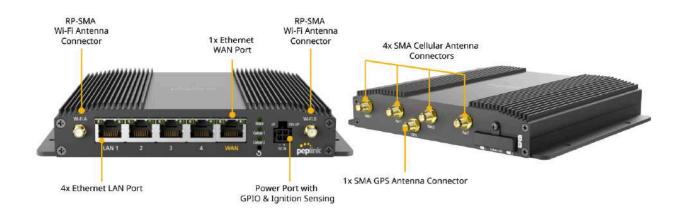


2.44 UBR Plus

2.44.1 Panel Appearance



2.44.2 LED Indicators

The statuses indicated by the front panel LEDs are as follows:

	Status Indicators						
	OFF	System initializing					
Status	Red	Booting up or busy					
Status	Blinking Red	Boot up error					
	Green	Ready					

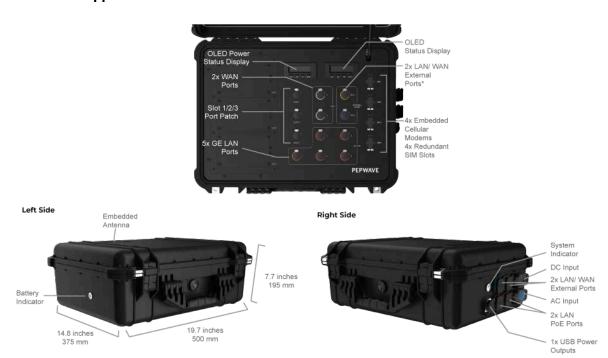
LAN and Ethernet WAN Ports						
Green LED	ON	1000 Mbps				
Green LED	OFF	10 Mbps / 100 Mbps or port is not connected				
	ON	Port is connected without traffic				
Orange LED	Blinking	Data is transferring				
	OFF	No data is being transferred or port is not connected				
Port Type	Auto MDI/MDI-X ports					



	Cellular Indicators							
	OFF	Disabled or no SIM card inserted						
Cellular	Blinking Slowly	Connecting to network(s)						
	Green	Connected to network(s)						

2.45 PDX

2.45.1 Panel Appearance



2.45.2 LED Indicators

The statuses indicated by the front panel LEDs are as follows:

	Status Indicators						
	OFF	No battery installed					
Status	Red	Charging					
	Blinking red	Low Battery					
	Green	Full Charged					



3 Installation

For details on connecting Pepwave routers to your network, please see this link.

4 Mounting the Unit

Please refer to this link.

5 Connecting to the Web Admin Interface

- 1. Start a web browser on a computer that is connected with the Pepwave router through the LAN.
- 2. To connect to the router's web admin interface, enter the following LAN IP address in the address field of the web browser:

http://192.168.50.1

(This is the default LAN IP address for Pepwave routers.)

3. Enter the following to access the web admin interface.

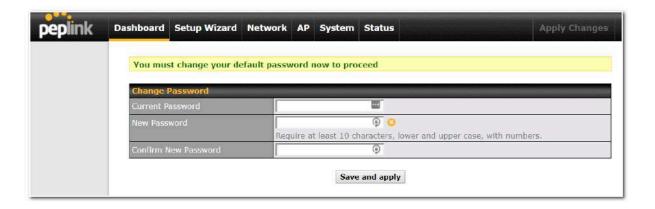
Username: admin **Password**: admin

(This is the default username and password for Pepwave routers).

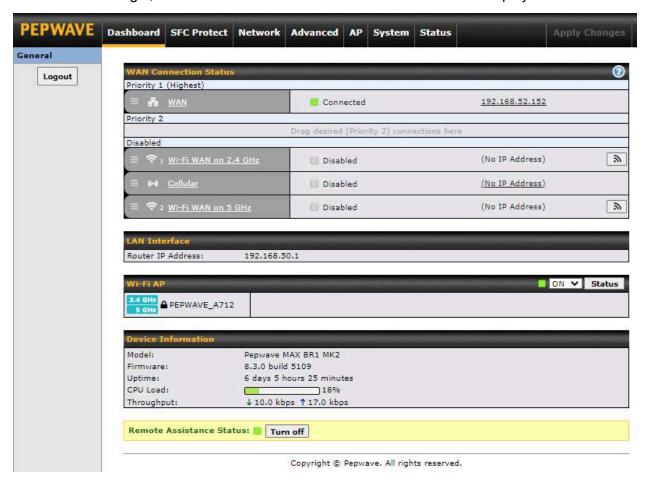


- You must change the default password on the first successful logon.
- Password requirements are: A minimum of 10 lower AND upper case characters, including at least 1 number.
- When HTTP is selected, the URL will be redirected to HTTPS by default.





