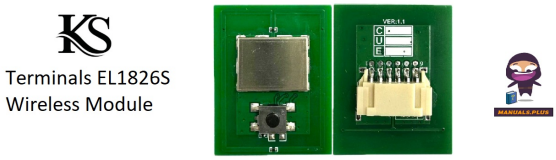

K S Terminals EL1826S Wireless Module User Manual

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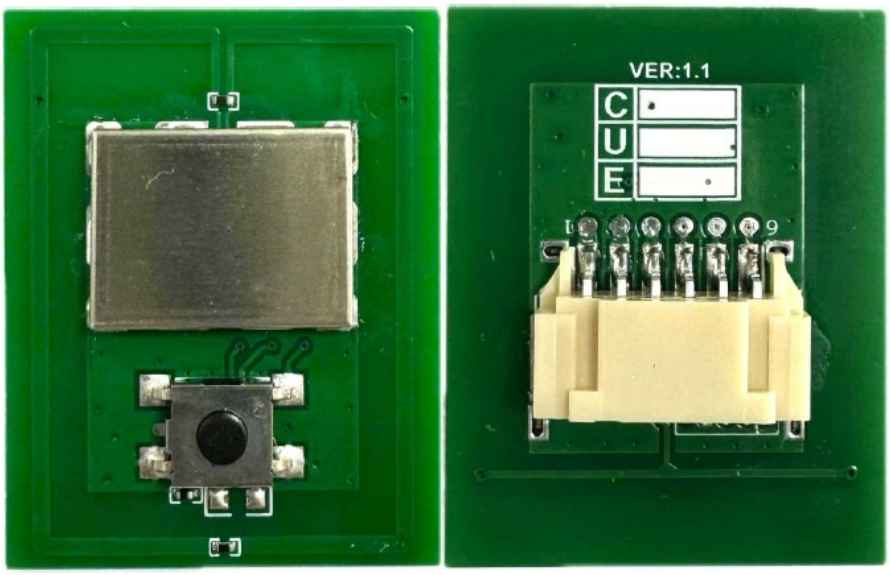
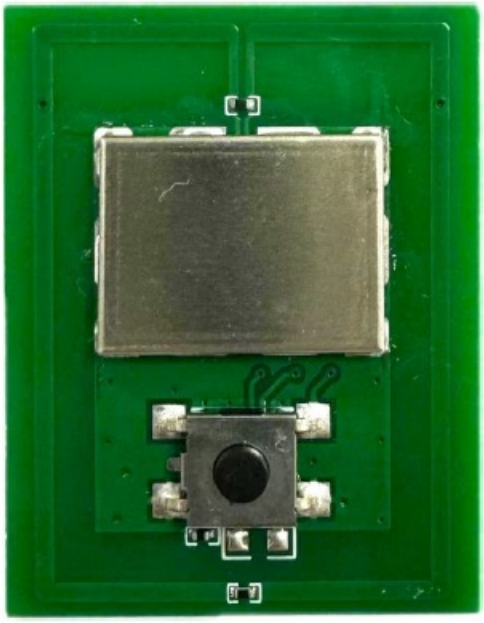


Introduction to EL1826SF1

The EL1826SF1 is a wireless transmitter module operating in the 315Mhz band.
EL1826SF1 can be used to unlock the charging cover of new energy vehicles. It can be used in various charging devices with optional charging power and wireless remote control to unlock the charging cover.



EL1826SF1 Main Features

- Wireless unlocking new energy vehicle charging cover plate
- Customizable charging current
- Support 10 A/16 A/32 A/48 A/63 A
- Wide input power range (5 ~ 12VDC)
- Convenient wiring
- Production is free of debugging

