



KE2 Edge Manager

(KE2-EM35)

Introduction:

The KE2 Edge Manager automatically finds and dashboards up to 35 KE2 Therm controllers and KE2 Wireless Sensors.

The KE2 Edge Manager is similar to the KE2 LDA communication device with several features that make it unique, including easily creating a common dashboard that integrates KE2 sensor data with in-depth system operational information from KE2 Therm controllers.

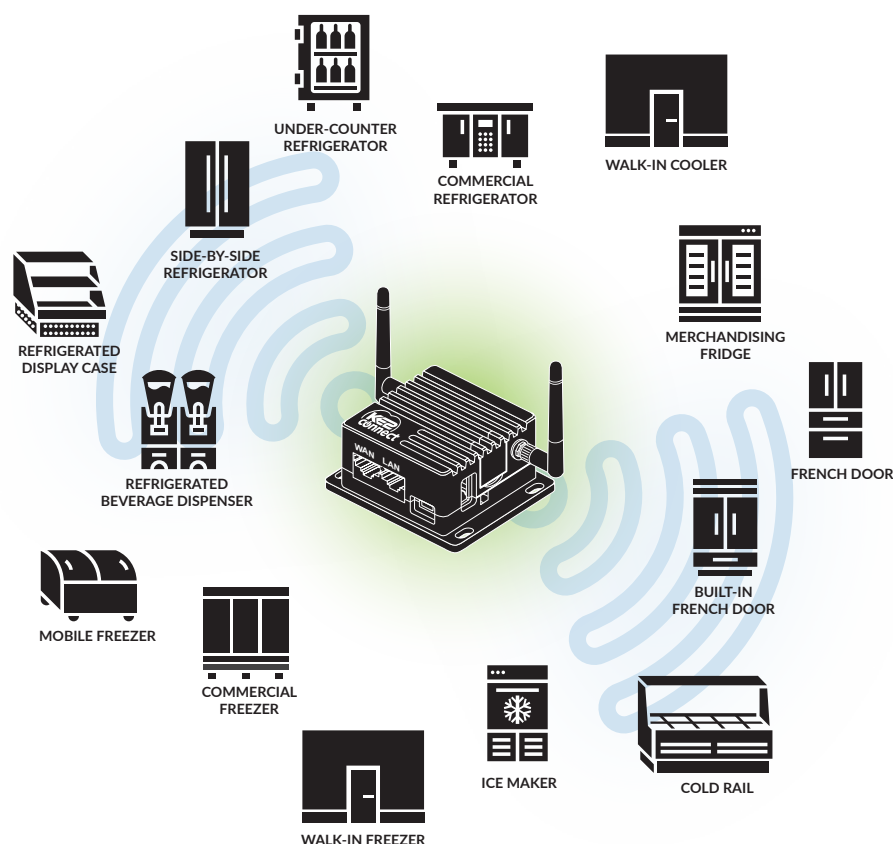
The KE2 Edge Manager provides real-time data tracking, storing, and uploading. And, while many monitoring options force users to store their data on the provider's "cloud," with the KE2 Edge Manager, local access is FREE - the user owns their data.

Plus, accessing the data has never been easier. The KE2 Edge Manager lets users access data locally, on their network, using their own "cloud" portal, or via the secure KE2 Portal.

Applications:

Walk-ins ■ Reach-ins ■ Under Counter ■ Cold Rails ■ Commercial Fridge

The KE2 Edge Manager, when used with KE2 Wireless Sensor technology provides the feasibility to remotely monitor and receive alarm notifications in almost any refrigeration applications - from warehouses, to walk-ins, reach-ins, cold rails, under counter and more.



