

RYGA315

315MHz Wireless EV Charge Port Opener Module for AC Charging Gun

Datasheet



PRODUCT DESCRIPTION

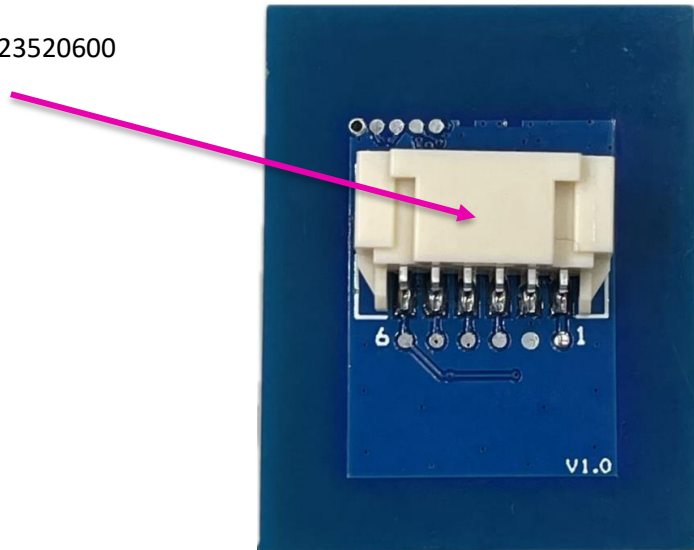
RYGA315 is a 315MHz wireless transmission module that can wirelessly open the Tesla® charge port cover and is suitable for use with AC charging guns.

FEATURES

- Can open the Tesla® charger port cover.
- Compliant with the NACS standard.

