



SDX Module Upgrade

Jan 2023

Important Notes

Tools required 1x Screwdriver - Phillips Head #2 / PH2

- Please take care with the connectors to not damage them.
- CAT12 FlexModules have 6x cellular antenna connections while CAT18 & CAT20 have 8x cellular antenna connections per FlexModule. So if you are upgrading from CAT12 to either CAT18 or CAT20, you will require additional antennas. The number of GPS antennas remains the same at one.
- FlexModules are fully interchangeable between the different types of FlexModules, e.g. ethernet, fibre, and cellular.

Procedures

Step 1: Power off the router. The router MUST be disconnected from power before starting the upgrade.



Step 2: For cellular versions, disconnect all antennas including the GPS antennas.

Step 3: There are two screws on the front of the FlexModule; both need to be loosened. The screws are spring loaded and will be held in place so as to not fall out. The screws remain with the FlexModule.



Step 4: Remove the module by pulling it out directly. It should slide out with minimal force.



Step 5: Install the new module. Make sure it is correctly aligned and press the module firmly into place. The FlexModule should sit flush with surrounding FlexModules or slightly countersunk (1-2mm) of the router chassis.



Step 6: Tighten the screws until flush and tight with the collar.



Step 7: Reconnect the antennas.

Step 8: Reconnect the power.

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

For FlexModule Plus

Federal Communication Commission Interference Statement

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 it is not installed and used in accordance with the instruction manual, it 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 your authority to operate the 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 20 centimeters between the radiator and your body.

Industry Canada Statement

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

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 (FlexModule Plus 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	SDX Main Chassis (BPL-SDX-LK1) BPL-SDX-LK1 EXM-3LTEA-K
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 303 413 V1.1.1
Draft ETSI EN 301 489-1 V2.2.0
Draft ETSI EN 301 489-52 V1.1.0
ETSI EN 301 489-19 V2.1.1
EN 55032: 2015 + AC:2016
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014+A11:2017

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	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

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 \pm 1 dB	
LTE bands 7	Single cell: +22 dBm \pm 1 dB UL CA: +22.8 dBm \pm 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 \pm 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/>

UK Statement for Pepwave Routers (FlexModule Plus for EM7565)

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	FlexModule Plus FlexModule Plus 3x LTEA (CAT-12) EXM-3LTEA-K
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 V11.1.1
EN 303 413 V1.1.1

Other Standards Applied

EN 62311: 2008
Draft ETSI EN 301 489-1 V2.2.0
Draft ETSI EN 301 489-52 V1.1.0
ETSI EN 301 489-19 V2.1.1
EN 55032: 2015 + AC:2016
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