After successful login, the **Dashboard** of the web admin interface will be displayed.



The **Dashboard** shows current WAN, LAN, and Wi-Fi AP statuses. Here, you can change WAN connection priority and switch on/off the Wi-Fi AP. For further information on setting up these connections, please refer to **Sections 8** and **9**.



Device Information displays details about the device, including model name, firmware version, and uptime. For further information, please refer to **Section 22**.

Important Note

Configuration changes (e.g. WAN, LAN, admin settings, etc.) will take effect only after clicking the **Save** button at the bottom of each page. The **Apply Changes** button causes the changes to be saved and applied.

6 AP

Please refer to this link.

7 System

Please refer to this link.

8 Status

Please refer to this <u>link</u>.

9 Ignition Sensing

Please refer to this <u>link</u> for the details of Ignition Sensing.



Appendix A: Restoration of Factory Defaults

Please refer to this <u>link</u>.

Appendix B: FusionSIM Manual

Please refer to this link.

Appendix C: Ports usage overview

Default Port Number	Usage	Service	Inbound/Outbound	Default Status
UDP 5246	Data flow	InControl	Outbound	Enabled
TCP 443	HTTPS service	InControl	Outbound	Enabled
TCP 5246	Optional, used when TCP 443 is not responding	InControl	Outbound	Enabled
TCP 5246	Remote Web Admin	InControl Virtual Appliance	Outbound	Enabled
TCP 4500	VPN Data (TCP Mode)	SpeedFusion VPN / SpeedFusion	Inbound / Outbound*	Disabled
TCP 32015	VPN handshake	SpeedFusion VPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 4500	VPN Data	SpeedFusion VPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 32015°	VPN Data (alternative)	SpeedFusion VPN / SpeedFusion	Inbound / Outbound*	Disabled
TCP/UDP 4500+N-1^	VPN Sub-Tunnels Data	SpeedFusion VPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 32015+N-1^	VPN Sub-Tunnels Data (alternative)	SpeedFusion VPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 4500	VPN Data	IPsec	Inbound / Outbound*	Disabled
UDP 500	VPN initiation	IPsec	Inbound / Outbound*	Disabled
UDP 500	L2TP	Remote User Access	Inbound	Disabled
UDP 1701	L2TP	Remote User Access	Inbound	Disabled
UDP 4500	L2TP	Remote User	Inbound	Disabled



		Access		
UDP 1194	OpenVPN	Remote User Access	Inbound	Disabled
IP 47	PPTP (GRE)	Remote User Access	Inbound	Disabled
TCP 2222	Remote Assistance Direct connection	Peplink Troubleshooting Assistance	Outbound	Enabled
TCP 80	HTTP traffic	Web Admin Interface access	Inbound	Enabled
TCP 443	HTTPS traffic	Web Admin Interface access (secure)	Inbound	Enabled
TCP 8822	SSH	SSH	Inbound	Disabled
UDP 161	SNMP Get	SNMP monitoring	Inbound	Disabled
UDP 162	SNMP Trap	SNMP monitoring	Outbound	Disabled
TCP, UDP 1812	Radius Authentication	Radius	Outbound	Disabled
TCP, UDP 1813	Radius Accounting	Radius	Outbound	Disabled
UDP 123	Network Time Protocol	NTP	Inbound Outbound	Disabled Enabled
TCP 60660	Real-time location data in NMEA format	GPS	Outbound	Disabled

Disclaimer:

- By default, only TCP 32015 and UDP 4500 are needed for SpeedFusion VPN / SpeedFusion.
- Inbound / Outbound* Inbound = For Server mode; Outbound = For Client mode
- UDP 32015° If IPsec VPN or L2TP/IPsec RUA is enabled, the UDP 4500 is occupied, so SpeedFusion VPN / SpeedFusion will automatically switch to UPD 32015 as VPN data port .
- UDP 32015+N-1^ / TCP/UDP 4500+N-1^ When using Sub-Tunnels, multiple ports are in use (1 for each Sub-Tunnel profile).
- The default UDP data ports used when using (N number of Sub-Tunnel profiles) are: 4500...4500+N-1, or (when port 4500 is in use by IPsec or L2TP/IPsec) 32015... 32015+N-1".