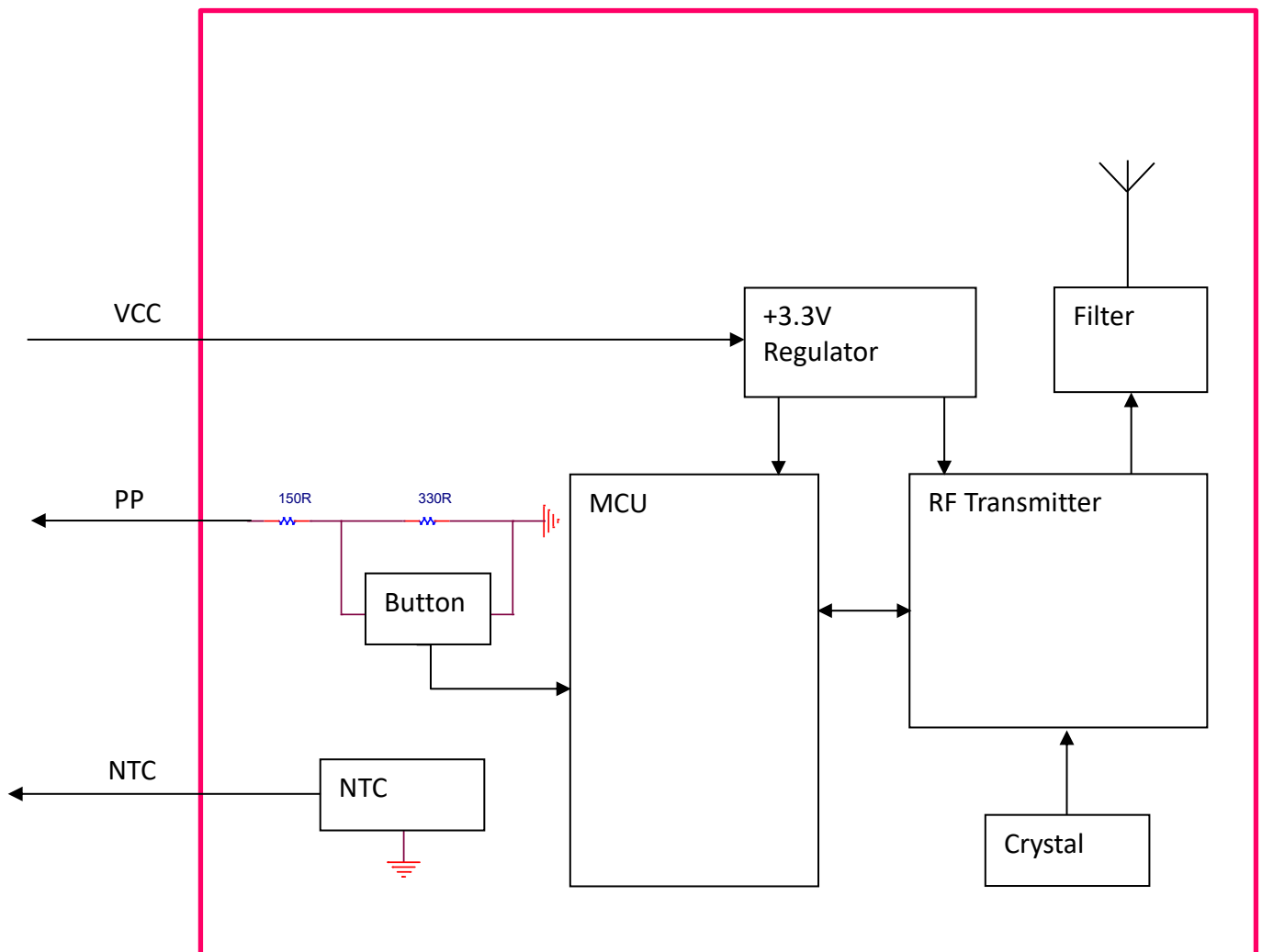
PIN DESCRIPTION

Molex® 5023520600



Pin	Name	I/O	Condition
1	VCC	P	Power Supply
2	GND	I	Ground
3	PP	O	Connect the PP (Proximity Pilot) pin of the charging gun
4	NTC	O	TDK NTCG103UH103HT1 10K Ohms 3950K
5	NC	-	
6	NC	-	

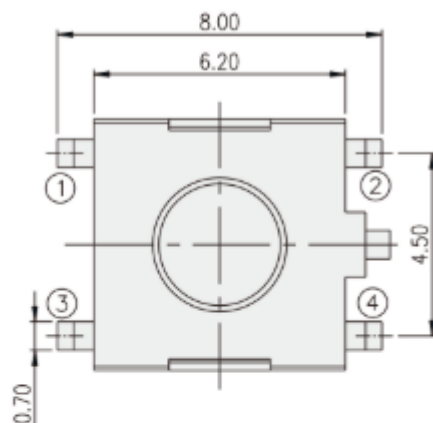
BLOCK DIAGRAM



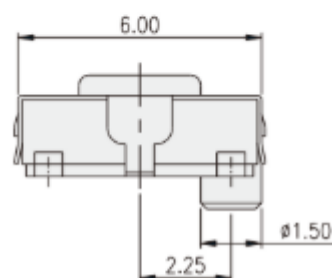
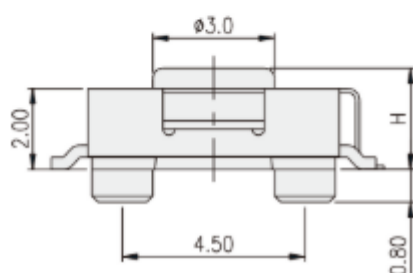
SPECIFICATION

Item	Min.	Typical	Max.	Unit	Condition
Power supply	4.5	5	13.5	V	VCC
RF Output power		70		dBuV/m	@3m
Frequency range		315		MHz	
Frequency accuracy		±30		ppm	
Transmit Mode current		15		mA	
Idel Mode current	2.4	2.8	3.2	mA	
Operating Temperature	-40	25	+85	°C	
Weight		5		g	

BUTTON SPECIFICATION



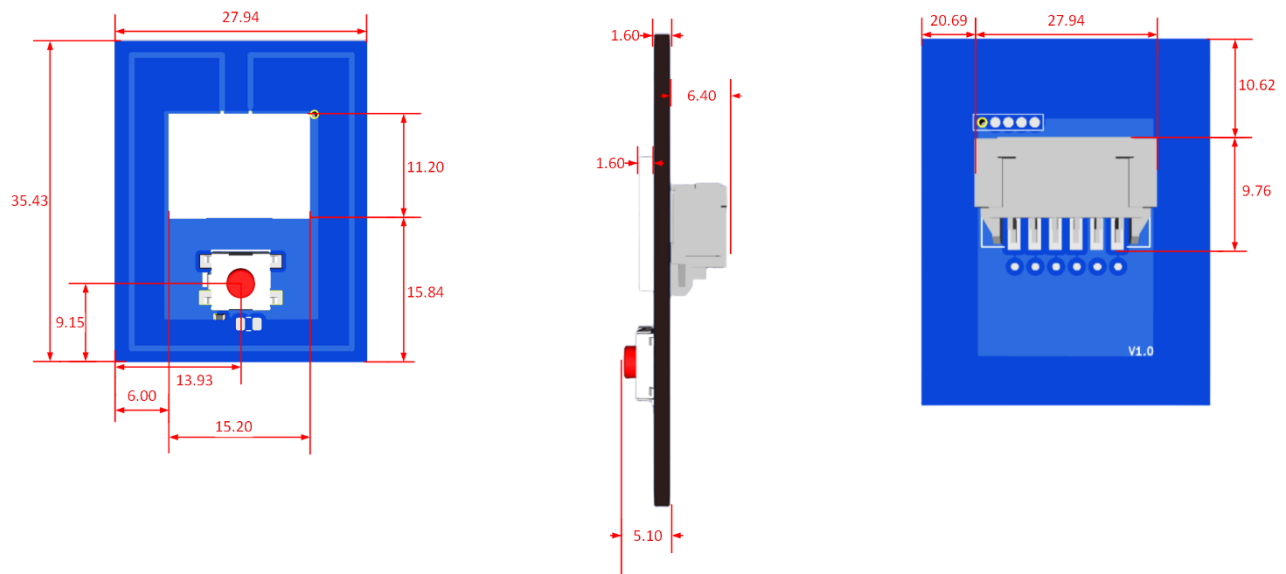
PART NO.	H
DTS□ZMPL-61	2.50
DTS□ZMPL-62	3.10
DTS□ZMPL-63	3.50
DTS□ZMPL-64	5.25