Features & Benefits:

- Automatically provides a real-time dashboard of up to 35, 100 or 250 (depending on pn) KE2 Therm controllers or KE2 wireless sensors
- Prevents food loss
- Data logging - Improves accuracy and eliminates the time and expense of manual tracking
- Detailed graphs with time stamps
- Easy remote access via KE2 Smart Access or ke2.io portal using any Ethernet or wireless device (ex: laptop, desktop, tablet or mobile.)
- Serves as a KE2 Therm BACnet IP and Modbus Gateway
- Wireless tethering & bridging
- Provides a wireless access point
- Configurable location name
- E-mail alarm notifications & real-time access to your data
- Commercial/industrial enclosure
- Wireless range up to 300 ft.
- Hybrid cloud architecture
- Co-location data options



FCC: 2A0PP-21634
IC: 23545-2163





KE2 Edge Manager

(KE2-EM35)

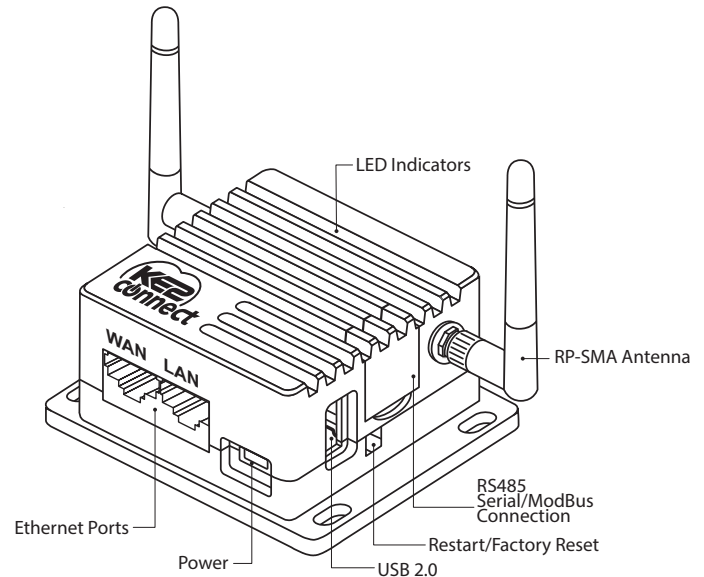
Specifications & Dimensions:

Frequency	2.4 GHz
Protocol	802.11 b/g/n
WAN/LAN	10/100
Power Input	5V / 1A
Power Consumption	<2W
Dimension	3.15 x 2.5 x 1.5 Inches 80 x 64 x 25 mm
Working Temperature	32°F - 122°F / 0°C - 50°C

Programming:

The KE2 Edge Manager does not require programming, so installation is quick and easy

KE2-EM35 Layout



KE2 Edge Manager & KE2 Wireless Sensors Description and Part Numbers

Description	Part Number
KE2 Edge Manager KE2-EM35	21634
KE2-EM35 & (5) Sensor Kit (Kit includes (3) 21632 & (2) 21633, a USB Bluetooth Adapter pn 21690)	21660
KE2 Wireless Sensor	21632
KE2 Wireless Sensor (10 Pack)	21687
KE2 Wireless Sensor w. Remote Probe	21633
KE2 Wireless Sensor w. Remote Probe (10 Pack)	21688
KE2 Edge Manager KE2-EM100	21629
KE2 Edge Manager KE2-EM100DL	21636
KE2 Edge Manager KE2-EM250	21635
KE2 Edge Manager KE2-EM250DL	21585
USB Bluetooth™ Adapter	21690





KE2 Edge Manager (KE2-EM35)

Landing Screen / Local Dashboard

The dashboard shows KE2 Wireless Sensors within range of the KE2 Edge Manager, as well as any KE2 Therm controllers connected to the same network. The Manage button,

found on the upper right of the page, provides access to the Management Console.

Access to Management Console, where setup changes are made

Displays active alarms

Download to CSV file

Up to 35 devices are automatically displayed on the dashboard

Alarm Notifications Enabled

Published to KE2 portal

Data Logging Enabled

Alarm Notifications NOT Enabled

Published to KE2 portal NOT Enabled

Green shaded bar indicates the device is published to the KE2 portal

KE2-EM35 Management Address & Firmware Version

http://10.1.0.204:1180
http://192.168.50.1:180
Version 1-29-2017

Log

KE2 Lab Two Door
BLE-E3-03-DC-E4-01-97

From optional mm/dd/yyyy
To optional mm/dd/yyyy

When log button selected, user prompted for date range.