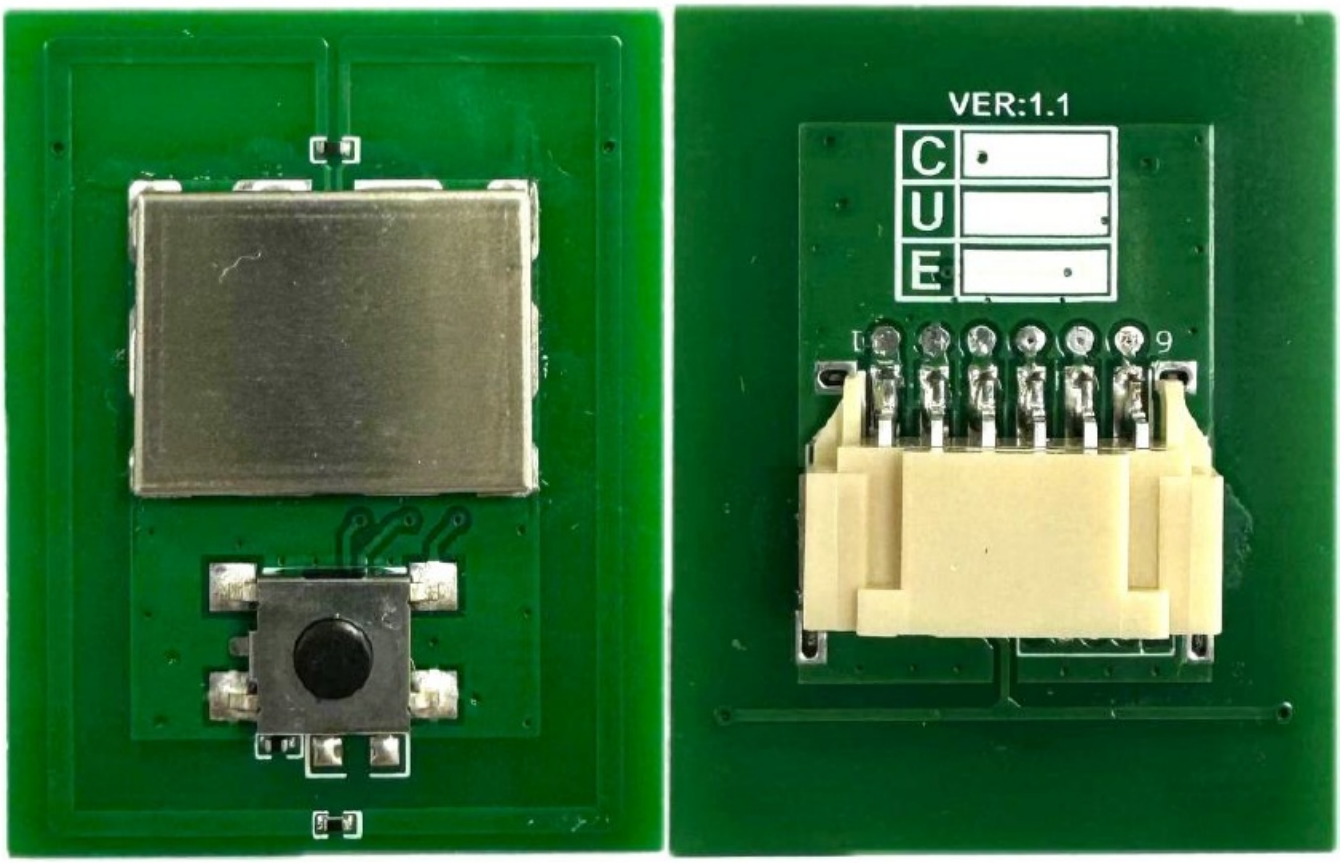
Application of EL1826SF1
Main purpose: All kinds of compatible charging piles and chargers

