

WXX017BK1E

Wireless Charger 10W

User Manual Rev 0.5.0



Revision history

Date	Version	Description
03/12/2024	V0.1.0	Draft version
16/09/2025	V0.2.0	Updated - FCC and IC statement - Product QR code label
26/09/2025	V0.3.0	Updated model number WXX017BK1E
20/10/2025	V0.4.0	Integrate FCC and IC statement
21/10/2025	V0.5.0	Update the table

Approvals

Name and surname	Role	Responsibility	Date
F. Caramaschi	Head of Engineering	Owner	26/09/2025

S. Carlone	Quality	Reviewer	26/09/2025
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1. General description

The WXX017BK1E is a wireless charging module designed to be integrated with a specific surface to add wireless charging capability to re-charge phone.

The charger is compatible with Qi standard up to 5W BPP. It is also capable of charging Apple phones up to 7.5W and Samsung PPDE up to 10W.

The module can be connected to any 12V rail coming from an industrial machine. Diagnostic and command signals are available for RS-232 interface.

2. Package Content

1x Wireless Charger module to be embedded (screws not included)

3. Electrical characteristics

3.1. Main characteristics

Rated Input Voltage	4.2V- 17V
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Operating Voltage Range	10.8V- 14.4V ¹
Rated Input Current	1.4 A Max
Operating Frequency	115-145 Khz
Rated Output Power	5w Qi Bpp 7.5w Apple Fast Charge 10w Samsung PPDE

3.2. Cable specifications

Referring to *Section 5. Mechanical specifications* for a full mechanical cable specification.

3.2.1. Connector Type

The input connector of the cable is a male, 2 row, 8 pins Molex Micro-Fit 3.0 Plug connector with part number 430200801.

¹ Ripple Voltage:

*) Typical: 600mVpp @12Vdc;

*) Worst case at lower_voltage: 1.2Vpp @11.4Vdc

*) Worst case at upper_voltage: 600mVpp @14.1Vdc

*) Ripple Voltage Frequency: from 50Hz to 1kHz.

Signal lines are only for burning programs updates and not available for public use.

3.2.2. Connector Pinout

Pin Number	Name	RS-232	AWG	Gauge Color
1	V _{CC}	-	24	Red
2	GND_in	GND 5	24	Grey
3	Tx	RXD+ 2	24	Orange
4	Rx	TXD+ 3	24	Green
5	GND	-	24	Black
6	PWR_en	RTS+ 7	24	Yellow
7	nIRQ	CTS+ 8	24	Blue
	ND_shield		24	White

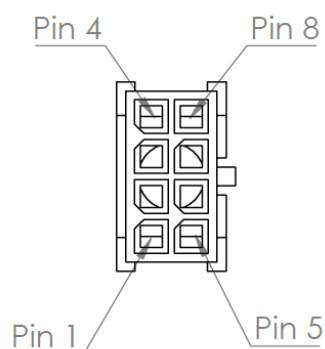


Fig 1 - Connector 2D Pin View

4. Mechanical characteristics

4.1. Mechanical dimensions

Dimensions	102.5 x 43 x 10.35 mm (without cable)
Weight	65 g
Cable Length	150mm +/- 10mm
Installation Distance	3mm to 4mm