Appendix D: Declaration

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Mini

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

FCC Radiation Exposure Statement (for MAX BR1 mini)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



CE Statement for Pepwave Routers (MAX BR1 Mini for EC25-E)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 Mini MAX BR1 Mini LTE Pismo930 Lite
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1

EN 300 328 V2.2.2

EN 303 413 V1.1.1

EN 50385 : 2017

EN 301 489-1 V2.2.3

EN 301 489-17 V3.1.1

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016

EN 55035: 2017

EN IEC 61000-3-2: 2019

EN 61000-3-3:2013 + A1:2019

EN 62368-1:2014 + A11:2017 (Second Edition)

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited





AT	BE	BG	HR	CY	cz	DK	EE	EI	FR	DE	EL	HU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	sĸ	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 16.38 dBm

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS

Output Power Class E2 (27dBm ±3dB) for EDGE 850/900MHz

Class E2 (26dBm +3/-4dB) for EDGE

1800/1900MHz

Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/



CE Statement for Pepwave Routers (MAX BR1 Mini for MC7455)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 Mini MAX BR1 Mini LTEA Pepwave MAX BR1 Mini Pepwave MAX BR1 Mini LTEA Peplink MAX BR1 Mini Peplink MAX BR1 Mini Peplink MAX BR1 Mini LTEA MAX-BR1-MINI-LTEA-W-T Pismo930 Lite
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1

EN 300 328 V2.2.2

EN 303 413 V1.1.1

EN 62311: 2008

EN 301 489-1 V2.2.3

EN 301 489-17 V3.1.1

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 62368-1:2014 + A11:2017 (Second Edition)

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited



AT	BE	ВG	HR	CY	cz	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	sĸ	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 16.38 dBm

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		•
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/



Industry Canada Statement (for MAX BR1 Mini)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.



FCC & IC Requirements for Operation in the United States and Canada (for MAX BR1 Mini)

FCC ID: U8G-P1930LITER6

FCC 15.21: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF exposure warning: This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IC Warning:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisee aux deux conditions suivantes

- 1. l'appareil ne doit pas produire de brouillage, et
- 2. l'utilisateur de l'appareil doit accepter tout brouillage radioelect rique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

98



Informations concernant l'exposition aux frequences radio (RF)

Cet equipement est conforme avec l'exposition aux radiations IC definies pour un environnement noncontrole.

Cet equipement doit etre installe et utilise a une distance minimum de 20 cm entre le radiateuret votre corps.

Cet emetteur ne doit pas etre co-localisees ou operant en conjonction avec une autreantenne ou transmetteur.

Les utilisateurs finaux et les installateurs doivent etre informes des instructions d'installation de l'antenne et des conditions de fonctionnement de l'emetteur afin de satisfaire a la conformite d'exposition RF.

This radio transmitter IC 20682-P1930LITER6 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Le present emetteur radio 20682-P1930LITER6 a ete approuve par Innovation, Sciences et Developpement economique Canada pour fonctionner avec les types d'antenne enumeres ci dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est superieur au gain maximal indique pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'emetteur.

antenna type Omni-directional antenna gain 5.33



FCC Requirements for Operation in the United States Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 MK2

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 24cm between the radiator & your body.

Industry Canada Statement (For MAX BR1 MK2)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio



exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en
- (i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

- (i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux:
- (ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.



CE Statement for Pepwave Routers (MAX BR1 MK2)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	Pismo Labs Technology Limited
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Pepwave / Peplink / Pismo Wireless Product
Model name of the appliance	MAX BR1 MK2
Trade name of the appliance	Pepwave / Peplink / Pismo



The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 303 413 V1.1.1

EN 301 908-1 V13.1.1

EN 301 489-1 V2.2.3

EN 301 489-17 V3.1.1

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032:2015 +A11:2020

EN 61000-3-2: 2019

EN 61000-3-3: 2019

EN 62311:2008

EN 62368-1:2014+A11:2017 (Second Edition)

EN 55035:2017

Yours sincerely.

Keith Chau

General Manager

Peplink International Limited



AT	BE	ВG	HR	CY	cz	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

<u>2.4GHz (2412 – 2472 MHz) : 19.95 dBm</u> <u>5GHz (5150 - 5250 MHz) : 22.73 dBm</u>

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS	12	14
Band 1 (IMT 2100 12.2 kbps) Band 3 (UMTS 1800 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

This equipment is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range in above countries.

contact as: https://www.peplink.com/



FCC Requirements for Operation in the United States Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Classic

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement (for MAX BR1 Classic)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



Industry Canada Statement (for MAX BR1 Classic)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions (1) This device may not cause interference; and(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.



