

MLConnect Battery Backup Device

To avoid an internet or phone interruption during a power outage, many devices require a battery backup. This is especially helpful for phones to maintain the ability to contact 911 emergency services. As such, MLConnect offers a battery backup purchase option.

NEED TO KNOW

To best serve you, MLConnect devoted a considerable amount of time to researching battery backup devices. The Precision Power model is recommended as the most compatible with our equipment. It will provide the MLConnect ONT (optical network terminal attached to your wall) enough power to supply 24 hours of phone service. If other items are plugged in as well, the backup time shortens. For example, if the ONT and residential gateway (see attached) for voice and internet are both using the battery backup, it reduces the battery time to approximately 5 hours.

While under battery backup power, you will be able to access phone services as long as your phone has power as well. Therefore, be sure to verify that your phone works when the power is out. If not, you may need to purchase a separate battery backup for your physical phone base, which is not provided by MLConnect.

This is a purchased product. You are responsible for obtaining, monitoring, replacing, and properly disposing of all batteries for the backup battery. MLConnect recommends testing the battery backup at least twice (2x) a year to ensure it is operating properly.

Depending on the nature of the power outage, external equipment damage, or a service network outage, the battery backup may not guarantee functionality.

NOTES

Failure to test or maintain your battery backup may result in loss of voice service during a power outage, including loss of access to Emergency 911 and other services.

New units, Y-cables, and replacement batteries may be purchased at your local Meriwether Lewis Electric Cooperative office and *typically available for pick up the next day*. They can also be purchased directly through Precision Power's website at <https://precisionpowersolutions.com>.

Please note that the battery backup and batteries are not covered under the MLConnect Service Plan. If you have any questions, please contact MLConnect tech support by calling your local MLEC office and selecting OPTION 3, then OPTION 2.

PRECISION POWER

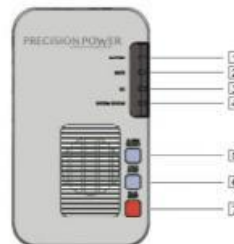
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USER'S MANUAL FOR PRECISION POWER 36W MICRO UPS

MODEL NUMBER: PP36L-12U

VISUAL INDICATORS AND CONTROL SWITCHES



VISUAL INDICATORS

4	SYSTEM STATUS	Color-Green	Receiving AC power load to operate under normal conditions
3	DC	Color-Green	Working off Battery
2	Mute	Color-Yellow	"Flashing"- Audible Alarm Silenced for 24 hrs, "Solid"- Audible Alarm silenced until manually enabled again.
1	Battery	Color-Red	Service or replace battery, or battery missing

CONTROL SWITCHES

5	ALARM SILENCE	Disables Audible Alarm Function. Press and release to disable Audible Alarm for 24 hours. Press and hold for 15 seconds to disable Audible Alarm indefinitely. Press and hold for another 15 seconds in order to re-enable Audible Alarm function.	
6	COLD START	Allows Desktop Pro capability to restart and restore standby power with new battery or to use reserve standby power on existing battery when in AC line power outage for extended time.	
7	N.I.R.	Network Interface Reset (N.I.R.) - Allows for DC line power reset of Optical Network Terminal. Press and hold for 3 seconds to reset/reboot ONT or CPE device.	

VISUAL AND AUDIBLE STATUS/ALARM SIGNALS

STATE	VISUAL INDICATOR	AUDIBLE INDICATOR	DESCRIPTION
NORMAL	System Status Indicator "ON"	System Status Indicator "ON"	Operating under normal AC line power load and conditions.
ON Battery	DC Indicator "ON"		AC line power failure or AC cord disconnection. Desktop Pro is being supplied with battery power.
Replace Battery	Battery Indicator "ON"	1/2 second indicator every 15 minutes	Replace faulty or end of life battery
Battery Missing	Battery Indicator "ON"		Operating on AC line power only without available battery backup for outage scenario. When battery is removed from unit, battery indicator will illuminate after 15 seconds.
Low Battery	DC Indicator Flashes	1/2 second audible indicator 4 times per minute	Battery has reached equal to or less than 45% remaining capacity on battery discharge

WARNING

Review the following important safety warnings to avoid bodily injury or damage to equipment during installation or operation of the device. Read ALL instructions before attempting to install or operate this device.

This device is intended for indoor use only. To prevent the risk of fire or electrical shock, install in dry location free from damp or wet environment, or potentially damp or wet environment.

Adhere to all acceptable operating environment limitations as listed to prevent the risk of fire or electrical shock (see user specifications within User's Manual)

Risk of fire or explosion if improper battery pack is installed and attempted to operate within this device. Follow User Manual instructions for proper installation of battery. Dispose of used batteries in accordance to battery manufacturer specifications.

