

# **KE2 Thermsolutions KE2 EdgeManager Plus Videodoor Entry System Monitor User Guide**

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KE2 Thermsolutions KE2 EdgeManager Plus Videodoor Entry System Monitor



#### **Product Information**

The KE2 EdgeManager Plus (KE2-EM Plus) and KE2 EdgeManager Cell (KE2-EM Cell) are products offered by other solutions. These devices are designed to provide advanced management and control capabilities for HVAC and refrigeration systems.

The KE2-EM Plus and KE2-EM Cell offer features such as wireless connectivity, remote access, and alarm notifications. These devices can be accessed and controlled through a web-based dashboard. The KE2-EM Cell requires a GSM SIM card for internet connectivity or backup internet. It is compatible with GSM carriers.

# **Product Getting Started**

#### **Power On**

- 1. Plug the power cable into the power port of the KE2-EM.
- 2. Use the 12V/1.5A power adapter supplied with the KE2-EM to ensure proper operation.
- 3. To perform a Factory Reset, if necessary, hold down the Reset button for 10 seconds and then release. Caution: All user data will be cleared!

# Connecting to the KE2-EM

You can connect to the KE2-EM via Wi-Fi or Ethernet Cat5e cable. Choose the most convenient method.

- 1. A MicroSD card is pre-installed in the KE2-EM. Do not remove or replace it.
- 2. If using the KE2-EM Cell, install a GSM SIM card for internet or backup internet.

#### Accessing the KE2-EM Dashboard:

- 1. Open a web browser (Firefox, Chrome, Edge, Safari).
- 2. Visit <a href="https://em.ke2.io">http://192.168.50.1</a>.
- 3. If it's a new install, you will be guided using the EZ-Install Wizard.

#### **EZ-Install Wizard**

#### **Password Setup**

- 1. Enter all fields properly.
- 2. Click the Next Step button to proceed.
- 3. Confirm the management account credentials when prompted.

#### **Publish**

- 1. Satisfy all requirements.
- 2. The Next button will be available.

#### Wi-Fi Password

- 1. Follow the instructions to set up the Wi-Fi password.
- 2. The Next button will be available.

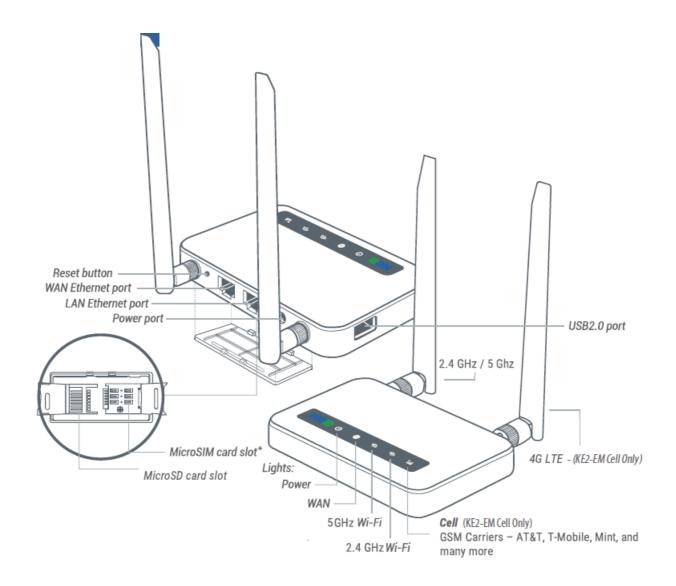
# Connectivity

This page helps you connect the KE2-EM to the Internet. If you want remote access to devices or receive alarm notifications, the KE2-EM must be connected to the Internet.

- 1. The KE2-EM has two wireless radios (2.4GHz and 5GHz) for connecting to a pre-existing Wi-Fi network.
- 2. Choose either 2.4GHz or 5GHz for the Wireless Bridge.
- 3. If using cellular only for internet, select Stand Alone (No Internet).

**Note:** The wireless radio selected for the Wireless Bridge will no longer be available as an Access Point. If you lose access to the KE2-EM, perform a Factory Reset and select the other wireless radio for the Wireless Bridge.

