

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:

- Working with electrical systems such as panels with energy supply can lead to major injuries. Only trained and certified electricians are allowed to install, replace, or service.
- 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 and remove possible hazards in your work area, such as moist floors, ungrounded power extension cables, frayed power cords, and missing safety grounds.
- Perform hazard assessments when working with high energy power to 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 appropriate for the task. This generally includes, but is not limited to, 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

i 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, the Site Survey on the next page should be completed. 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.

✓ **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 Auditor, antennas, and power cables**

Each Ohm Auditor has four (4) wires--red, white, blue and black--for voltage reading.

✓ **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, you will need to use (3) AA lithium ion batteries per Link.

✓ **Ohm Senses**

You will need: mounting tape or velcro tape and (2) AA lithium ion batteries.

✓ **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.

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).

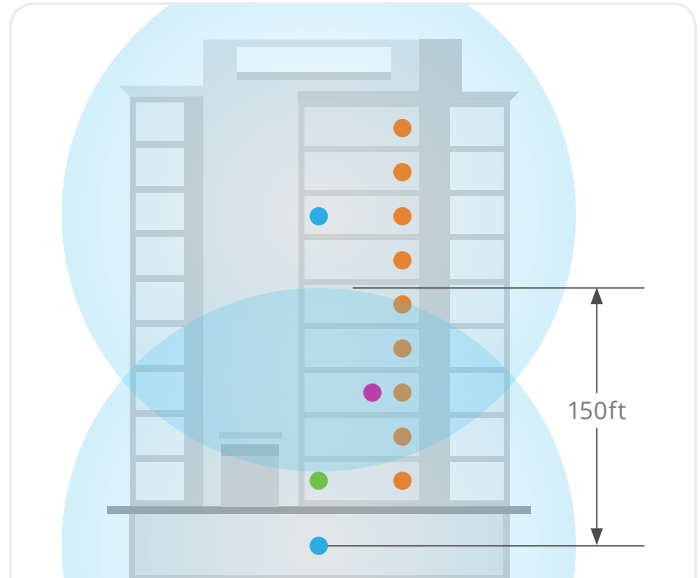
My Device Plan

Buddy Ohm (Gateway - 150ft range, Monitor up to 2 circuits)	(At least 1 required)
Buddy Auditor (Monitors up to 6 circuits)	
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).
- **Buddy Auditors and 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

 **This is an interactive PDF form, open in Adobe Acrobat Reader. Please complete one form per site.**

General Information

Primary Contact Information	YOUR NAME:	EMAIL:	PHONE:
Project/Site Name			
Project/Site Address	ADDRESS:	STATE/PROVINCE:	COUNTRY:
On-site Person's Contact Information	ON-SITE PERSON'S NAME:	ON-SITE PERSON'S EMAIL:	ON-SITE PERSON'S PHONE:
Any site specific monitoring goals? If so, please list.			
Apx Square Feet		Number of Floors	

Monitoring Details

What resources are we monitoring?	Electricity	Water	Solar	Gas	Temperature/Humidity
Do the site have good cellular coverage?	Yes	No			
If site does not have good cellular coverage? Is there Ethernet Port available where the Buddy Ohm system is going to be installed at?	Yes	No (<i>if no, answer next question</i>)			

Electrical

	Panel or Circuit	Description <i>e.g.: Basement, Parking Garage</i> <small>(25 character max.)</small>	Cable/wire Diameter <small>(Optional)</small>	Voltage	Amperage	# of Phases <small>(1 or 3)</small>	Power Outlet Available
1	Panel Circuit					1 (single) 3 Phase	Yes No
2	Panel Circuit					1 (single) 3 Phase	Yes No
3	Panel Circuit					1 (single) 3 Phase	Yes No
4	Panel Circuit					1 (single) 3 Phase	Yes No
5	Panel Circuit					1 (single) 3 Phase	Yes No
6	Panel Circuit					1 (single) 3 Phase	Yes No
7	Panel Circuit					1 (single) 3 Phase	Yes No
8	Panel Circuit					1 (single) 3 Phase	Yes No
9	Panel Circuit					1 (single) 3 Phase	Yes No
10	Panel Circuit					1 (single) 3 Phase	Yes No
11	Panel Circuit					1 (single) 3 Phase	Yes No
12	Panel Circuit					1 (single) 3 Phase	Yes No

OTHER NOTES:

Electrical (continued)

<p>How far apart are the electrical panel(s) listed on previous page from each other?</p> <p>0-50 ft 50-100 ft 150 ft+</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>Yes* 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> <small>(25 character max.)</small>	Pulse or REED meter? <small>(if you do not know, take a pictures of your meter face and email to: orderfulfillment@buddy.com)</small>	What is the pipe diameter	Power Outlet Available
1		Pulse REED		Yes No
2		Pulse REED		Yes No
3		Pulse REED		Yes No
4		Pulse REED		Yes No

Temperature and Humidity

Sense	Description <i>e.g.: Lobby Climate, Copy Room Temp.</i> <small>(25 character max.)</small>	Location	Distance from nearest Buddy Ohm		
1			0-50 ft	50-100 ft	150 ft+
2			0-50 ft	50-100 ft	150 ft+
3			0-50 ft	50-100 ft	150 ft+
4			0-50 ft	50-100 ft	150 ft+
5			0-50 ft	50-100 ft	150 ft+
6			0-50 ft	50-100 ft	150 ft+
7			0-50 ft	50-100 ft	150 ft+
8			0-50 ft	50-100 ft	150 ft+
OTHER NOTES:					
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? Yes* No <small>*If yes, please use the space on the right to describe condition.</small>			MORE DETAILS:		
How far are the temperature spaces listed above from the electrical panel? 0-50 ft 50-100 ft 150 ft+			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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 **Save a copy of this form before clicking the *Submit Form* button.**