NO user-replaceable parts within this device except the battery. Do not remove cover unless you are installing, replacing, or servicing the battery.

NOTE: The reference to "MICRO UPS" within this User Manual refers to Precision Power Model PP36L-12U and all package accessories as listed below

CONTENTS OF DESKTOP PRO PACKAGE

NOTE: Please verify all standard contents are accounted for upon receipt of Desktop Pro UPS.

STANDARD: (1) Power Supply/Charger; (1) Li Ion Battery Pack; (1) AC Power Cord; (1) 7-Pin Connector; (1) User's Manual.

Optional: (1) Universal Wall Mount Enclosure w/ Cover.

MICRO UPS INTRODUCTION

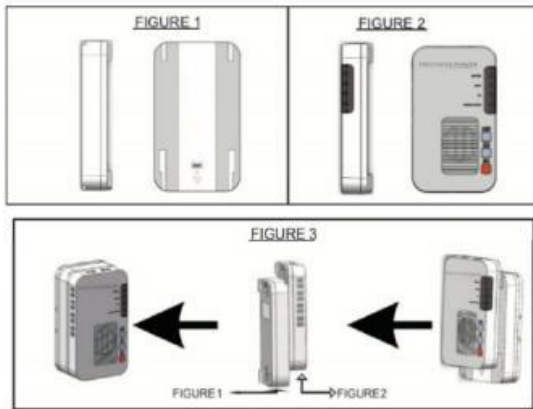
MICRO UPS is designed and intended for use as a Desktop or Wall-Mount uninterruptible 12Vdc power supply and battery backup device for 12Vdc CPE Equipment (i.e. ONT, Router, Access Point). The MICRO UPS not only provides constant supply of DC power during normal operating conditions, but offers battery backup power in case of electrical power outage.

CONNECTION POINTS FOR VAC (INPUT) AND VDC/TELEMETRY (OUTPUT)



MODEL: PP36L-12U		
AUDIBLE ALM	VISUAL ALM	TELEMETRY ALM
YES	YES	YES

INSTALLATION



PROCEDURE:

A. Slide MICRO UPS Battery Pack (FIGURE 1) onto MICRO UPS Power Supply (FIGURE 2) until MICRO UPS Battery Pack becomes fully flush with the top of the MICRO UPS Power Supply. You should hear a "click" when the MICRO UPS Battery Pack is fully seated.

B. Connect provided AC Power Cord to AC Input Connector on bottom of the MICRO UPS Power Supply.

C. Connect 3 Prong AC Power Cord Plug End into standard 3 Prong AC Receptacle rated for NEMA 5-15 3 Prong AC Plug.

D. Verify "System Status" LED is "On" with Green illumination.

E. Connect NXG-Vision to ONT (Optical Network Terminal) or other 12Vdc CPE Device.

F. Ensure "System Status" LED is the only illuminated LED on the MICRO UPS. If any additional LEDs are illuminated recheck the MICRO UPS Battery Pack to make sure it is fully seated and ensure that all wiring from the MICRO UPS to ONT is installed correctly as listed by ONT specific instructions.

BATTERY REPLACEMENT

As long as AC line power is available, the MICRO UPS can resume operation while the battery pack is replaced.

Procedure: Remove the MICRO UPS Battery Pack by sliding off in opposite direction of installation (FIGURE 3) and follow "Installation Step A." above for installing new MICRO UPS Battery Pack.

NOTE: Please follow all State, Federal, and International Regulations when disposing or recycling Li Ion Battery Pack.

WARNINGS Li Ion Battery Pack	
	DO NOT DISASSEMBLE BATTERY PACK
	DO NOT DISPOSE OF IN FIRE
	CHARGE ONLY WITH SPECIFIED CHARGER
	DO NOT STORE IN TEMPERATURE OVER 65C

FCC NOTICE

This equipment has been tested and found to comply with the limit for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (1) Reorient or relocate the receiving antenna. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. (4) Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any changes or modifications could void the authority granted by FCC to operate this equipment

NOTE: Precision Power reserves the right to change or correct the contents of this document and does not assume any responsibility for omissions or errors.