Main performance parameters of EL1826SF1

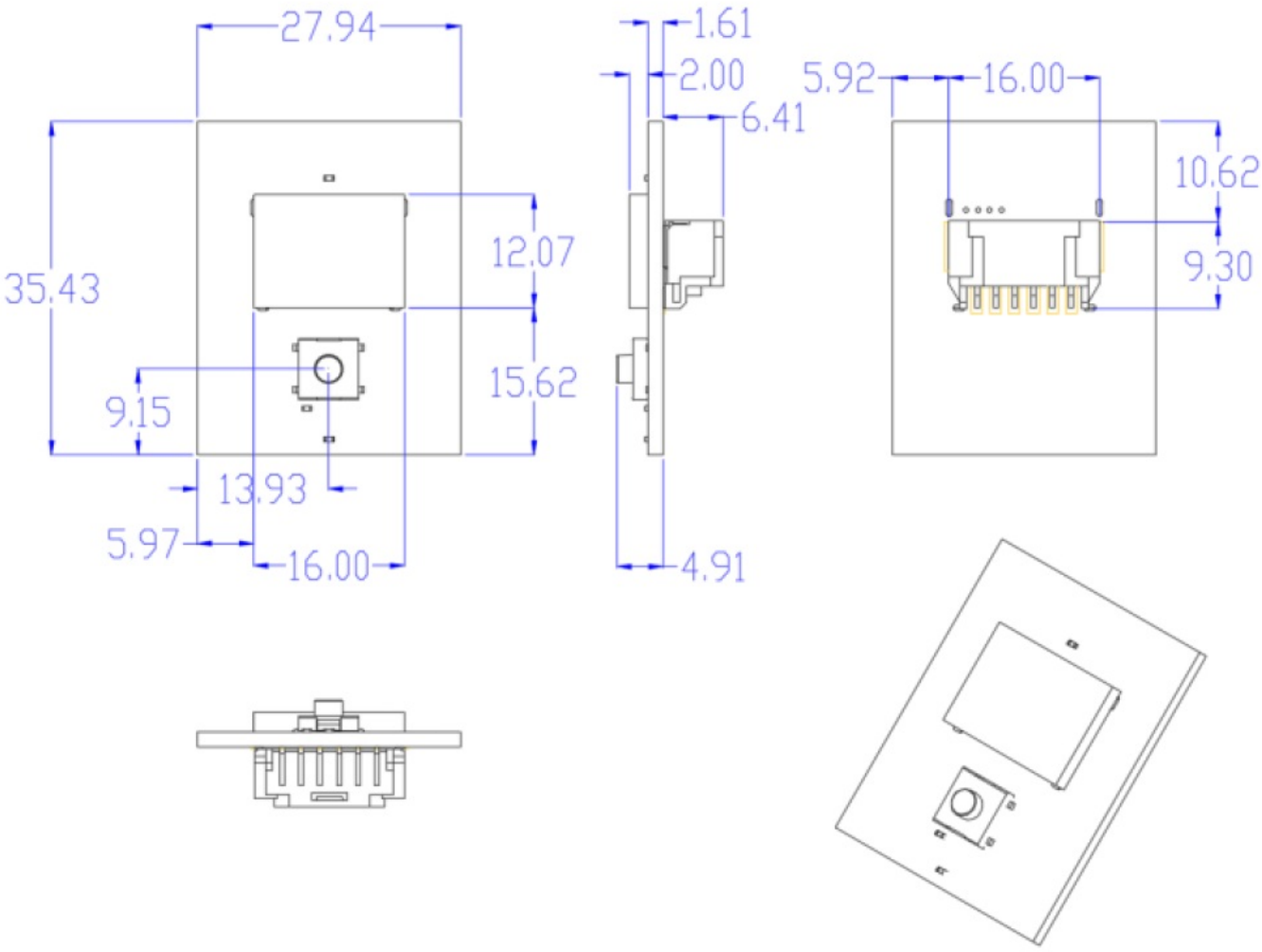
EL1826SF1

Category	Description	Minimum value	Typical value	Maximum value	Unit
Operating voltage		5	5	12	V
Operating frequency			315		MHz
Operating temperature range		-30		+85	℃
Operating current		5	10	15	mA

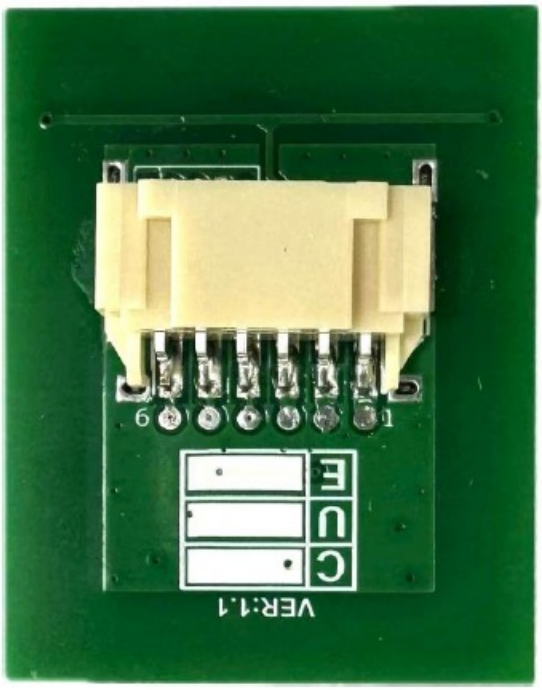
Outline drawing of EL1826SF1 wireless module



Dimensional drawing of EL1826SF1 wireless module (unit: mm)



Pin definition of EL1826SF wireless module (module front view)



In the figure above, the direction from right to left is 1 ~ 6 pins.

EL1826SF1:

Pin number	definition	Description
1	VCC	DC + 5 ~ 12V power input
2	GND	The power ground is also connected to the PE terminal of the gun head
3	PP	Connect the PP (CC) terminal of the gun head
4	NTC	Output pin of onboard 10 K NTC resistor, and the other pin of onboard NTC resistor is connected to GND
5	NC	
6	NC	

EL1826SF2:

Pin number	definition	Description
1	VCC	DC + 5 ~ 12V power input
2	GND	The power ground is also connected to the PE terminal of the gun head
3	PP	Connect the PP (CC) terminal of the gun head
4	PT1000_1	On-board PT1000 resistor output pin 1
5	PT1000_2	On-board PT1000 resistor output pin 2
6	Sstop	Onboard key (Ss top) output pin

Ordering information
Product model = product type + operating frequency band EL1826SF

Product model	Charging current	Packaging form
EL1826SF1-US-48A	48A	
EL1826SF2-US-48A	48A	

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: This device may not cause harmful interference, and This device must accept any interference received, including interference that may cause undesired operation.