#### **Product Overview**



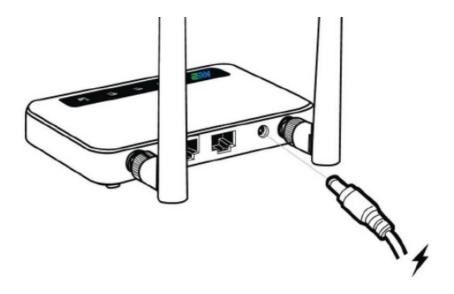
• \*KE2-EM Cell Only – SIM card not included, use only GSM carriers.

# **GETTING STARTED**

# Power On

- Plug the power cable into the power port of the KE2-EM. Use the 12V/1.5A power adapter supplied with the KE2-EM in order to ensure proper operation.
- **Note:** If necessary to perform a Factory Reset, hold down the Reset button for 10 seconds, then release. Caution all User Data will be cleared!

Note: A MicroSD card is pre-installed in the KE2-EM. DO NOT remove or replace the MicroSD card.



• KE2-EM Cell only – install a GSM SIM card for internet/backup internet if desired.

# Connecting to the KE2-EM

• You can connect to the KE2-EM via Wi-Fi or Ethernet Cat5e cable. Choose the most convenient method.

**Note:** This step only connects your mobile/tablet/laptop/desktop to the local area network (LAN) of the KE2-EM. Internet access is not yet configured. In order to connect to the Internet, please finish the setup procedures below and then follow EZ-Install Wizard to setup an Internet connection.

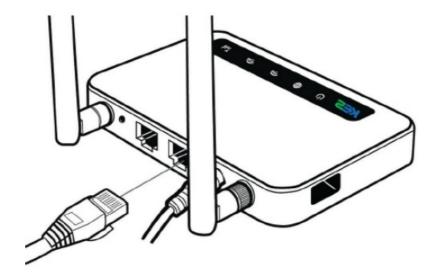
#### Method 1: Connect via Wi-Fi

Search for the KE2-EM's Wi-Fi network (SSID) in your device's list of Wi-Fi networks and input the default password – All characters are upper case: KE2EMPLS#1 for KE2-EM or KE2EMCELL#1 for KE2-EM Cell.

The SSID is printed on the label on the bottom of the KE2-EM in the following formats:

- KE2EMPLUS-XXXXX (Ex: KE2EMPLUS-04CDC7)
- KE2EMPLUS-XXXXX-5G (Ex: KE2EMPLUS-04CDC7-5G)\

Note: Your device will not display both Wi-Fi networks unless it supports both 2.4GHz and 5GHz Wi-Fi.



- KE2EMCELL-XXXXXX (Ex: KE2EMCELL-04CDC7)
- KE2EMCELL-XXXXXX-5G (Ex: KE2EMCELL-04CDC7)

# Method 2: Connect via LAN

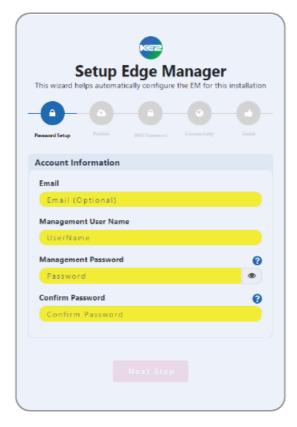
• Connect your device to the LAN port of the KE2-EM via Ethernet cable.

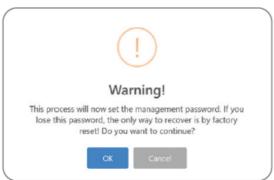
#### Access the KE2-EM Dashboard

- Open a web browser (Firefox, Chrome, Edge, Safari) and visit <a href="https://em.ke2.io">http://192.168.50.1</a>.
- If this is a new install, you will be guided using the EZ-Install Wizard.

