FLEXOPTIX

Safety information
Please keep this safety information.
Failure to observe these precautions could result in serious injury to a person and/or material damage!

Information de sécurité
Conservez ces informations de sécurité.
Le non-respect de ces précautions pourrait entrainer des blessures graves à une personne et/ou des dégâts matériels!

FLEXBOX Overview

The FLEXBOX is the first-of-its-kind end user optics configurator. A mobile tool, built to solve real life problems faced by optical network engineers. Durable and compact, it’s made to travel. Use it with the FLEXOPTIX App to configure your Universal Transceivers in seconds.

Technical Specifications

Connection:	USB-C®
Input Voltage:	5V/9V/12V/15V ⎓ max. 3A
Ambient Temp:	0°C to 50°C
Inductive Charge Output:	5W - 7.5W - 9W - 15W max. (Under the optimal conditions)

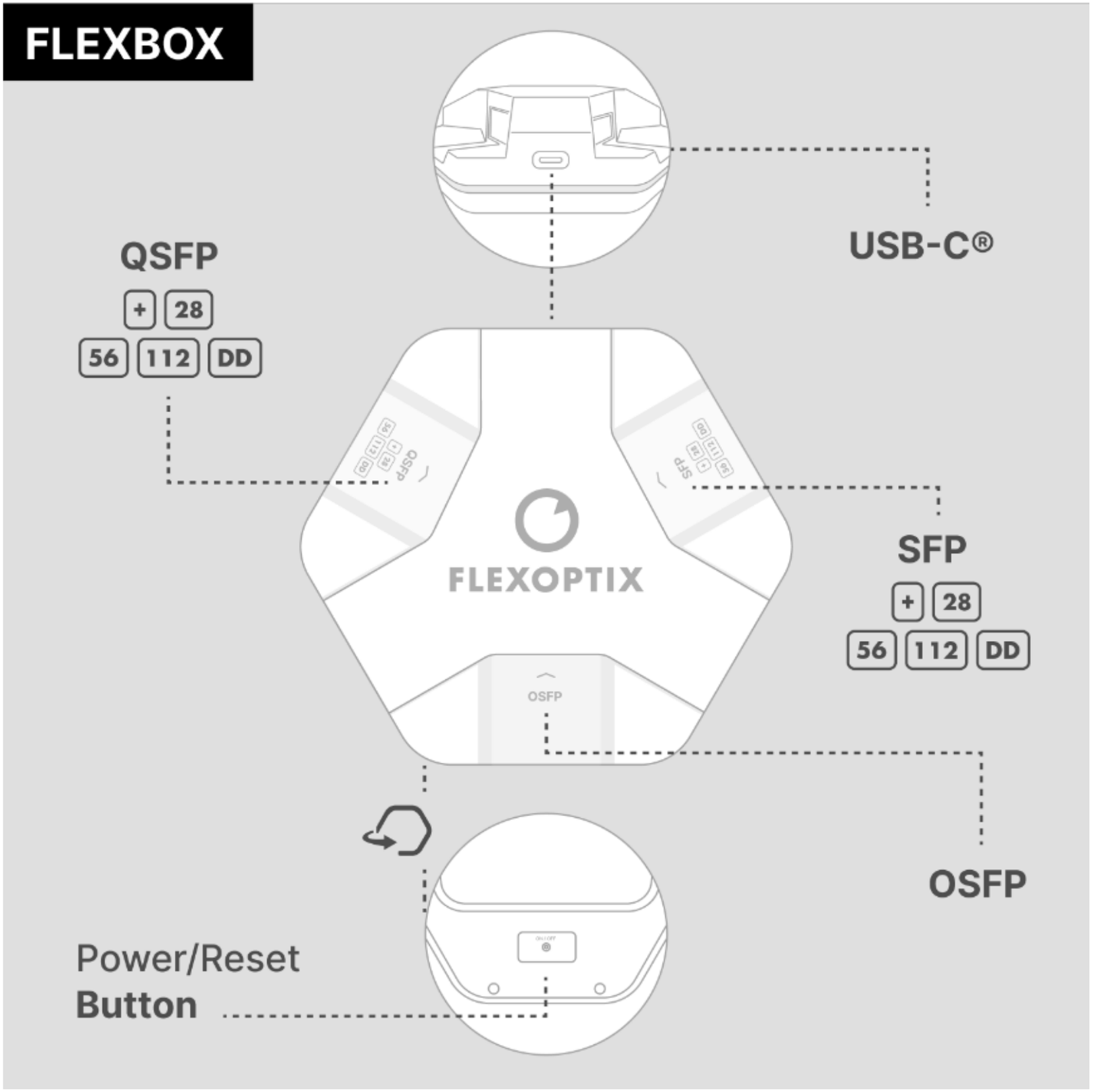
RF Power Outputs:

CE		Power
BLE 1M	2402~2480MHz	6 ± 2 dBm
BLE 2M	2402~2480MHz	6 ± 2 dBm
2.4G WLAN	802.11b: 2412~2472MHz	18 ± 2 dBm
	802.11g: 2412~2472MHz	18 ± 2 dBm
	802.11n (20MHz): 2412~2472MHz	18 ± 2 dBm
	802.11n (40MHz): 2422~2462MHz	18 ± 2 dBm
Wireless Charging	128-130KHz	-5.31 dBμV/m at 10m

FCC		Power
BLE 1M	2402~2480MHz	5 ± 2 dBm
BLE 2M	2402~2480MHz	5 ± 2 dBm
2.4G WLAN	802.11b: 2412~2462MHz	17 ± 2 dBm
	802.11g: 2412~2462MHz	15.5 ± 3 dBm
	802.11n (20MHz): 2412~2462MHz	15 ± 3 dBm
	802.11n (40MHz): 2422~2452MHz	10.5 ± 3 dBm
Wireless Charging	128-130KHz	28.64 dBμV/m at 3m

Japan		Power
BLE 1M	2402~2480MHz	6.5 ± 1 dBm
BLE 2M	2402~2480MHz	6.5 ± 1 dBm
2.4G WLAN	802.11b: 2412~2472MHz	16 +± 1 dBm
	802.11g: 2412~2472MHz	18 ± 1 dBm
	802.11n (20MHz): 2412~2472MHz	17 ± 1 dBm
	802.11n (40MHz): 2422~2462MHz	16 ± 1 dBm
2.4G WLAN 14CH	802.11b: 2471-2497MHz	18 ± 1 dBm

Note: Wireless charging does not require radio certification in Japan.


FLEXBOX
USB-C®
QSFP
+
28
56
112
DD
FLEXOPTIX
SFP
+
28
56
112
DD
OSFP
OSFP
Power/Reset
Button

Powering On/Off

Press and hold the small button on the back side of your FLEXBOX for 3 seconds to turn it on and off.

Hard reset FLEXBOX

Press and hold the power button on your FLEXBOX for 15 seconds until the blue LED indicator turns off briefly before lighting up solid blue again. Once the light remains steady, the reset process is complete.

Charging the Device

Charge your FLEXBOX using the provided cable in a standard USB port, unplug when the LED indicator is fully filled, and use only authorised chargers for safety.

Note:
A hard reset is only possible when the USB cable is not connected.
The FLEXBOX is designed to automatically power off after 10 minutes of inactivity when no operations are performed, and no USB power connection is detected. This energy-saving feature optimises power consumption and conserves energy whenever the device is idle.

Safety information

ESD Protection:

- Handle this product only in an ESD-safe environment. Use grounding measures like an anti-static wrist strap and avoid direct contact with connectors or circuitry to prevent damage from electrostatic discharge.

Power and Connectivity:

- Use the provided USB-C® cable only to connect the device.
- Use only one port (SFP-DD, QSFP-DD, or OSFP) at a time.
- Do not plug in defective transceivers.

Device Handling:

- Avoid touching the inside of the port shafts to prevent ESD damage.
- Do not leave transceivers in the device for an extended period to prevent heat damage.

- Unplug the device from the USB-C® port when not in use to prevent ESD damage.

Casing and Warranty:

- Do not open the casing; opening it will void the warranty.

Safe Operation:

- Do not use the device if it is visibly damaged, not functioning properly, exposed to rain or moisture, or subjected to unfavourable conditions.
- In case of doubt about the device's safe operation, discontinue its use and contact FLEXOPTIX for inspection.

Environmental Considerations:

- Keep the device away from direct sunlight, heat sources, moisture, dust, and vibrations.
- Do not place the device near water sources or on carpets, blankets, or similar materials.

Battery Usage

Replacement of a Battery with Incorrect Type:
Replacing a battery with an incorrect type can compromise the protection.
Le remplacement d'une batterie par un type incorrect peut compromettre la protection.

Improper Battery Disposal:
Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery can result in an explosion.
L'élimination d'une batterie dans un feu ou un four chaud, ou le concassage ou la découpe mécanique d'une batterie peut entraîner une explosion.

High-Temperature Environment Warning:
Leaving a battery in an extremely high-temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.
Laisser une batterie dans un environnement extrêmement chaud peut entraîner une explosion ou une fuite de liquide ou de gaz inflammable.