CE Statement for Pepwave Routers (MAX BR1 Classic for MC7455)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 ESN MAX BR1 ESN LTEA Pepwave MAX BR1 ESN LTEA Peplink MAX BR1 ESN LTEA Peplink MAX BR1 ESN LTEA Peplink MAX BR1 ESN LTEA Pismo930 Lite MAX-BR1-ESN-LTEA-W-T MAX BR1 Classic MAX BR1 Classic LTEA Pepwave MAX BR1 Classic Pepwave MAX BR1 Classic Peplink MAX BR1 Classic LTEA MAX-BR1-LTEA-W-T MAX BR1 MAX BR1 Pepwave MAX BR1 Pepwave MAX BR1 LTEA
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1

EN 300 328 V2.2.2

EN 303 413 V1.1.1

EN 62311: 2008

EN 301 489-1 V2.2.3

Draft EN 301 489-17 V3.2.0

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016-07

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited



AT	BE	ВG	HR	CY	cz	DK	EE	FI	FR	DE	EL	ΗU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	sĸ	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.78 dBm

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes	
LTE			
LTE Band 1,3,8,20	+23 dBm ± 1 dB		
LTE Band 7	+22 dBm ± 1 dB		

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/



CE Statement for Pepwave Routers (MAX BR1 Classic for EC25-E)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 Classic Pismo930 Lite MAX BR1 MAX BR1 LTE MAX-BR1-LTE-E-T MAX BR1 Classic LTE MAX BR1 ESN MAX BR1 ESN LTE MAX-BR1-ESN-LTE-E-T Pepwave MAX BR1 Pepwave MAX BR1 Classic Pepwave MAX BR1 Classic Pepwave MAX BR1 Classic Pepwave MAX BR1 Classic LTE Pepwave MAX BR1 ESN Pepwave MAX BR1 ESN Peplink MAX BR1 Peplink MAX BR1 Peplink MAX BR1 Classic Peplink MAX BR1 ESN Peplink MAX BR1 ESN Peplink MAX BR1 ESN
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1

EN 300 328 V2.2.2

EN 303 413 V1.1.1

EN 62311: 2008

EN 301 489-1 V2.2.3

Draft EN 301 489-17 V3.2.0

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016-07

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited



ΑT	BE	ВG	HR	CY	cz	DK	EE	El	FR	DE	EL	HU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	sĸ	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.78 dBm

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS

Output Power Class E2 (27dBm ±3dB) for EDGE 850/900MHz

Class E2 (26dBm +3/-4dB) for EDGE

1800/1900MHz

Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/



FCC Requirements for Operation in the United States Federal Communications Commission (FCC) Compliance Notice:

For MAX HD4 MBX, MAX HD2 MBX, MAX HD4 MBX 5G, MAX HD2 MBX 5G

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IMPORTANT NOTE

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED Warning Statement For MAX HD4 MBX

Industry Canada Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions (1) This device may not cause interference; and(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.



Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

- (i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

- (i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

IC Radiation Exposure Statement

This equipment complies with Innovation, Science and Economic Development Canada RF exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times.

Declaration d'exposition aux radiations Cet equipement est conforme aux limites d'exposition aux rayonnements IC etablies pour un environnement non controle. Cet equipement doit etre installe et utilise avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

This radio transmitter 20682-P1MBX has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

WIFI Antenna type Replacement Antenna WIFI Antenna gain 2.4GHz / 2.44 dBi , 5GH / 4.73 dBi LTE Antenna type Replacement Antenna LTE Antenna gain 4.38 dBi



Battery Caution Statement (MAX HD4 MBX, MAX HD2 MBX, MAX HD4 MBX 5G, MAX HD2 MBX 5G)

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.