# **EZ-INSTALL WIZARD**

# **Password Setup**





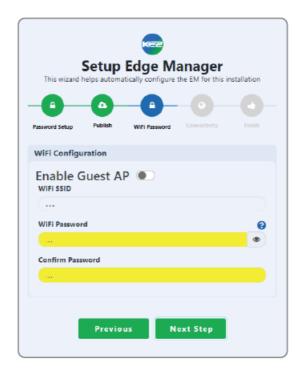
- Email: Optional field.
- **User Name:** Management Console User Name. The KE2-EM secures access to the Management Console with these credentials. You are required to create this account on first install.
- Password: Management Console Password. The KE2-EM secures access to the Management Console with these credentials. You are required to create this password on first install. Please record both User Name and Password for future reference. You will need both to login to the Management Console. This password requires 8-15 characters, at least one upper and lower case, a number, and a special character (!@#\$()%&\*).
- **Confirm Password:** Confirm Password as entered in the prior field. You are required to confirm this password on first install.
- The Next Step button will be available once all fields are entered properly.
- You will be prompted to CONFIRM the management account credentials to continue.

# **Publish**



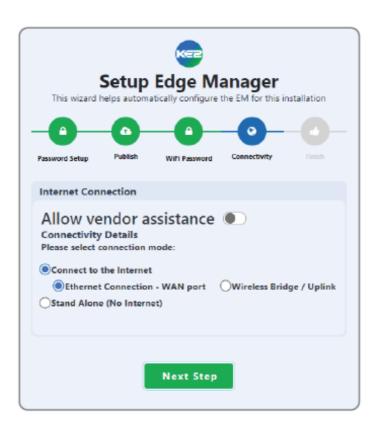
- Auto Publish ALL devices: This option allows you to automatically publish any KE2 Therm devices
  communicating with the KE2-EM to the Portal specified below.
- **Do not Auto Publish devices:** If you do not wish your KE2 Therm devices to be automatically published to the Portal, select this option.
- **Portal:** This is the remote portal that your devices will be published to. In most cases, this does not need to be changed.
- Site: This is the unique Site name on the Portal where all devices on the KE2-EM will be published. A Site name should be descriptive. Ex: MyStore-04CD
- Pass: This field contains the Portal password used to publish devices. This password should be 8-15 characters, with upper and lower case, including numerals and special characters (!@#\$()%&\*).
- The Next button will be available once all requirements have been satisfied.

#### Wi-Fi Password



- Wi-Fi Password: For security purposes, you will be prompted to change the default Wi-Fi Password during installation. A minimum of 8 characters is required, but 14 is recommended. Please record this Wi-Fi password. You will need it to reconnect later.
- **Confirm Password:** Confirm Password as entered in the prior field. You are required to confirm the password before the Next Step button becomes available.
- Enable Guest AP: Allows Wi-Fi access to the dashboard without a password. Internet access is not available when connected to the Guest AP.

# Connectivity



• This page helps you connect this KE2-EM to the Internet. If you want to publish devices to the Portal for remote access, or receive alarm notifications, the KE2-EM must be connected to the Internet.

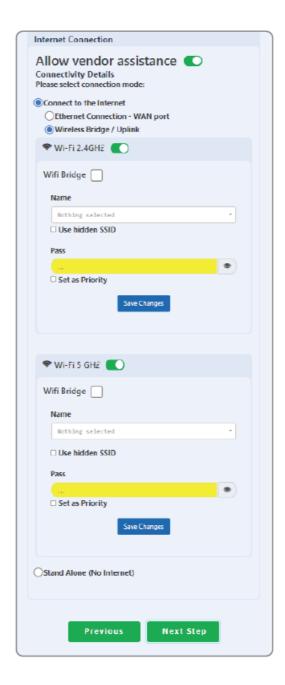
#### **Connect to the Internet**

- Allow vendor assistance: Allows KE2 Therm to remotely connect to the KE2-EM for technical support.
- Ethernet Connection WAN Port: Select this option if you are using a Cat5e Ethernet cable to connect the KE2-EM to the Internet. The KE2-EM will automatically request an IP address from the network.
- Stand Alone (No Internet): Select this option if you do not want to connect the KE2-EM to the Internet.
- Wireless Bridge / Uplink: Select this option if you want to wirelessly connect to an available Wi-Fi network
  within range of the KE2-EM and use it to access the Internet. This mode is a convenient way to connect to
  another Wi-Fi Access Point, Hotspot, or Guest Network for quick Internet access. Be sure to consider any
  security implications this may cause. If in doubt, contact your local IT or help desk for direction and support.