Close Graph Save

Management Console

The password-protected Management Console allows you to make adjustments to the dashboard including enabling data-

logging, setting-up alarm notifications, publishing devices to the portal, and more.

Customize your portal

Setup alarm notifications

Data logging setup

System updates

Global selection - Enable setting for all devices

Activate Services

Alarm Notifications Enabled

Device displayed on Dashboard

Published to KE2 portal

Data Logging Enabled

Alarm Notifications NOT Enabled

Device NOT displayed on Dashboard

NOT Published to KE2 portal

Data Logging NOT Enabled

Allow KE2 to manage/configure EM35 and all devices remotely

Access KE2- EM35 (with valid subscription) from Portal

Automatically discover and display ONLY KE2 devices

Management Console will display all* of the KE2 devices connected to the Network directly or through the KE2-EM35s.

*While theoretically unlimited, performance speed will vary based on the number of connections / devices.

Tested to 50 devices without noticeable loss of speed





KE2 Edge Manager (KE2-EM35)

Publish Sensors to a Portal

1. Connect to the KE2-EM35 - Wired or Wirelessly

a. **Wired** - Connect RJ45 Ethernet cable to Laptop or Desktop and the other end to LAN Port of KE2-EM35

Open browser (Chrome, Internet Explorer, Edge, Firefox, Safari, etc) and type in <http://192.168.50.1> and press enter

b. **Wireless** - Locate the Wireless Network of the KE2-EM35. It will be listed on a label on the back of the unit (Ex. KE2EDGE-4F2A1A)

Open browser (Chrome, Internet Explorer, Edge, Firefox, Safari, etc) and type in <http://192.168.50.1> and press enter

2. You are now presented a Dashboard of all the KE2 Wireless Sensors found by the KE2-EM35. To change the location name, enable alarms, or publish to the Portal, click **Manage**.

3. For security, you will now be required to authenticate into the KE2-EM35. Please provide the **Username** and **Password**, located on a label on the bottom of the unit.

Important:

The default Username and Password should be changed. Please see KE2-EM35 documentation for procedure.