CE Statement for Pepwave Routers (MAX HD4 MBX For EM7565)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building Phase 6, 481 Castle Peak Road Cheung Sha Wan Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD4 MBX MAX-HD4-MBX-LTEA-K-T HD4 MBX MBX MAX HD4 MBX LTEA EXM-T4-LTEA-R Peplink Balance 310X Balance 310X BPL-310X-LTE-E-T
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2

EN 303 413 V1.1.1

EN 301908-1 V13.1.1

Draft EN 301 489-1 V2.2.1

Draft EN 301 489-17 V3.2.0

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016-07

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 55035: 2017

EN 62311: 2008

EN 62368-1:2014 + A11:2017

EN 301 489-19 V2.1.1

EN 301 893 V2.1.1

Yours sincerely,

Antony Chong Director of Hardware Engineering

Peplink International Limited





2.4GHz (2412 – 2472 MHz) : 19.6 dBm 5GHz (5150 - 5250 MHz) : 19.4 dBm

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE	<u> </u>	W
LTE bands 1,3,8,20	+23 dBm ± 1 dB	
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

This equipment is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range in above countries.

contact as: https://www.peplink.com/



<u>UK Statement for Pepwave Routers (MAX HD4 MBX For EM7565)</u>

UK DECLARATION OF CONFORMITY

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD4 MBX MAX-HD4-MBX-LTEA-K-T HD4 MBX MBX MAX HD4 MBX LTEA EXM-T4-LTEA-R Peplink Balance 310X Balance 310X BPL-310X-LTE-E-T
Trade name of the appliance	PEPWAVE / PEPLINK



We declare under sole responsibilities that the above product conforms to the applicable requirements of following relevant UK legislation and designed standards.

UK legislation

Radio Equipment Regulations 2017

UK Designed Standard

EN 301 908-1 V13.1.1 EN 300 328 V2.2.2 EN 301 893 V2.1.1 EN 303 413 V1.1.1

Other Standards Applied

EN 62311: 2008 Draft EN 301 489-1 V2.2.1 Draft EN 301 489-17 V3.2.0 EN 301 489-19 V2.1.1 Draft EN 301 489-52 V1.1.0 EN 55032: 2015 + AC:2016-07 EN 55035: 2017 EN 61000-3-2: 2014 EN 61000-3-3: 2013

EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong

Director of Hardware Engineering Peplink International Limited



CE Statement for Pepwave Routers (MAX HD2 MBX / MAX HD4 MBX For LM960A18)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD4 MBX MAX HD4 MBX LTEA MAX HD2 MBX MAX HD2 MBX LTEA MBX MAX-HD4-MBX-GLTE-G MAX-HD2-MBX-GLTE-G EXM-MBX-T4-GLTE-G EXM-MBX-T2-GLTE-G Pepwave MAX HD4 MBX Pepwave MAX HD2 MBX Pepwave MAX HD4 MBX LTEA Peplink MAX HD4 MBX LTEA
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 303 413 V1.1.1

EN 62311: 2008

EN 301 489-1 V2.2.3

EN 301 489-17 V3.2.4

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016-07

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited





<u>2.4GHz (2412 – 2472 MHz) : 19.6 dBm</u> <u>5GHz (5150 - 5250 MHz) : 19.4 dBm</u>

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands	Class 3 (0.2W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

This equipment is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range in above countries.

contact as: https://www.peplink.com/



UK Statement for Pepwave Routers (MAX HD2 MBX / MAX HD4 MBX For LM960A18)

UK DECLARATION OF CONFORMITY

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD4 MBX MAX HD4 MBX LTEA MAX HD2 MBX MAX HD2 MBX LTEA MBX MAX-HD4-MBX-GLTE-G MAX-HD2-MBX-GLTE-G EXM-MBX-T4-GLTE-G EXM-MBX-T2-GLTE-G Pepwave MAX HD4 MBX Pepwave MAX HD2 MBX Pepwave MAX HD4 MBX LTEA Peplink MAX HD4 MBX LTEA
Trade name of the appliance	PEPWAVE / PEPLINK



We declare under sole responsibilities that the above product conforms to the applicable requirements of following relevant UK legislation and designed standards.