4.2. Drawings

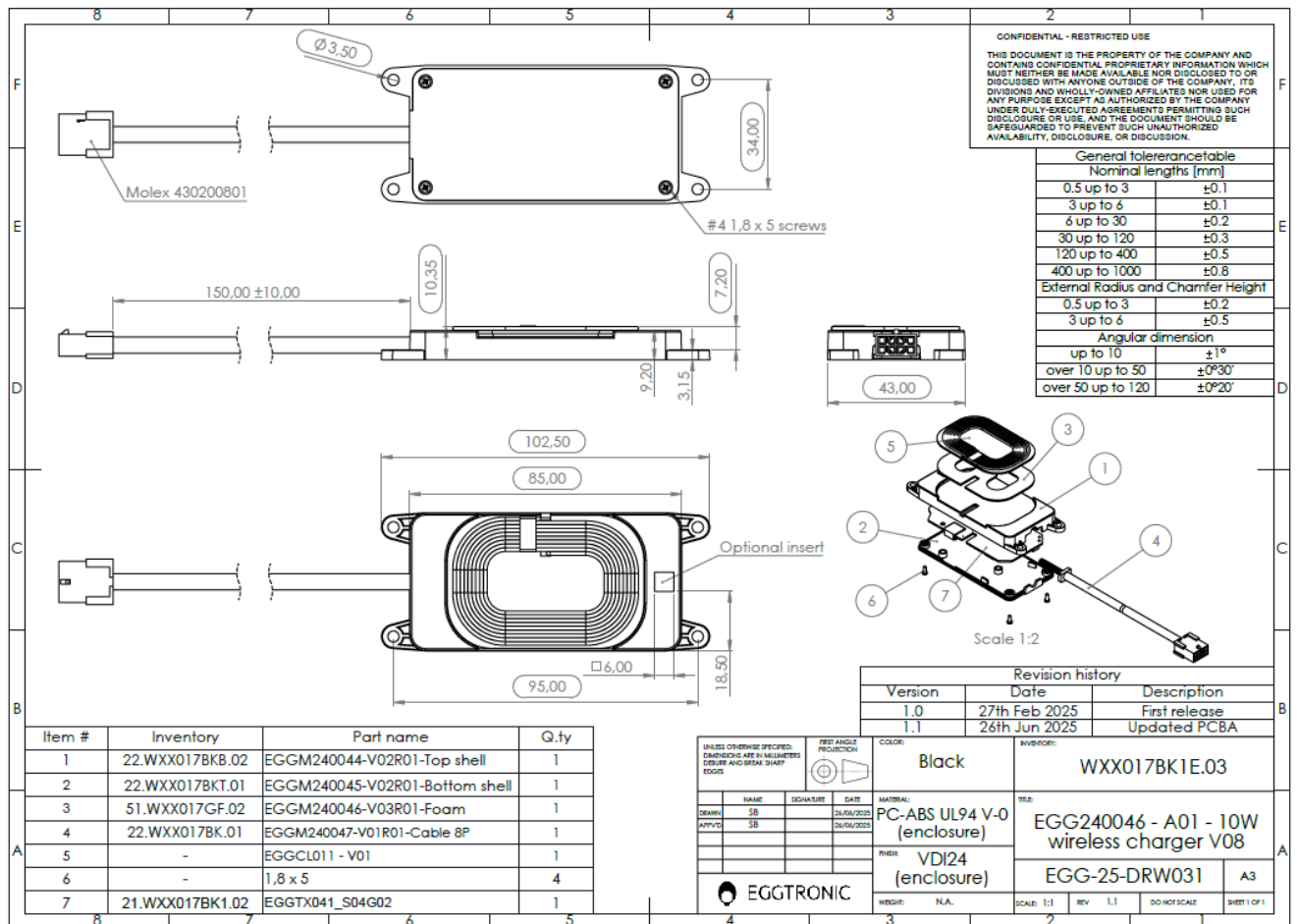


Fig 2 - Product 2D Drawing

5. Instructions

NOTE: only a skilled person should be allowed to install, replace, or service this equipment.

Mount the module inside the machine according to the installation distance

Connect the machine cable.

Place the smartphone with the display facing up on the center of the wireless charger or adjust the placement position until the charging process starts.

When the smartphone is fully charged, remove it from the wireless charger.

6. General usage tips

Do not place any metal objects between the smartphone and the wireless charger .

To ensure more effective charging, remove protective cases.

Charging time depends on battery capacity, phone input specifications, current phone energy consumption, phone position on the wireless charger, charging distance, etc.

7. Troubleshooting

Your device is not compatible with the Qi wireless charging standard.

Your device is placed on the wireless charger in a wrong way.

