting found in QoS > User Group cannot be changed. If the user wants to modify it, they need to add a new one.	All Models

Report an Issue

To report an issue, please open a support ticket at:

<https://ticket.peplink.com/>

For the latest development news and known issues, take a look at our forums:

<https://forum.peplink.com/>