UK legislation

Radio Equipment Regulations 2017

UK Designed Standard

EN 301 908-1 V13.1.1 EN 300 328 V2.2.2 EN 301 893 V2.1.1 EN 303 413 V1.1.1

Other Standards Applied

EN 62311: 2008 EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN 301 489-19 V2.1.1 Draft EN 301 489-52 V1.1.0 EN 55032: 2015 + AC:2016-07 EN 55035: 2017 EN 61000-3-2: 2014 EN 61000-3-3: 2013 EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong

Director of Hardware Engineering Peplink International Limited



CE Statement for Pepwave Routers (MAX HD2 MBX 5G / MAX HD4 MBX 5G For MV31-W)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAYE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2 MBX 5G MAX-HD2-MBX-5GD-T MAX HD4 MBX 5G MAX-HD4-MBX-5GD-T Balance 310X Balance 310X 5G BPL-310X-5GD-T MBX Expansion Module Expansion Module with 1x 5G modems EXM-310X-5GD Expansion Module with 4x 5G modems EXM-MBX-T4-5GD Expansion Module with 2x 5G modules EXM-MBX-T2-5GD
Trade name of the appliance	PEPWAYE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 303 413 V1.1.1

EN 62311: 2020

EN 301 489-1 V2.2.3

EN 301 489-17 V3.2.4

Draft EN 301 489-19 V2.2.0

Draft EN 301 489-52 V1.1.2

EN 55032: 2015 / A11: 2020

EN 55035: 2017 / A11: 2020

EN 61000-3-2: 2014

EN 61000-3-3: 2013 / A1:2019

EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited



AT	BE	BG	HR	CY	cz	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

<u>2.4GHz (2412 – 2472 MHz) : 19.6 dBm</u> <u>5GHz (5150 - 5250 MHz) : 19.4 dBm</u>

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

	Bands	FR1 (Sub 6G): FDD: n28 TDD: n78							
	Band combinations	For supported E-UTRAN New Radio Dual Connectivity (EN-DC) see [2]							
	4x4 MIMO	n78							
56	DSS	n28,							
	Category	3GPP Rel 15 256 QAM UL/DL							
	Output Power	FR1 (Sub 6G): n78: 25.5dBm +1.5/-1dB (HPUE) All other bands: 23dBm ±1dB							
	Bands	FDD: B1, B3, B7, B8, B20, B28							
		TDD: B38, B40							
	Band combinations	For supported carrier aggregations (CA) see [2]							
	4x4 MIMO	B1, B3, B7, B38, B40							
4G	RX Diversity	All LTE bands							
4	Category	UE Cat. 13 (UL: 150Mbps) + UE Cat. 20 (DL: 2Gbps); 7xDL CA, 3xUL CA (Intra-band), 5xDL CA+4X4 MIMO (Up to UE Cat20) 256 QAM UL/DL							
	Output Power	B1, B3, B7, B38, B40 23dBm ±1dBm B8, B20, B28: 23.5dBm ±1dBm							
	Bands	Bd.I, Bd.VIII							
	RX Diversity	All 3G bands							
36	Category	DC-HSPA+ – DL Cat. 24 (42Mbps) / UL Cat. 6 (11Mbps) HSUPA – UL 5.76Mbps Compressed mode (CM) supported according to 3GPP TS25.212							
	Output Power	All bands: 23.5dBm +1/-1dB							

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.



This equipment is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range in above countries.

contact as: https://www.peplink.com/



UK Statement for Pepwave Routers (MAX HD2 MBX 5G / MAX HD4 MBX 5G For MV31-W)

UK DECLARATION OF CONFORMITY

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2 MBX 5G MAX-HD2-MBX-5GD-T MAX HD4 MBX 5G MAX-HD4-MBX-5GD-T Balance 310X Balance 310X 5G BPL-310X-5GD-T MBX Expansion Module Expansion Module with 1x 5G modems EXM-310X-5GD Expansion Module with 4x 5G modems EXM-MBX-T4-5GD Expansion Module with 2x 5G modules EXM-MBX-T2-5GD
Trade name of the appliance	PEPWAVE / PEPLINK



We declare under sole responsibilities that the above product conforms to the applicable requirements of following relevant UK legislation and designed standards.

UK legislation

Radio Equipment Regulations 2017

UK Designed Standard

EN 301 908-1 V13.1.1 EN 300 328 V2.2.2 EN 301 893 V2.1.1 EN 303 413 V1.1.1

Other Standards Applied

EN 62311: 2020 EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 Draft EN 301 489-19 V2.2.0 Draft EN 301 489-52 V1.1.2 EN 55032: 2015 / A11: 2020 EN 55035: 2017 / A11: 2020

EN 61000-3-2: 2014

EN 61000-3-3: 2013 / A1:2019 EN 62368-1: 2020 + A11:2020

Yours sincerely,

Antony Chong

Director of Hardware Engineering Peplink International Limited

https://www.peplink.com



FCC Requirements for Operation in the United States Federal Communications Commission (FCC) Compliance Notice:

For MAX HD2

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 50 centimeters between the radiator and your body.