# Wireless Bridge / Uplink – has additional configuration options:

 The KE2-EM has two wireless radios (2.4GHz and 5GHz) to connect to a pre-existing Wi-Fi network for Internet access. This provides the KE2-EM access to the Internet without running Ethernet cables. Choose only ONE, 2.4GHz OR 5GHz, for the Wireless Bridge.

**NOTE:** If using cellular only for internet, select Stand Alone (No Internet).



- Name: Select this dropdown to display Wi-Fi networks within range. If a network does not appear, it may be on the other frequency (2.4GHz or 5GHz).
- Use hidden SSID: Use this option to specify the SSID of a hidden Wi-Fi network.
- Pass: This is the password field for the Wi-Fi network found previously. Input the password for the Wi-Fi network.
- Set as Priority: This is an advanced option and usually not required. This option allows network traffic to be delivered to the Wi-Fi interface first. Enable this only at the instruction of an IT representative.
- Save Changes: to complete the Wireless Bridge / Uplink connection, you must select save changes.
- The Next Step button can be selected if Stand Alone (No Internet) was selected previously.

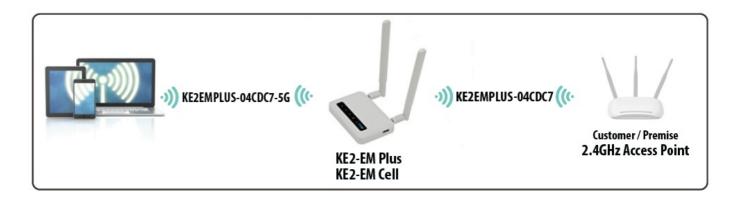
**Note:** The wireless radio (2.4GHz or 5GHz) selected for the Wireless Bridge will no longer be able to be used as an Access Point for the KE2-EM. If you lose access to the KE2-EM and cannot reconnect, perform a Factory Reset and select the other wireless radio for the Wireless Bridge.

# Wi-Fi Example 1:



• User connects their smart device to the KE2EMPLUS-04CDC7 2.4GHz Wi-Fi network to access the KE2-EM Plus. The 5GHz radio is used to create the Wireless Bridge to the existing Wi-Fi network.

# Wi-Fi Example 2:

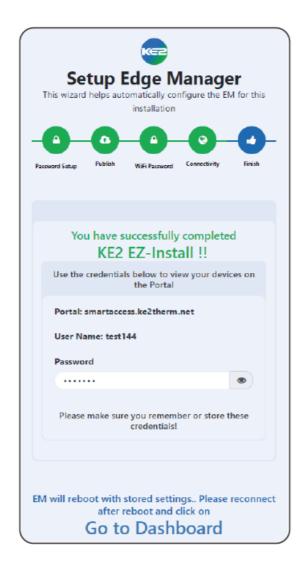


• User connects their smart device to the KE2EMPLUS-04CDC7-5G 5GHz Wi-Fi network to access the KE2-EM Plus. The 2.4GHz radio is used to create the Wireless Bridge to the existing Wi-Fi network.

# Wi-Fi Tips

- Use 2.4GHz Wi-Fi Bridge for sites using traditional, slower Internet Access Points.
- Use 5GHz Wi-Fi Bridge for sites using newer, faster Internet Access Points.
- Note: 2.4GHz wireless transmissions can travel farther than 5GHz transmissions.
- DO NOT ATTEMPT to Wi-Fi Bridge both 2.4GHz and 5GHz!!!

#### Finish



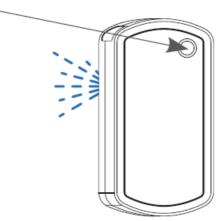
Congratulations!! You have successfully completed the EZ-Install Wizard. The KE2-EM will need to reboot with the configuration options you have selected. This process will take less than two minutes to complete. To reconnect, simply use the same method you used in Step ② Connecting to the KE2-EM as described earlier. Don't forget, the Wi-Fi password and management credentials were changed during the EZ-Install Wizard setup.