Unit : mm

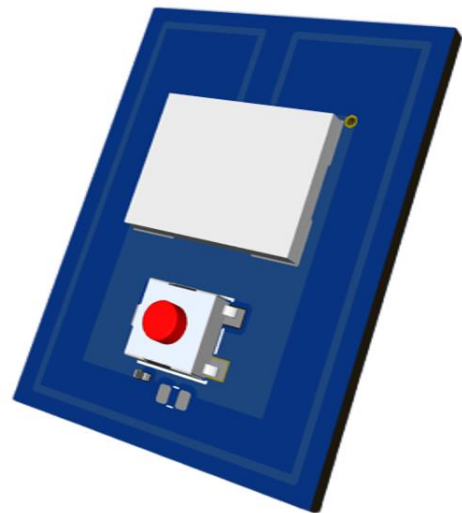
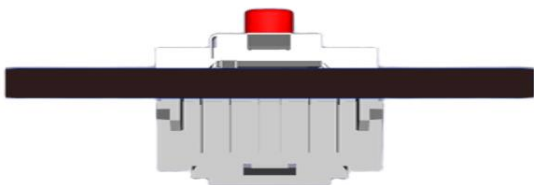
Item	Min.	Typical	Max.	Unit	Condition
Operation Force	210	260	310	g	
Electrical Life		50K		Cycles	Cycle - Return to the original position
Stroke		0.25		mm	+0.2mm/-0.1mm

DIMENSIONS



Unit : mm

*For more detail, please refer to the 3D model Information.



CERTIFICATIONS

Federal Communication Commission Interference Statement

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 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 Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC 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.

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

The antennas 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.

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.

Additional testing regarding to Part 15 Subpart B disclaimer might be required. The modular transmitter is only FCC authorized for the specific rule parts 15.231 listed 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 modular transmitter grant of certification. The host product may need to be evaluated against the FCC Part 15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.

The host responsible party integrator must perform EMC testing of the Module in simultaneous transmission operations while integrated into the host according to KDB 996369 D04 Module Integration Guide. Only Grantees are permitted to make permissive changes, the host manufacturer

shall contact us if the module will be used differently than granted.

Host manufacturer shall be responsible for ensuring the final product is labeled with "contains FCC ID: 2BF7W-VCNB1"

•Canadian Compliance Statement

This device complies with Industry Canada licence-exempt RSS 210 standard.

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

Exposure

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.

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

The antennas 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.

Host manufacturer shall be responsible for ensuring the final product is labeled with "contains IC:32387-VCNB1"

Cet appareil est conforme aux limites d'exposition aux rayonnements RF de la FCC établies pour un environnement non contrôlé. Il doit être installé et utilisé à une distance minimale de 20 centimètres entre l'antenne et le corps.

Cet émetteur ne doit pas être installé à proximité d'une autre antenne ou d'un autre émetteur, ni fonctionner simultanément avec ceux-ci.

Les antennes utilisées pour cet émetteur doivent être installées de manière à maintenir une distance minimale de 20 cm entre l'antenne et toute personne, et ne doivent pas être installées à proximité d'une autre antenne ou d'un autre émetteur, ni fonctionner simultanément avec ceux-ci.

Antenna Table

Brand	Antenna Model	Antenna Type	Qualified Region
REYAX	RYGx315 On board antenna	PCB antenna	FCC/IC