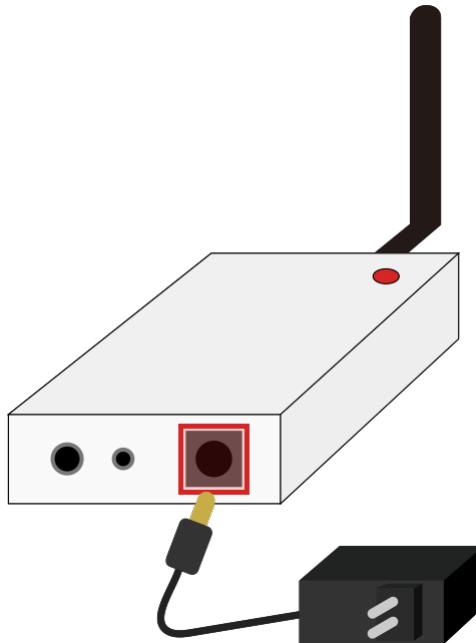


User's Manual

(KVL-C3-K01/KVL-R3-K01)

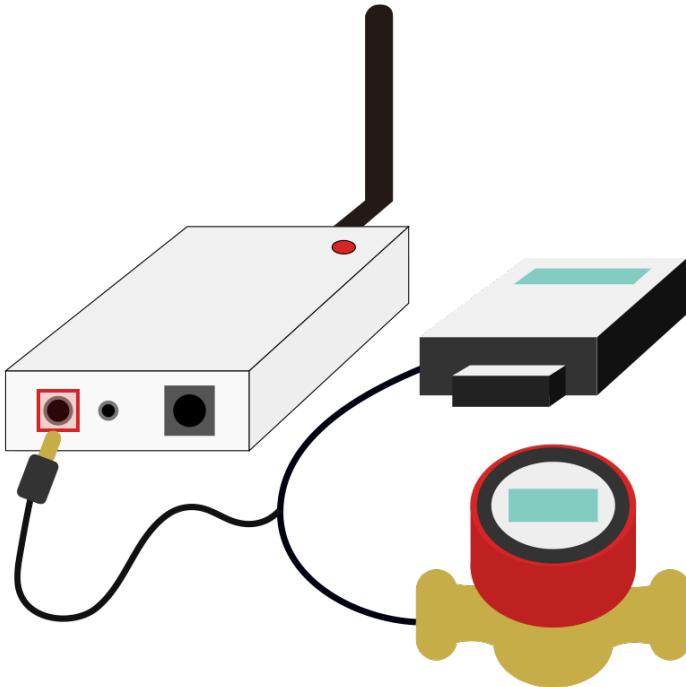
1. Power Connection
2. Connecting a measuring instrument
3. Terminal Description
4. Specification

1. Power Connection



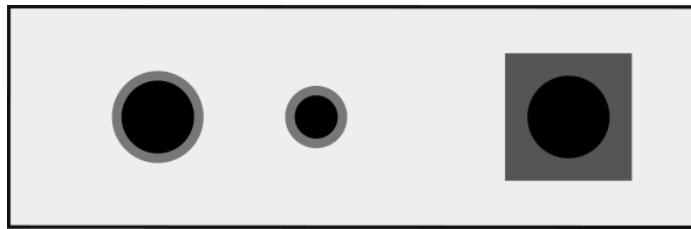
- a. Prepare a 12V/1A adapter.
- b. After Plugging the adapter into the AC outlet, connect the DC plug of the DC adapter to "DC IN" of the product.
- c. When the power connection is completed, the red LED on the top of the products lights up.

2. Connecting a measuring instrument



- a. Prepare a measuring instrument.
- b. Connect the measuring instrument and the product.
with dedicated cable through "METER" terminal.

3. Terminal Description



- a. Left 3.5mm round terminal: “METER” - External meter connection.
- b. Central 2.5mm round terminal: “UART” - monitoring and setting.
- c. Round terminal in the right square: “DC-IN” – Power connection.

4. Specification

RF	<ul style="list-style-type: none">.LoRA Technology RF modulation.Frequency : 902MHz ~ 928MHz
Interface Type	<ul style="list-style-type: none">· RS-485, DC-PLC Interface or M-Bus Interface (Interface : Optional Feature)
Operation Range	<ul style="list-style-type: none">· Maximum 3Km
Crypto Engine	<ul style="list-style-type: none">· AES-128
Rx Sensitivity	<ul style="list-style-type: none">· -137dBm
RF Tx Power	<ul style="list-style-type: none">· 0 ~ 14dBm
LED	<ul style="list-style-type: none">· Power Status, Operation Status
Power Supply	<ul style="list-style-type: none">· DC 12V 1.5A
Operating Temp.	<ul style="list-style-type: none">· -40° C ~ + 80° C
Size (Standards)	<ul style="list-style-type: none">· 112(H)x65(W)x17(D)mm

4. Specification

The revised User Manual does not contain the FCC required warning statements.

a. Rule Part 15.19(a)(3): 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.

b. Rule Part 15.21: The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.