Low Air Pressure Warning:
A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.
Une batterie soumise à une pression atmosphérique extrêmement basse peut provoquer une explosion ou une fuite de liquide ou de gaz inflammable.

Location of Applied Nameplate:
The applied nameplate is located on the bottom or back of the product.
La plaque signalétique appliquée est située sur le dessous ou à l'arrière du produit.

Regulatory Compliance Statement

The provided information is a standard compliance statement typically found on electronic devices, affirming adherence to regulations set by the Federal Communications Commission (FCC) in the United States and Industry Canada (IC) standards. The FCC compliance states that the device must not cause harmful interference and should accept any received interference, even if it leads to undesired operation. In the context of Canadian regulations, the device is declared to comply with Canadian ICES-003 and NMB-003 standards. Additionally, there is a cautionary note specifying compliance with the Radio Standards Specification RSS-Gen, issue 5, emphasising adherence to general requirements for radio frequency devices in Canada. In essence, these statements confirm that the device meets the prescribed regulatory standards in both the United States and Canada, particularly concerning electromagnetic interference.

FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
  Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.
- To maintain compliance with FCC’s RF Exposure guidelines, this equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

IC Caution:

English:
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:

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.

To maintain compliance with RSS-102 RF Exposure guidelines, this equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

French:
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

L'exploitation est autorisée aux deux conditions suivantes:

1. *L'appareil ne doit pas produire de brouillage;*
2. *L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Pour se conformer aux lignes directrices d'exposition RF RSS-102, cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps. Utilisez uniquement l'antenne fournie.

Conformity

Hereby, Flexoptix GmbH declares that the radio equipment type FLEXBOX is in compliance with cETLus safety according to UL62368 & CSA62368.

German (de):
VEREINFACHTE EU-KONFORMITÄTSERKLÄRUNG
Hiermit erklärt Flexoptix GmbH, dass der Funkanlagentyp FLEXBOX der Richtlinie 2014/53/EU und 2011/65/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: flexoptix.net/FLEXBOX

English (en):
SIMPLIFIED EU DECLARATION OF CONFORMITY
Hereby, Flexoptix GmbH declares that the radio equipment type FLEXBOX is in compliance with Directive 2014/53/EU and 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address: flexoptix.net/FLEXBOX

French (fr):
DECLARATION UE DE CONFORMITE SIMPLIFIEE
Le soussigné, Flexoptix GmbH, déclare que l'équipement radioélectrique du type FLEXBOX est conforme à la directive 2014/53/UE et 2011/65/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: flexoptix.net/FLEXBOX

Spanish (es):
DECLARACIÓN UE DE CONFORMIDAD SIMPLIFICADA
Por la presente, Flexoptix GmbH declara que el tipo de equipo radioeléctrico FLEXBOX es conforme con la Directiva 2014/53/UE y 2011/65/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: flexoptix.net/FLEXBOX

Italian (it):
DICHIARAZIONE DI CONFORMITÀ UE SEMPLIFICATA
Il fabbricante, Flexoptix GmbH, dichiara che il tipo di apparecchiatura radio FLEXBOX è conforme alla direttiva 2014/53/UE e 2011/65/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: flexoptix.net/FLEXBOX

Bulgarian (bg):
ОПРОСТЕНА ЕС ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ
С настоящото Flexoptix GmbH декларира, че този тип радиосъоръжение FLEXBOX е в съответствие с Директива 2014/53/ЕС и 2011/65/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: flexoptix.net/FLEXBOX

Czech (cs):
ZJEDNODUŠENÉ EU PROHLÁŠENÍ O SHODĚ
Tímto Flexoptix GmbH prohlašuje, že typ rádiového zařízení FLEXBOX je v souladu se směrnicí 2014/53/EU a 2011/65/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: flexoptix.net/FLEXBOX

Danish (da):
FORENKLET EU-OVERENSSTEMMELSESERKLÆRING Hermed erklærer Flexoptix GmbH, at radioudstyrstypen FLEXBOX er i overensstemmelse med direktiv 2014/53/EU og 2011/65/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: flexoptix.net/FLEXBOX

Estonian (et):
LIHTSUSTATUD ELI VASTAVUSDEKLARATSIOON Käesolevaga deklareerib Flexoptix GmbH, et käesolev raadioseadme tüüp FLEXBOX vastab direktiivi 2014/53/EL ja 2011/65/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: flexoptix.net/FLEXBOX

Greek (el):
ΑΠΛΟΥΣΤΕΥΜΕΝΗ ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΕΕ
Με την παρούσα ο/η Flexoptix GmbH, δηλώνει ότι ο ραδιοεξοπλισμός FLEXBOX πληροί την οδηγία 2014/53/ΕΕ και 2011/65/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: flexoptix.net/FLEXBOX