Industry Canada Statement (MAX HD2)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en



- (i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

- (i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 37cm between the radiator & your body. 70 cm minimum distance for the device operate with plug-in USB cellular device which has maximum of 7W(ERP) output power.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 37 cm entre le radiateur et votre corps. Distance minimale de 70 cm pour que l'appareil fonctionne avec un appareil cellulaire USB enfichable qui a une puissance de sortie maximale de 7 W (ERP).

Battery Caution Statement

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.



			For WL	AN					
Antenna No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connec		Cable Length (mm	
WAN(2.4G)-1	SmartAnt	SAA06-220690	3	2400 - 2500 MHz	Dipole	R-SM	R-SMA		
WAN(2.4G)-2	SmartAnt	SAA06-220690	3	2400 ~ 2500 MHz	Dipole	R-SM	R-SMA 150		
10/50) 1	Constant	nartAnt SAA06-220690 5.5 5150 ~ 5350 MHz		Block	0.00		260		
AP(5G)-1	SmartAnt	SAA06-220690	6	5350 ~ 5875 MHz	Dipole	R-SM	IA	260	
	2 02 0		5.5	5150 ~ 5350 MHz	e .			260	
AP(5G)-2	SmartAnt	SAA06-220690	6	5350 ~ 5875 MHz	Dipole	R-SMA		260	
		·	For GP	S					
Antenna No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type		Connecter Type		
	MASTER WAVE TECHNOLOGY CO., LTD.	98335KSAF000	4.5 ±0.5	1575.42 MHz	Magnetic		SMA		
			For WWAN	(LTE)					
Antenna No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna	Туре	Connecter Type		
Cellular 1 Main			1.99	699~960 MHz					
Cellular 1 Diversity/Aux	MASTER WAVE	WAVE		1575~2170 MHz	Dipole			SMA	
Cellular 2 Main	TECHNOLOGY CO., LTD.	98619ZSAX025	1	2300~2320 MHz	L-por	Dipole		SMA	
Cellular 1	Secretary States of F		2.8	2325~2690 MHz					



CE Statement for Pepwave Routers (MAX HD2 For MC7455)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
PEPWAVE / PEPLINK Wireless Product
MAX HD2, MAX HD2 LTE, MAX HD2 LTEA Pismo 811AC
PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 301 908-1 V11.1.1

Draft EN 301 489-1 V2.2.0

Draft EN 301 489-19 V2.1.0

Draft EN 301 489-52 V1.1.0

Draft EN 301 489-17 V3.2.0

EN 55032:2015 +AC: 2016

EN 61000-3-2: 2014,

EN 61000-3-3: 2013,

EN 55024:2010+A1:2015

EN 62311:2008

EN 60950-1:2006+A11: 2009+A1:2010+A12:2011+A2:2013

EN 303 413 V1.1.1

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited



AT	BE	BG	HR	CY	cz	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.90 dBm 5GHz (5150 - 5250 MHz) : 22.88 dBm

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS	144	
Band 1 (IMT 2100 12.2 kbps) Band 3 (UMTS 1800 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

This equipment is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range in above countries.

contact as: https://www.peplink.com/



CE Statement for Pepwave Routers (MAX HD2 For EM7565)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2 MAX HD1 MAX HD2 LTEA MAX HD1 LTEA MAX-HD1-LTEA-K-T MAX-HD1-LTEA-K-T Pepwave MAX HD2 Pepwave MAX HD1 Pepwave MAX HD1 Pepwave MAX HD1 LTEA Peplink MAX HD1 LTEA Pismo 811AC Pismo 811ac with 4SIMs piggy
Trade name of the appliance	PEPWAVE / PEPLINK



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 303 413 V1.1.1

EN 62311: 2008

EN 301 489-1 V2.2.3

EN 301 489-17 V3.1.1

EN 301 489-19 V2.1.1

Draft EN 301 489-52 V1.1.0

EN 55032: 2015 + AC:2016

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 62368-1:2014 + A11:2017 (Second Edition)

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited



AT	BE	ВG	HR	CY	cz	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	МТ	NL	PL	PT	RO	sĸ	SI	ES	SE	UK(NI)

<u>2.4GHz (2412 – 2472 MHz) : 19.86 dBm</u> <u>5GHz (5150 - 5250 MHz) : 22.68 dBm</u>