Warning: 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 minimum distance 20cm between the radiator & your body.

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01

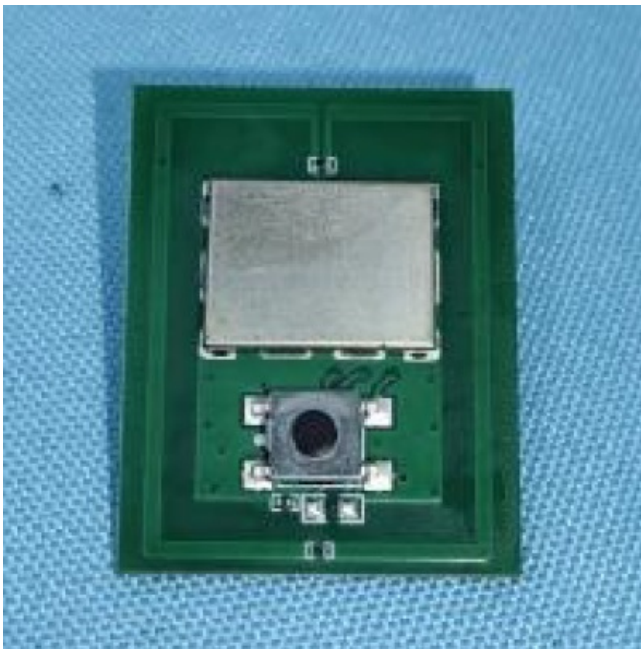
List of applicable FCC rules
FCC Part 15 Subpart C 15.231 & 15.207 & 15.209

Specific operational use conditions
Operation Frequency: 315MHz
Number of Channel: 1 Channels
Modulation Type: OOK
Antenna Type: PCB Antenna
Antenna Gain(Peak): 0.21 dBi (Provided by customer)

The module can be used for mobile or portable applications with a maximum 0.21 dBi antenna. The host manufacturer installing this module into their product must ensure that the final composit product complies with the FCC requirements by a technical assessment or evaluation to the FCC rules, including the transmitter operaition. The host manufacturer has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.

Limited module procedures
Not applicable. The module is a Single module and complies with the requirement of FCC Part 15.212.

Trace antenna designs
Not applicable. The module has its own antenna, and doesn't need a host's printed board microstrip trace antenna etc.



RF exposure considerations
The module must be installed in the host equipment such that at least 20mm is maintained between the antenna and users' body; and if RF exposure statement or module layout is changed, then the host product manufacturer required to take responsibility of the module through a change in FCC ID or new application. The FCC ID of the module cannot be used on the final product. In these circumstances, the host manufacturer will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

Antennas
Antenna Specification are as follows:
Antenna Type: PCB Antenna
Antenna Gain(Peak):0.21 dBi (Provided by customer)
This device is intended only for host manufacturers under the following conditions:
The transmitter module may not be co-located with any other transmitter or antenna;
The module shall be only used with the External antenna(s) that has been originally tested and certified with this module. The antenna must be either permanently attached or employ a 'unique' antenna coupler.

As long as the conditions above are met, further transmitter test will not be required. However, the host manufacturer is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

Label and compliance information
Host product manufacturers need to provide a physical or e-label stating "Contains FCC ID 2BF7W-VCNB0 with their finished product.

Information on test modes and additional testing requirements
Operation Frequency: 315MHz
Number of Channel: 1 Channels
Modulation Type: OOK
Antenna Type: PCB Antenna
Antenna Gain(Peak): 0.21 dBi (Provided by customer)

Host manufacturer must perform test of radiated & conducted emission and spurious emission, etc according to the actual test modes for a stand-alone modular transmitter in a host, as well as for multiple simultaneously transmitting modules or other transmitters in a host product.
Only when all the test results of test modes comply with FCC requirements, then the end product can be sold legally.

Additional testing, Part 15 Subpart B disclaimer
The modular transmitter is only FCC authorized for FCC Part 15 Subpart C 15.231 & 15.207 & 15.209 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. If the grantee markets their product as being Part 15 Subpart B compliant (when it also contains unintentional-radiator digital circuity), then the grantee shall provide a notice stating that the final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

Documents / Resources

	K S Terminals EL1826S Wireless Module [pdf] User Manual EL1826S Wireless Module, EL1826S, Wireless Module, Module

References

- User Manual