Croatian (hr):
POJEDNOSTAVLJENA EU IZJAVA O SUKLADNOSTI
Flexoptix GmbH ovime izjavljuje da je radijska oprema tipa FLEXBOX u skladu s Direktivom 2014/53/EU i 2011/65/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: flexoptix.net/FLEXBOX

Latvian (lv):
VIENKĀRŠOTA ES ATBILSTĪBAS DEKLARĀCIJA
Ar šo Flexoptix GmbH deklarē, ka radioiekārta FLEXBOX atbilst Direktīvai 2014/53/ES un 2011/65/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: flexoptix.net/FLEXBOX

Lithuanian (lt):
SUPAPRASTINTA ES ATITIKTIES DEKLARACIJA
Aš, Flexoptix GmbH, patvirtinu, kad radijo įrenginių tipas FLEXBOX atitinka Direktyvą 2014/53/ES ir 2011/65/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: flexoptix.net/FLEXBOX

Hungarian (hu):
EGYSZERŰSÍTETT EU-MEGFELELŐSÉGI NYILATKOZAT Flexoptix GmbH igazolja, hogy a FLEXBOX típusú rádióberendezés megfelel a 2014/53/EU és 2011/65/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: flexoptix.net/FLEXBOX

Maltese (mt):
DIKJARAZZJONI SSIMPLIFIKATA TA' KONFORMITÀ TAL-UE B'dan, Flexoptix GmbH, niddikjara li dan it-tip ta' tagħmir tar-radju FLEXBOX huwa konformi mad-Direttiva 2014/53/UE u 2011/65/UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: flexoptix.net/FLEXBOX

Dutch (nl):
VEREENVOUDIGDE EU-CONFORMITEITSVERKLARING
Hierbij verklaar ik, Flexoptix GmbH, dat het type radioapparatuur FLEXBOX conform is met Richtlijn 2014/53/EU en 2011/65/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: flexoptix.net/FLEXBOX

Polish (pl):
UPROSZCZONA DEKLARACJA ZGODNOŚCI UE
Flexoptix GmbH niniejszym oświadcza, że typ urządzenia radiowego FLEXBOX jest zgodny z dyrektywą 2014/53/UE i 2011/65/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: flexoptix.net/FLEXBOX

Portuguese (pt):
DECLARAÇÃO UE DE CONFORMIDADE SIMPLIFICADA
O(a) abaixo assinado(a) Flexoptix GmbH declara que o presente tipo de equipamento de rádio FLEXBOX está em conformidade com a Diretiva 2014/53/UE e 2011/65/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: flexoptix.net/FLEXBOX

Romanian (ro):
DECLARAȚIA UE DE CONFORMITATE SIMPLIFICATĂ
Prin prezenta, Flexoptix GmbH declară că tipul de echipamente radio FLEXBOX este în conformitate cu Directiva 2014/53/UE și 2011/65/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: flexoptix.net/FLEXBOX

Slovak (sk):
ZJEDNODUŠENÉ EÚ VYHLÁSENIE O ZHODE
Flexoptix GmbH týmto vyhlasuje, že rádiové zariadenie typu FLEXBOX je v súlade so smernicou 2014/53/EÚ a 2011/65/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: flexoptix.net/FLEXBOX

Slovenian (sl):
POENOSTAVLJENA IZJAVA EU O SKLADNOSTI
Flexoptix GmbH potrjuje, da je tip radijske opreme FLEXBOX skladen z Direktivo 2014/53/EU in 2011/65/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: flexoptix.net/FLEXBOX

Finnish (fi):
YKSINKERTAISTETTU EU-VAATIMUSTENMUKAISUUSVAKUUTUS
Flexoptix GmbH vakuuttaa, että radiolaitetyyppi FLEXBOX on direktiivin 2014/53/EU ja 2011/65/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: flexoptix.net/FLEXBOX

Swedish (sv):
FÖRENKLAD EU-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE
Härmed försäkrar Flexoptix GmbH att denna typ av radioutrustning FLEXBOX överensstämmer med direktiv 2014/53/EU och 2011/65/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: flexoptix.net/FLEXBOX

WWAN and Wifi/ Bluetooth function only support firmware upgrade, firmware upgrade process is recommended on the desktop, Don‘’t hold in the hand

WWAN and Wifi/ Bluetooth function only support firmware upgrade, firmware upgrade process is recommended on the desktop, Don‘’t hold in the hand

FLEXOPTIX GmbH
Muehltalstr. 153
64297 Darmstadt,
Germany

Phone: +49 6151 62904-0
Fax: +49 6151 62904-99
E-mail: info@flexoptix.net