See the manual of your smartphone to find the exact place of the built-in Qi wireless charging receiver.

A protective case of the smartphone or another object on the back of the smartphone is blocking the charging process.

8. Safety information

Do not drop or cause an impact on the device.

Do not disassemble, modify or repair your device.

Keep away from humidity and heat.
Keep it beyond the reach of children.

9. Assembly notes

Panel mounting by #4 M3 screws

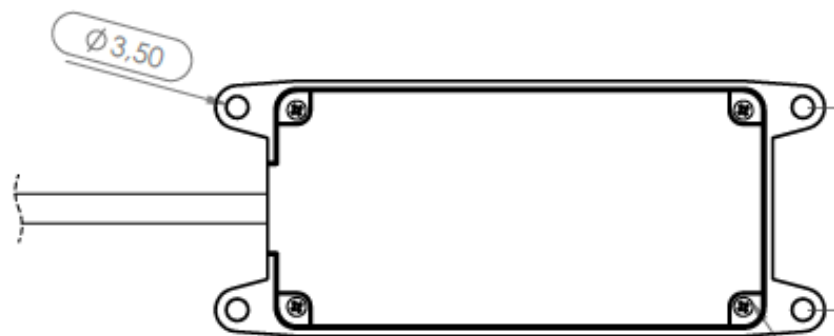


Fig 3 - Mounting Screws Position

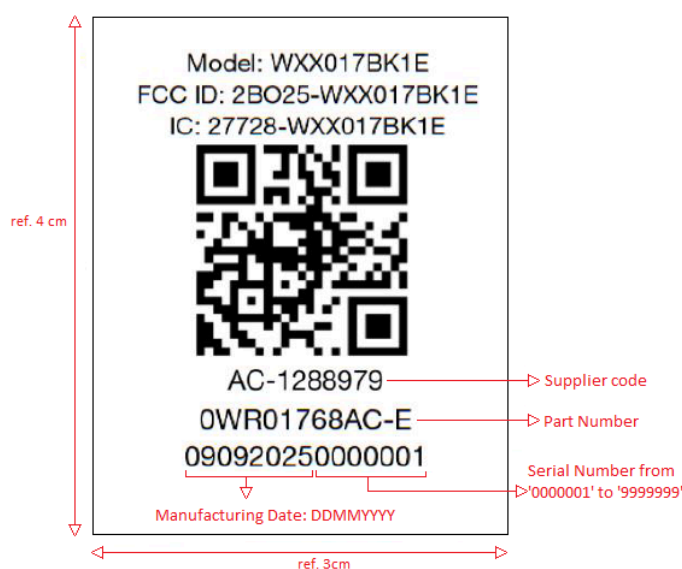
10. Environmental

STORAGE TEMPERATURE	-20°C/70°C
STORAGE RELATIVE HUMIDITY	0%-95%

OPERATING TEMPERATURE	0°C/50°C ²
OPERATING RELATIVE HUMIDITY	10% - 95%, non condensing

11. Packaging information

Each device is uniquely identified through a dedicated QR-Code. Below the structure:



² The WXX017BK1E monitors the coil temperature, when temperature exceeds 80°C charging reduce the power gradually up to 65°C . In case temperature rises over 85°C the WXX017BK1E shuts down. Additional protection is based on HW with NTC that shutdown the module once temperature goes over 110°C.

One label is attached on the device and the second label floating.

Each device is packed in a dedicated plastic bag and packed in an outer industrial carton providing total 100pcs devices per carton.

12. Certification

The WXX017BK1E.00 has the following certification:

- **FCC** (FCC Part 15C, FCC Part 15B Part B)
- **IC** (RSS-216, ICES-003)
- **CE: RED - LVD - EMC** (EN IEC 62368-1:2020+A11:2020, EN 55032:2015+A11:2020+A1:2020, EN 55035:2017+A11:2020, ETSI EN 301 489-1 V2.2.3, ETSI EN 301 489-3 V2.1.1, ETSI EN 301 489-17V3.2.4, ETSI EN 300330, EN 50665)
- **CE: RoHS - REACH** (IEC62321, EC 1907/2006)
- **UL** (UL62368)
- **KC** (KCC-RF+EMC)
- **PSE** (J62368+55032/55035)

FCC STATEMENT

List of applicable Fcc rules:

This device complies with FCC part 15C

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

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.

