

Getting Started

Pre-Installation Guide

This guide helps you determine how many Ohm hardware units are needed to monitor your space as well as provide safety information and installation checklists.



Only trained and certified electricians are allowed to install, replace, or service. Working with electrical systems such as panels with energy supply can lead to major injuries.

Safety Warning and Recommendations



Hazards and Cautions:


- Only trained and certified electricians are allowed to install, replace, or service. Working with electrical systems such as panels with energy supply can lead to major injuries.
- Take care when connecting devices and sensors to supply/power panels.
- Locate the emergency power-off switch in the room in which you are working. If an electrical accident occurs, you can quickly turn off the power.
- Look carefully for possible hazards in your work area, such as moist floors, ungrounded power extension cables, frayed power cords, and missing safety grounds.
- When working with high energy power supply make sure you have the proper personnel protective equipment (PPE).
- Perform hazard assessments as required, and determine the PPE needed to protect workers. Additional PPE, such as fall protection equipment, respirators, chemical-resistant or cut-resistant gloves, and chaps, may be required, depending on the results of the hazard assessment.
- Depending on the job task to be performed, wear PPE for the electric power generally includes safety glasses, face shields, hard hats, safety shoes, insulating (rubber) gloves with leather protectors, insulating sleeves, and flame-resistant (FR) clothing.
- Do not work alone if hazardous conditions exist.


General Safety Recommendations:


- Keep the chassis area clear and dust-free during and after installation.
- Keep tools and chassis components away from walk areas.
- Do not wear loose clothing that could get caught in the chassis. Fasten your tie or scarf and roll up your sleeves.
- Wear safety glasses when working under conditions that might be hazardous to your eyes.
- Do not perform any action that creates a hazard to people or makes the equipment unsafe.


Installation Checklist

-  **Please ensure all materials, components, and accessories are ready prior to an installation. This checklist will help you plan your install.**
-  **Completed Site Survey (*Project Scope*)**


Prior to installation, a Site Survey should be completed by the Service Provider. The survey will inform you what hardware goes where at the installation site. If you do not have a completed Site Survey or have questions contact support@buddy.com please have Customer and Building names ready when calling.
-  **Service Provider has been informed of the installation schedule**


Service Provider should be informed of the installation schedule at least 48 hours in advance so they can ensure an installation support representative will be available.
-  **Ohms, antennas, Mini UPS 5V power adapters, and mounting plates**


If there is no metal surface to mount the Ohm unit, find a suitable location with access to a nearby outlet and install the metal mounting plate. If any CT clips will be attached to the Ohm, it will also need to be near the electrical panel.
-  **Ohm Links, antennas, and power adapters**

Each Ohm Link should have a 9V AC-AC and 5V DC adapters for reading voltage. 5V is necessary and 9V is optional for real power (high accuracy). If the Link will run on batteries in a single-phase installation, have (3) AA lithium Ion batteries per Link.
-  **Ohm Senses**

You will need: Mounting tape or Velcro tape and AA batteries. (*2 batteries per Ohm Sense unit*).

-  **Installation tools**

You may need a drill, drill bits, mounting screws, wire cutters, zip ties, cable straps, screw drivers, spare breakers, etc., to properly install Buddy Ohm.
-  **Electrical outlet parts**

If a new outlet needs to be installed, be sure to have all the necessary components like a junction box, outlet, faceplate, and wires.
-  **Buddy Ohm App credentials**

You should have received mobile App login credentials prior to installation. If you have not received your credentials please contact your Service Provider.

The Hardware



Buddy Ohm - The main base unit which other devices communicate with. Buddy Ohm connects via cellular network to Buddy Cloud.



Ohm Link - This device monitors electricity and communicates back to Buddy Ohm over radio frequency (433 Mhz). Ohm Links have more input ports than Buddy Ohm units.



Ohm Sense - This sensor wirelessly measures temperature and humidity and communicates with Buddy Ohm over radio frequency (433 Mhz).



Ohm Pulse - Pulse sensor used for monitoring water, gas and steam. This device communicates with Buddy Ohm and Ohm Link units via RJ45 cable, but can also be wired to an Ohm Sense unit as well.



Ohm View - This device displays a public-facing dashboard onto a TV or monitor using HDMI connection.

The Buddy Ohm App

The Buddy Ohm mobile app is required for all installations. Download the Buddy Ohm App to quickly install your Buddy Ohm hardware.