4. Change the Portal location to the Portal you wish to use (smartaccess.ke2therm.net or ke2.io).

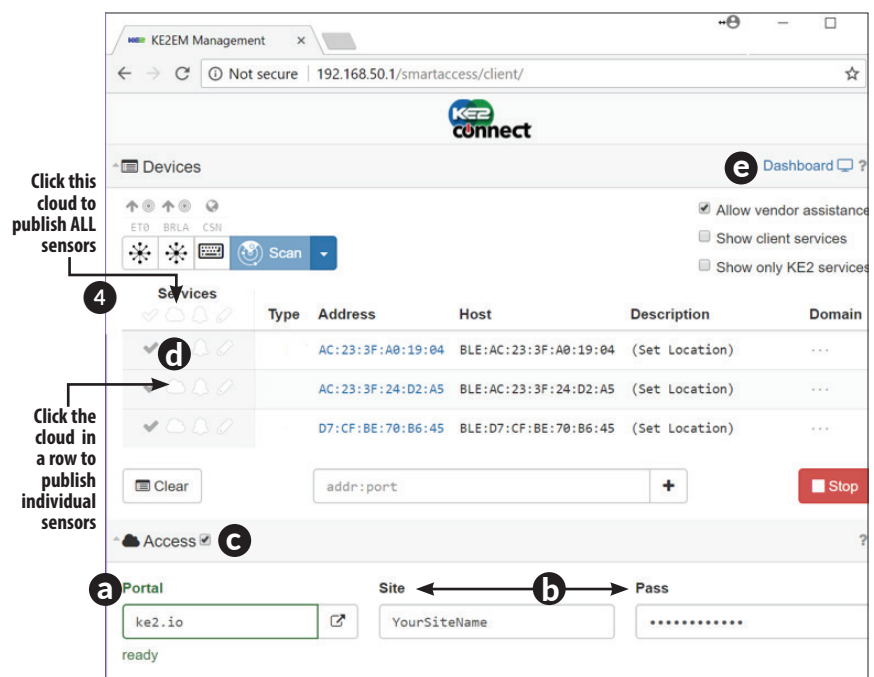
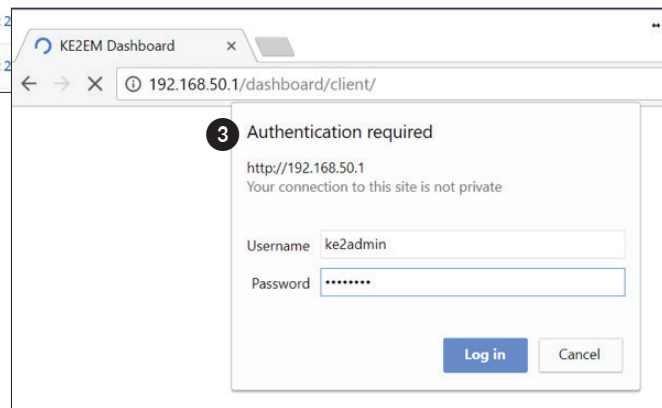
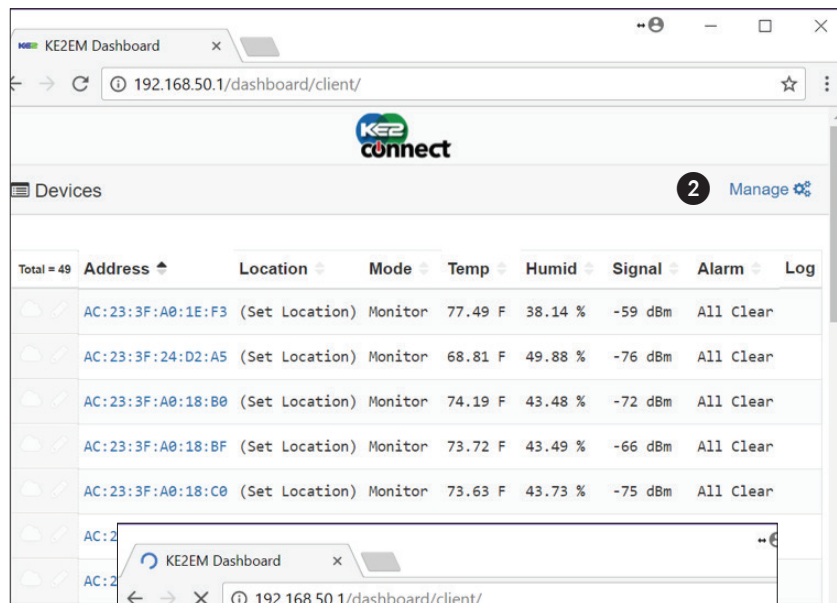
a. Make sure the WAN port is connected to the Internet

b. Type the **Site** name and **Password** to access sensors from the Internet

c. Click the checkbox next to **Access** to publish sensors to the Portal

d. Click the **Cloud icon in each row** for each sensor you wish to publish to the Portal -OR- Click the **Cloud icon at the top** of the column to publish **ALL** sensors.

e. To return to the Dashboard, click the **Dashboard** link





KE2 Wireless Sensor

for Temperature & Humidity
pn 21632 & pn 21633

Ideal for monitoring in commercial refrigeration applications, or other temperature & humidity sensitive applications...and with the KE2 Connect Edge Manager gateway, onsite access is FREE - you own your data....you are not at the mercy of your "cloud" provider.