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 a minimum distance of 20 cm between the radiator and your body.

FCC ID: 2BO25-WXX017BK1E

If the fcc identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2BO25-WXX017BK1E Or Contains FCC ID: 2BO25-WXX017BK1E"

Information on test modes and additional testing requirements:

Any final host product with the modular transmitter installed should be under test according to guidance given in KD8 996369 D04.

When something wrong happens in configuring test modes for host product with module, host product manufacturer should coordinate with module manufacturer for technical support, it is recommended that some investigative measurements should be taken to confirm that host product with module installed does not exceed the spurious emissions limits or band edge limits

Additional testing, Part 15 Subpart B disclaimer:

The modular transmitter is only Fcc authorized for the specific rule parts (Fcc Part 15C) lit on the grant, and that the host product manufacturer is responsible for compliance to any other fcc rules that apply to the host not covered by the module transmitter grant of certification. The final host product still requires Part 15 subpart B compliance testing with the modular transmitter installed when contains digital circuitry.

Summarize the specific operational use conditions:

This device and its antennas, must not be co-located or operating in conjunction with any other antenna or transmitter, and the module should be installed at a minimum distance of 20 cm away from person nearby, The host product manufacturer should state this information to the host instruction manual.

Trace antenna designs

Not applicable.Antennas:

Antenna Type: Coil Antenna

Antenna Gain: 0dBi

RSS-Gen statement

RSS-Gen Issue 5 "&" RSS-Gen numéro 5

- 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:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

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

RF exposure statement:

The equipment complies with IC Radiation exposure limit set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 10cm between the radiator and your body.

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with IC multi-transmitter product procedures. Referring to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without reassessment permissive change.

This module is limited to OEM installation only and must not be sold to end-users, end-user has no manual instructions to remove or install the device, only software or operating procedure shall be placed in the end-user operating manual of final products. Additional testing and certification may be necessary when multiple modules are used.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. The final end product must be labeled in a visible area with the following "

Contains IC: 27728-WXX017BK1E ".

- French:

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:

(1) Cet appareil ne doit pas causer d'interférences.

(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

Tout changement ou modification non expressément approuvé par la partie responsable de la conformité pourrait annuler l'autorité de l'utilisateur à utiliser l'équipement.

Déclaration d'exposition RF:

L'équipement est conforme à la limite d'exposition aux radiations de la IC établie pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 10 cm entre le radiateur et votre corps.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionner en association avec une autre antenne ou transmetteur.

IC: 27728-WXX017BK1E

Ce dispositif et ses antennes ne doivent pas être co-localisées avec aucun autre émetteur sauf conformément aux procédures de produit multi émetteur IC. En se référant à la politique des multi émetteurs, les multi émetteurs et les modules peuvent être exploités simultanément sans changement permis de réévaluation.

Cet appareil et son antenne(s) ne doivent pas être co-localisés ou fonctionner en association avec une autre antenne ou transmetteur.

Ce module est limité à l'installation OEM seulement et ne doit pas être vendu aux utilisateurs finaux, l'utilisateur final n'a pas d'instructions manuelles pour enlever ou installer l'appareil, seul logiciel ou procédure d'exploitation doit être placé dans le manuel d'exploitation de l'utilisateur final des produits finaux. Des essais et une certification supplémentaires peuvent être nécessaires lorsque plusieurs modules sont utilisés. "

Toute modification ou modification qui n'est pas expressément approuvée par le fabricant pourrait annuler l'autorisation de l'utilisateur à exploiter ce matériel.

Le produit final doit être étiqueté dans une zone visible avec

« Contient IC : 27728-WXX017BK1E ».