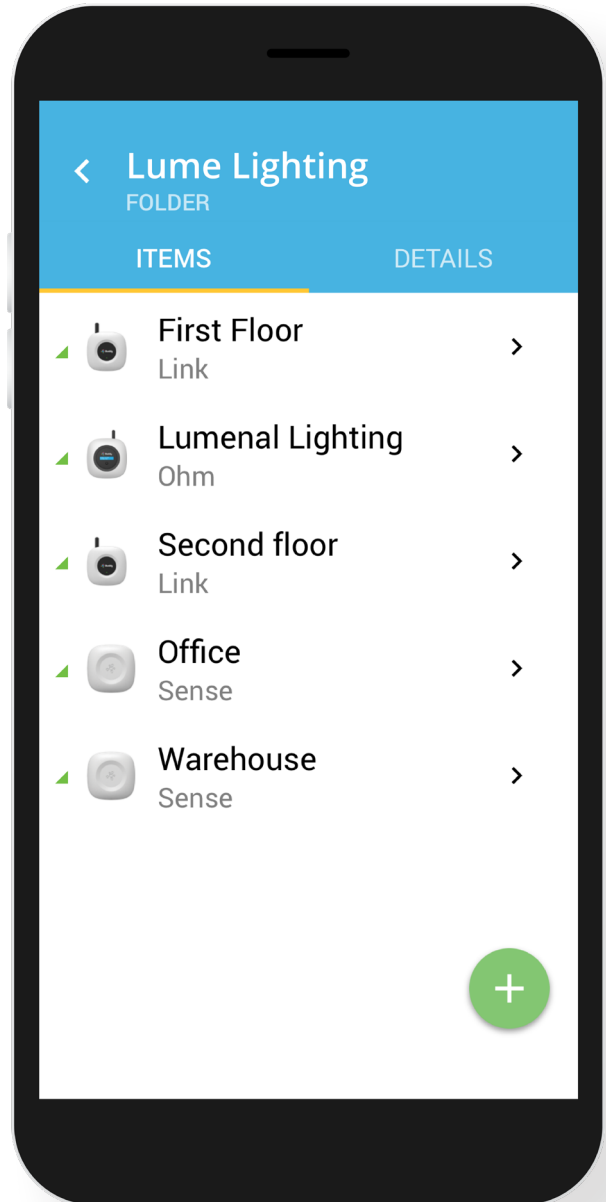


Requires iOS 5S or later.
[Download](#)



Requires Android 4.1 or later.
[Download](#)

Installer should have received App login credentials prior to installation. If you have not received your credentials please contact Buddy Support: support@buddy.com.



My Install Plan

To plan for your installation, use the following pages to determine what area(s) you want to monitor and how many hardware units are required.

Remember:

- Buddy Ohm base units have maximum communication range of 150ft (depending on wall density and construction material). Additional Buddy Ohms are needed if monitoring larger spaces.
- Buddy Ohm can support up to 40 Ohm devices (Ohm Link, Ohm Sense, Ohm Pulse).
- Buddy Ohm require power outlets (recommended for Ohm Link).

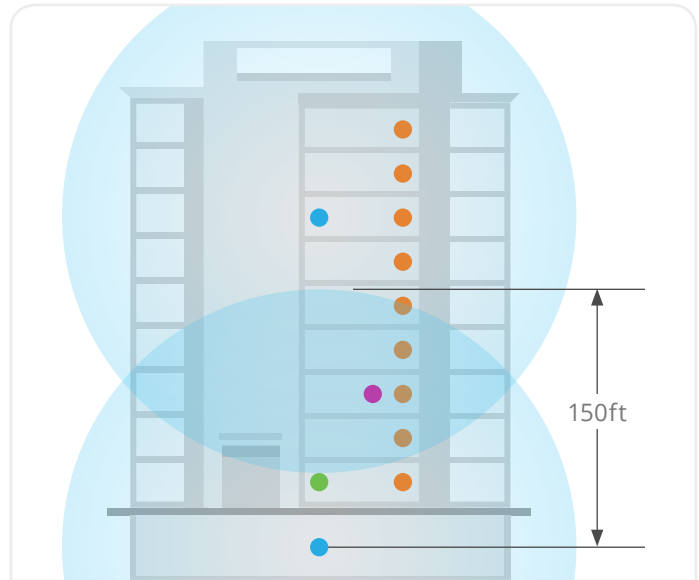
My Device Plan

Buddy Ohm (Gateway - 150ft range, Monitor up to 2 circuits)	(At least 1 required)
Ohm Link (Monitor up to 3 circuits or one 3-phase circuit)	
Ohm Sense (Temperature and humidity sensor - wireless)	
Ohm Pulse (Pulse sensor - Monitor water or natural gas)	
Ohm View (Digital Signage Controller)*	

This Plan will help you for general installations for one site, for more complex installations please contact Buddy Support and they can assist you with developing your Plan. *Does not communicate with Buddy Ohm, uses internal cellular communication.

Sample Installation

(Small Office Tower)



- **Buddy Ohms**
Gateway to Buddy Cloud (150ft range).
- **Ohm Links**
Monitoring electrical circuits at the electrical panel.
- **Ohm Senses**
Monitoring temperature and humidity.
- **Ohm View**
Occupant-facing Dashboard.

You'll notice two (2) Buddy Ohm units are needed for this Installation so all sensors can report back to Buddy Cloud.

Site Survey

Please use this form to document installation hardware requirements for your site.