WWAN: Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes		
LTE		**		
LTE bands 1,3,8,20	+23 dBm ± 1 dB			
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer		

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

This equipment is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range in above countries.

contact as: https://www.peplink.com/



Mounting the Unit

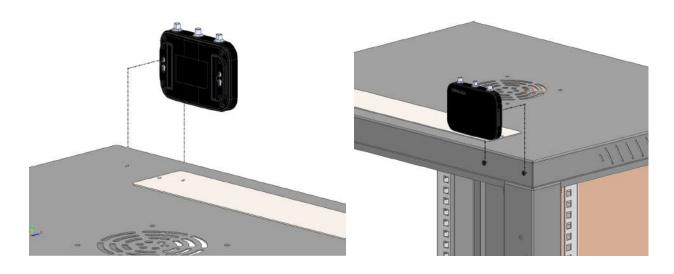
Wall Mount

Some devices can be wall mounted using screws. After adding the screw on the wall, slide in the screw hole socket as indicated below. Recommended screw specification M3.5 x 20mm, head diameter 6mm, head thickness 2.4mm.

For type 1, the device requires four screws for wall mounting.



For type 2, the device requires two screws for wall mounting.





(For MAX BR1 Classic CB IEC 62368-1)

Output of the external power source shall complied with ES1 and ES2 requirements, output rating 10-30 Vdc, minimum 12W (DC Jack or POE injector), with minimum ambient temperature 65 $^{\circ}$ C, altitude = 5000m , and evaluated in accordance to UL/EN/IEC 60950-1 and / or UL/EN/IEC 62368-1

Ensure to connect the power cord of power adapter to a socket-outlet with earthing.

(For MAX BR1 Mini HW3 CB IEC 62368-1)

Output of the external power source shall complied with ES1 and PS2 requirements, input rating 10-30 Vdc, maximum 18W (DC Power Port) or 802.3at PoE, with minimum ambient temperature 65 °C, altitude = 5000m, and evaluated in accordance to UL/EN/IEC 60950-1 and / or UL/EN/IEC 62368-1.

Ensure to connect the power cord of power adapter to a socket-outlet with earthing.

The MAX BR1 Mini is investigated to IEC TR 62102 as SELV (ES1) circuits and only connected to PoE without routing to the outside plant, including campus environment.



FCC Requirements for Operation in the United States Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Pro 5G

FCC 15.21

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 23 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Industry Canada Statement (MAX BR1 Pro 5G)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes

- 1. l'appareil ne doit pas produire de brouillage, et
- 2. l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

compromettre le fonctionnement. Informations concernant l'exposition aux frequences radio (RF)

Cet equipement est conforme avec l'exposition aux radiations IC definies pour un environnement noncontrole.

Cet equipement doit etre installe et utilise a une distance minimum de 23 cm entre le radiateuret votre corps.

Cet emetteur ne doit pas etre co-localisees ou operant en conjonction avec une autreantenne ou transmetteur.

Les utilisateurs finaux et les installateurs doivent etre informes des instructions d'installation de l'antenne et des

conditions de fonctionnement de l'emetteur afin de satisfaire a la conformite d'exposition RF.

This radio transmitter IC 20682-P1AX02 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

antenna type Omni-directional

antenna gain for 2.4GHz 2.44 dBi



antenna gain for 5GHz ($5150 \sim 5250 \text{ MHz}$) 4.10 dBi antenna gain for 5GHz ($5725 \sim 5850 \text{ MHz}$) 4.73 dBi

Battery Caution Statement

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.



CE Statement for Pepwave Routers (MAX BR1 Pro 5G)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED				
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com				
Description of the appliance	PEPWAVE / PEPLINK Wireless Product				
Model name of the appliance	MAX BR1 5G MAX-BR1-5GD-T MAX BR1 Pro 5G MAX-BR1-PRO-5GD-T-PRM				
Trade name of the appliance	PEPWAVE / PEPLINK				



The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 303 413 V1.1.1

EN 62311: 2020

EN 301 489-1 V2.2.3

EN 301 489-17 V3.2.4

Draft EN 301 489-19 V2.2.0

Draft EN 301 489-52 V1.1.2

EN 55032: 2015 / A11:2020

EN 55035: 2017

EN 61000-3-2: 2014

EN 61000-3-3: 2013 / A1:2019

EN 62368-1:2020+A11:2020

Yours sincerely,

Antony Chong

Director of Hardware Engineering

Peplink International Limited

