

FLEXOPTIX FB5 Configure Universal Transceivers Instruction Manual

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Safety information

Please keep this safety information.

Failure to observe these precautions could result in serious injury to a person and/or material damage!

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 5W - 7.5W - 9W - 15W max.

Output: (Under the optimal conditions)

RF Power Outputs

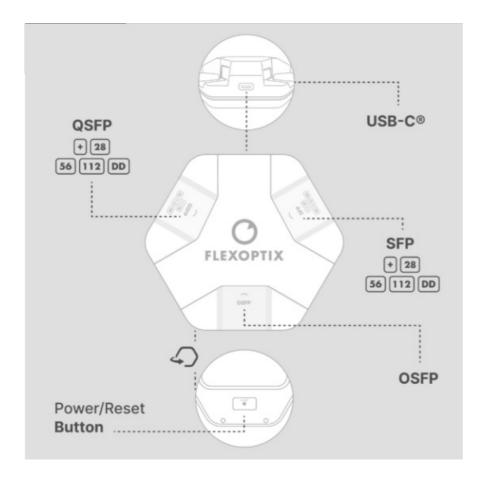
| CE | | Power |
|-------------------|-------------------------------|---------------------|
| BLE 1M | 2402~2480MHz | 6 ± 2 dBm |
| | 2402~2480MHz | 6 ± 2 dBm |
| BLE 2M | 802.11b: 2412~2472MHz | 18 ± 2 dBm |
| DEL ZIVI | | |
| 2.4G WLAN | 802.11g: 2412~2472MHz | 18 ± 2 dBm |
| | 802.11n (20MHz): 2412~2472MHz | 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 |
| | 2402~2480MHz | |
| BLE 2M 2.4G WLAN | 802.11b: 2412~2462MHz | 5 ± 2 dBm 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 BLE 2M | 2402~2480MHz 2402~ 2480MHz | 6.5 ± 1 dBm 6.5 ± 1 dBm |
| | 802.11b: 2412~2472MHz | 16 +± 1 dBm |
| 2.4G WLAN | 802.11g: 2412~2472MHz 802.11n (20MHz): 2412~2472MHz | 18 ± 1 dBm 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.

FLEX BOX



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 unfavorable 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.

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.

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.

Low Air Pressure Warning:

A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or

Location of Applied Nameplate:

The applied nameplate is located on the bottom or back of the product.

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:

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.

Conformity

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

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

CUSTOMER SUPPORT

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Documents / Resources



FLEXOPTIX FB5 Configure Universal Transceivers [pdf] Instruction Manual FB5, FB5 Configure Universal Transceivers, Configure Universal Transceivers, Universal Transceivers, Transceivers

References

User Manual

Manuals+, Privacy Policy

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