Customer Information

Customer Name:	
Address:	
Phone:	
Main Contact & Email:	

Overall Project Description

Number of Site(s)/Building(s):	Are we measuring electricity? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If measuring electricity, are we measuring panels or circuits? <input type="checkbox"/> Panels <input type="checkbox"/> Circuits <input type="checkbox"/> Both			
What other resources are we monitoring? <input type="checkbox"/> Water <input type="checkbox"/> Gas <input type="checkbox"/> Temperature/Humidity			
Do the site(s) have good cellular coverage? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If site(s) <u>does not</u> have good cellular coverage? Is there Ethernet Port available where the Buddy Ohm system is going to be installed at? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(if no, answer next question)</i>			
What is the WiFi SSID, user name and password?	SSID:	USER NAME:	PASSWORD:
Is an electrician required for install? <input type="checkbox"/> Yes <input type="checkbox"/> No			
What conditions exist at the location? <i>(e.g.: Heavy equipment, dense walls, hazards)</i>			

Site Details for Site #1 *(Replicate as Needed)*

Project Description

Project/Site Name			
Project/Site Address:			
Contact Name/Email:			
Any site specific monitoring goals? If so, please list:			
Approx SQFT:		No. Floors:	

Electrical

Panel/ Circuit	Description <i>(e.g.: North Office, Conference Room, Kitchen)</i>	Name for Portal/ Dashboard	Voltage	Amperage	# of Phases	Power Outlet Available
1						<input type="checkbox"/> Yes <input type="checkbox"/> No
2						<input type="checkbox"/> Yes <input type="checkbox"/> No
3						<input type="checkbox"/> Yes <input type="checkbox"/> No
4						<input type="checkbox"/> Yes <input type="checkbox"/> No
5						<input type="checkbox"/> Yes <input type="checkbox"/> No
6						<input type="checkbox"/> Yes <input type="checkbox"/> No
7						<input type="checkbox"/> Yes <input type="checkbox"/> No
Other Notes:						

Electrical (continued)

<p>How far apart are the electrical panel(s) listed above from each other?</p> <p><input type="checkbox"/> 0-50 ft</p> <p><input type="checkbox"/> 50-100 ft</p> <p><input type="checkbox"/> 150 ft+*</p> <p><small>*Any electric panel beyond 150ft will need be recorded as it will require extra Buddy Ohm equipment.</small></p>	<p>More details:</p>
<p>Are there any existing signal blockers such as thick concrete walls, metal surfaces, or any other condition that may block a cellular signal between the electric panels ?</p> <p><input type="checkbox"/> Yes* <input type="checkbox"/> No</p> <p><small>*If yes, please use the space on the right to describe condition.</small></p>	<p>More details:</p>

Water, Gas, Steam

Meter	Description <i>(e.g.: Basement, Parking Garage)</i>	Pulse meter or REED meter?	Approximate location	Power Outlet Available
1		<input type="checkbox"/> Pulse <input type="checkbox"/> REED		<input type="checkbox"/> Yes <input type="checkbox"/> No
2		<input type="checkbox"/> Pulse <input type="checkbox"/> REED		<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>What is the diameter or the pipe you are metering?</p>		<p>More details:</p>		
<p>How far apart are the meter(s) listed above from each other?</p> <p><input type="checkbox"/> 0-50 ft</p> <p><input type="checkbox"/> 50-100 ft</p> <p><input type="checkbox"/> 150 ft+*</p>		<p>More details:</p>		
<p>Are there any existing signal blockers such thick concrete walls, metal surfaces, or any other condition that may block a cellular signal between the meters?</p> <p><input type="checkbox"/> Yes* <input type="checkbox"/> No</p> <p><small>*If yes, please use the space on the right to describe condition.</small></p>		<p>More details:</p>		

Temperature and Humidity

Sense	Description for Dashboard	Location	Details
1			
2			
3			
4			
5			
6			
7			
Other Notes:			
<p>How far apart are the temperature and humidity spaces listed above from each other?</p> <p><input type="checkbox"/> 0-50 ft</p> <p><input type="checkbox"/> 50-100 ft</p> <p><input type="checkbox"/> 150 ft+*</p> <p><small>*Any temperature and humidity spaces beyond 150ft will need be recorded as it will require extra Buddy Ohm equipment.</small></p>		More details:	
<p>Are there any existing signal blockers such thick concrete walls, metal surfaces, or any other condition that may block a cellular signal between the temperature and humidity sensors?</p> <p><input type="checkbox"/> Yes* <input type="checkbox"/> No</p> <p><small>*If yes, please use the space on the right to describe condition.</small></p>		More details:	

Ohm View Dashboard (Digital Signage Controller)

What is the WiFi network name, user name and password?	NETWORK NAME:	USER NAME:	PASSWORD:
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Contact Support

Online: www.buddy.com/support

Email: support@buddy.com

Additional Documentation

Ohm Installation Guide (US)

Ohm Portal User Manual (US)

Ohm Product Specifications (US)

Find additional documents and guides
online, visit www.buddy.com/support.