Introduction:

Waterproof and portable, the **KE2 Wireless Sensor** is a high-precision digital temperature and humidity indicator (thermo-hygrometer). The wireless signal and light-weight design mean installation takes just seconds. And, the sensor's 3-year battery life ensures low maintenance and extended performance.

The KE2 Edge Manager automatically finds and dashboards **KE2 Wireless Sensors** and KE2 Therm controllers*. So, local monitoring is almost instantaneous, and IT support is generally not necessary. Remote monitoring is easily achieved by using KE2 Therm's KE2 SmartAccess Portal or the KE2 Connect Portal.

After powering the unit on, the KE2 Edge Manager will automatically locate the KE2 Wireless Sensor and provide temperature and humidity data.

The KE2 Wireless Sensor uses a high-quality, integrated digital temperature and humidity sensor module, ensuring the transmitter's superior long-term stability, low latency and resistance to chemical contamination, thus providing an excellent platform to deliver temperature and humidity data.

Application:

The **KE2 Wireless Sensor** can be used to measure environmental temperature and humidity in industrial, commercial, and residential environments. Common applications are: laboratory, agricultural, communications, storage facilities, warehouses, refrigerated spaces, medical and hospitality.

**KE2 Edge Manager is available in several models, that can find and dashboard 35, 100 or 250 devices, based on the part number.*



pn 21632



with Remote Probe pn 21633

Features & Benefits:

- High-accuracy digital temperature and humidity sensor inside
- Temperature monitoring - tenths of a degree
- Humidity monitoring - relative humidity +/- .25%
- Configurable location name
- Wireless signal - using BLE 4.1 (Bluetooth Low Energy device)
- E-mail/Text alerts (see list below)
- IP66 waterproof level
- 300ft./100m broadcasting range
- 3- year battery life (AAA)
- Low battery indicator
- 12-month free KE2 portal access
- Very fast start-up and measurement time
- Real-time data tracking, storing, & uploading

Alarms:

- High/low temp alarm with adjustable time delay
- High/low humidity with adjustable time delay
- Disconnect alarm - KE2 Edge Manager loses contact with sensor
- Device loss alarm - KE2 Wireless Sensor loses contact for an extended period (user defined)
- Portal Disconnect Alarm (optional)
- Low battery indicator



FCC: 2A0PP-21632
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KE2 Wireless Sensor

for Temperature & Humidity
pn 21632 & pn 21633

Physical Properties:

(21632) - KE2 Wireless Sensor for Temperature and Humidity

(21633) - KE2 Wireless Sensor with Remote Probe for Temperature and Humidity - 36" sensor wire

Waterproof Level	IP66
Case Material	ABS
Case Color	White
Product Dimensions	70.6 x 38 x 17.8mm
Unit Weight	1.52 oz. / 43g
Battery Type	(2) AAA - FR03 Li-Fe batteries
Voltage	3V
Data Access	Edge Manager Product Line or KE2 Connect Mobile Client
Average Power Consumption	35uA
Transmission Range	Max. 300ft/100m in open space
Assemble	Adhesive strip

Technical Specifications:

Item		Value	Error Range
Temperature	Range	-40°F to 158°F -40°C to 70°C	Depends on battery working environment
	Accuracy	50°F 10°C	0.9°F° 0.5°C°
Humidity	Range	0%RH to 100%RH	----
	Measure Accuracy	0%RH to 90%RH ≥90%RH	±2.5% RH ±3.5% RH
	Resolution	0.05%RH	----
Sampling Period	----	Once per second	----

Electrical Specifications:

Static Current	<3uA (power consumption under power-off status)
Peak Current	<8mA
Average Current	<35uA (not including power consumption on data transmission)
Battery Type	FR03
Battery Capacity	1250mAH
Lifetime	Over 3 years

Environmental Properties:

Working Temperature	-40°F to 158°F / -40°C to 70°C
Long-term Storage Temperature	50°F to 77°F, ≤ 65%RH / 10°C to 25°C, ≤ 65%RH