# **WIRELESS SENSOR SETUP**

**IMPORTANT:** To ensure the sensors have the strongest wireless connection possible, please follow the steps in:

1. Power On

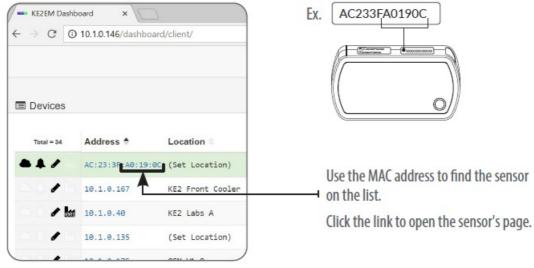
# Press button until blue blinking light comes on.



- Video 125- Best Practices for Deploying a Wireless Monitoring Solution
- or <a href="https://bit.ly/2Prb10c">https://bit.ly/2Prb10c</a>



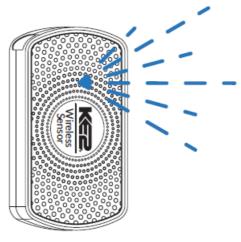
2. Sensors should automatically display on the Dashboard.



3. The last 6 digits of the MAC address are unique for each sensor.



4. The timer in the top left shows how often the wireless sensor is checking in with the KE2-EM. This helps determine optimal sensor location.



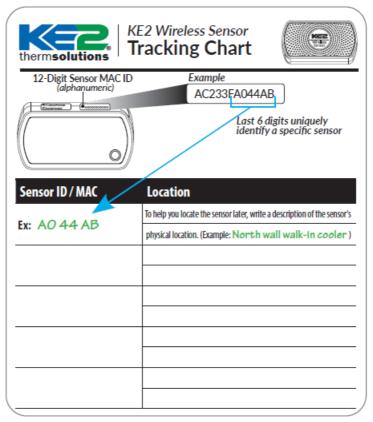
5. Place the sensor where you think you want it.



6. If the timer reads 1 second or less, the location is ideal. Below 10 seconds is good. If 20 seconds or more, consider moving or changing the orientation of the sensor.

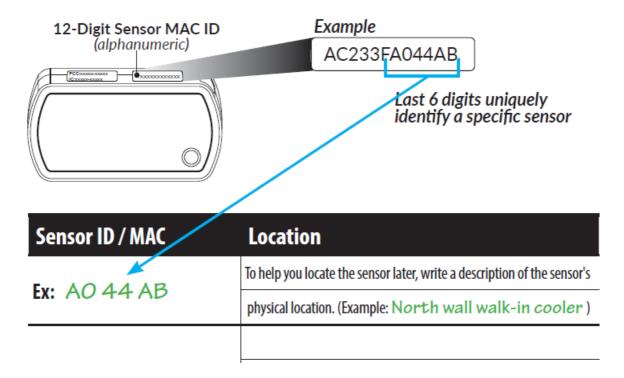


7. Once the location is validated, apply Velcro or an adhesive strip, and place sensor.



- 8. Record on the tracking chart.
- 9. Repeat steps through for each additional sensor. Store tracking chart in a secure location, and take a picture of it for future reference.

# **Tracking Chart**



Once your Tracking Chart is filled in, we suggest taking a picture of the list, to serve as a backup copy.

# **MODBUS SETUP**

#### Change Modbus address on each controller

Warning: Each controller's Modbus address must be unique. Available addresses are 2-247.

- KE2 Temp: Press and hold ENTER to access the setpoints menu.
- KE2 Adaptive / Low Temp: Press and hold BACK to access the Advanced menu.
- tS is displayed



■ Use the ▲ arrow until you see Adr (Address)



 Press enter to display the current address (default =1)



- Change the address by pressing or Press momentarily to move to the next digit if necessary. Available addresses are 2 to 247.
- When address is set to the preferred value (Ex. 24), press and hold (EX. 24) for 3 seconds to save the address.

Example:



 The controller will return to the Adr screen when the setting is saved.



- The setting change can be verified by pressing ENTER again.
- To exit, press BACK several times.

# **KE2 Temp + Valve**

· Change Modbus address on each controller

Warning: Each controller's Modbus address must be unique. Available addresses are 2-247.

- Press and hold BACK to access the Advanced menu.
- CtL is displayed



■ Use the ▲ arrow until you see Adr (Address)

- Press ENTER to display the current address (default = 1)
- Change the address by pressing or Press momentarily to move to the next digit if necessary. Available addresses are 2 to 247.
- When address is set to the preferred value (Ex. 123), press and hold ENTER for 3 seconds to save the address.

Example:

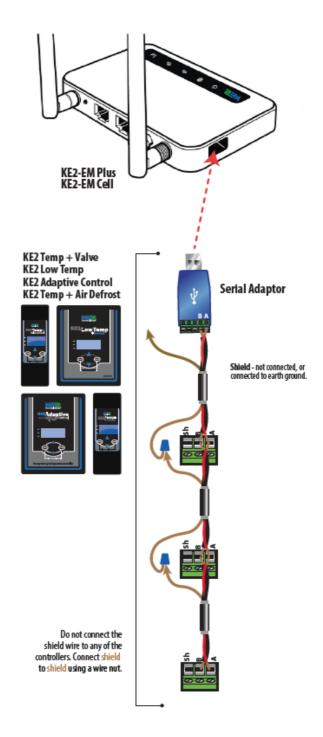


 The controller will return to the Adr screen when the setting is saved.



- The setting change can be verified by pressing ENTER again.
- To exit, press BACK several times.

# **MODBUS WIRING**



If using the KE2-EM to communicate with the KE2 Temp + Air Defrost, KE2 Temp + Valve, KE2 Low Temp, or KE2 Adaptive, the controllers must be wired to the EM.

- · Connection must be daisy chained.
- Maximum 1,000ft total cable length.
- Use only cables that meet RS-485 specifications. Cat5e cable is acceptable in most situations (use one of the twisted pairs). Use 24 AWG or larger.

#### **TECHNICAL SUPPORT**

# **Factory/Login Credentials Reset**

If you are unable to access the KE2 Dashboard or cannot connect to the KE2-Edge Manager (KE2-EM), you can press the RESET button:

- Press the reset button for 1 second or less to reboot the KE2-EM.
- Press and hold the reset button for 3 to 5 seconds, then release to reset KE2-EM credentials to the default of ke2admin/ke2admin. You will be prompted to change the username and password from default upon logging in.
  - NOTE: Any Modbus controller and wireless sensor login credentials will also be reset to ke2admin/ke2admin.
- Press and hold the reset button for at least 10 seconds, then release to reset the KE2-EM to factory settings.
   WARNING all settings and user data will be cleared.

#### **Technical Support**

If you are unable to access the KE2 Dashboard or cannot connect to the KE2-Edge Manager (KE2-EM), you can press the RESET button:

- For more detailed / updated instructions, please visit our website https://ke2therm.com
- For additional questions, use one of the following:
  - Send an E-mail to techsupport@ke2therm.com
  - Visit our YouTube channel <a href="https://youtube.com/user/KE2Therm/videos">https://youtube.com/user/KE2Therm/videos</a>
  - Call us at 636-266-0140 (M-F, 8am 5pm CST)

If calling, please make sure you are running the latest version and have access to the KE2-EM.

Visit <a href="https://ke2therm.com/literature/literature-ke2-edge-managers/">https://ke2therm.com/literature-literature-ke2-edge-managers/</a> or use the QR code to view all KE2-EM literature:



# **Record Credentials (optional)**

Record your credentials in the space below and secure in a safe location for future reference:

#### **Management Console**

Username:	Password:

#### **KE2 SmartAccess**

Site: Password:	Site:	Password:
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· Password:

#### **KE2-EM Plus/KE2-EM Cell**

Serial No:	MAC Address:
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#### Contact

# **KE2 Therm Solutions, Inc.**

• 12 Chamber Drive . Washington, Missouri 63090

ph: 636.266.0140fx: 888.366.6769

• www.ke2therm.com

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#### **Documents / Resources**



KE2 Thermsolutions KE2 EdgeManager Plus Videodoor Entry System Monitor [pdf] User Guide

KE2 EdgeManager Plus Videodoor Entry System Monitor, KE2 EdgeManager Plus, Videodoor Entry System Monitor, System Monitor, Monitor

# References

- Home KE2 Therm Solutions
- **6** YouTube
- Home KE2 Therm Solutions
- <u>Literature KE2 Edge Managers KE2 Therm Solutions</u>

Manuals+,