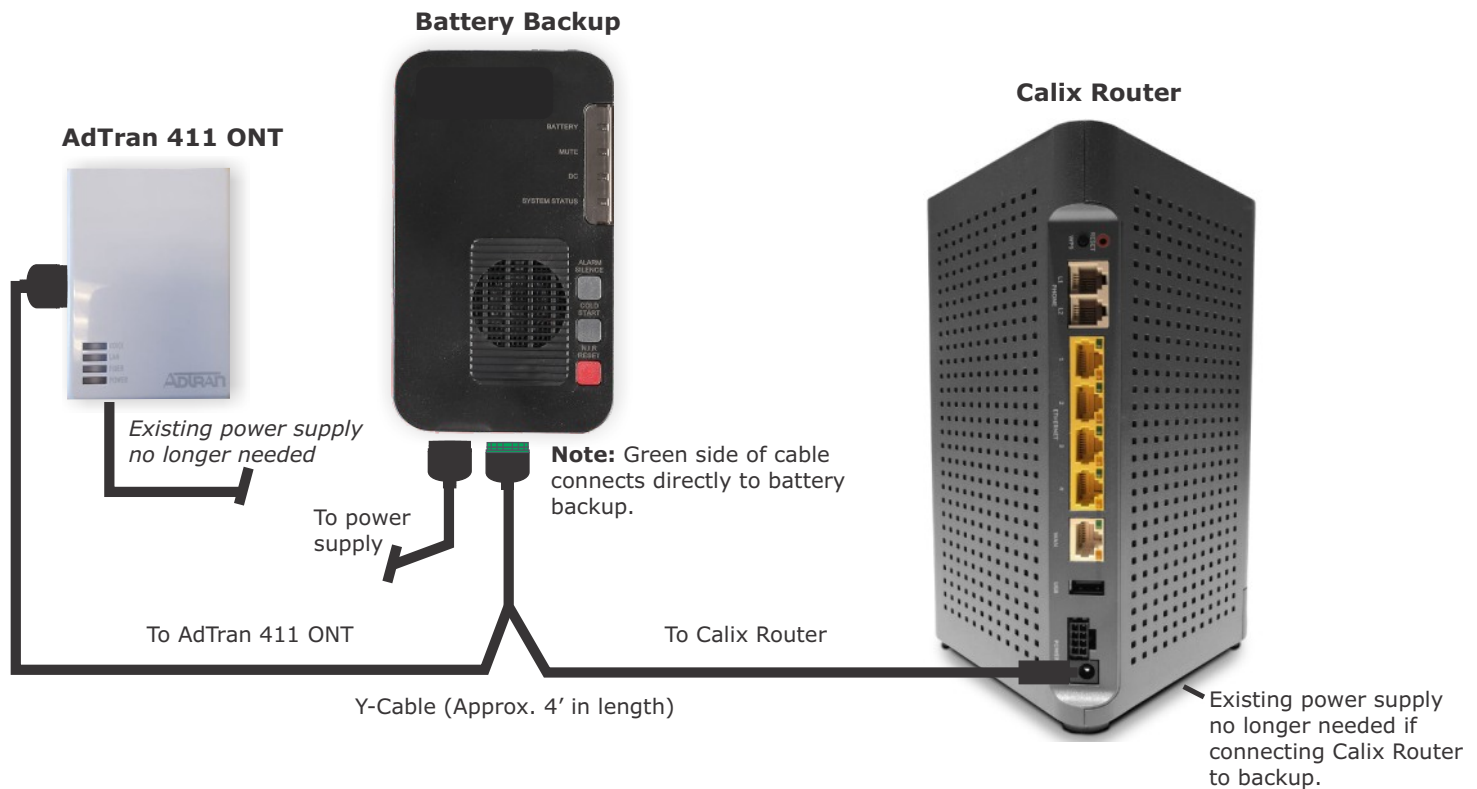
TECHNICAL SPECIFICATION	
INPUT	
Voltage Range	100Vac-240Vac
Frequency Range	50/60Hz
Input Power Cord	NEMA 5-15/ 3-Prong Power Cord
Input Ground Reference	Earth Grounded
OUTPUT-ON AC	
Output Voltage	12Vdc (Nominal)
Continuous Power Capacity	3A(36WATT)
OUTPUT-ON BATTERY	
Output Voltage	12Vdc (Nominal)
Continuous Power Capacity	3A(36WATT)
BATTERY	
Battery Type	Lithium Ion Battery Pack
Design Life	10-15Years
Battery Capacity	14.8V/ 5200mAh
Typical Recharge Time	<12 hrs
Replaceable Pack	Yes
SURGE PROTECTION AND FILTERING	
Lightning/ Surge Protection	Yes(IEC 61000-4-5 2005 LEVEL D)
MANAGEMENT	
Battery Auto-Charge	Yes
Remote Battery Alarming	Optional
Local Alarming(Audible/ Visual)	Yes
Alarm Silence	
24 Hour Silence	Yes
Disable Indefinitely	Yes
ONT Reset	Yes
Cold Start	Yes
PHYSICAL	
Maximum Dimensions (L*W*D)	155mm*89mm*31mm
Weight(lb.)	1.76lb (with battery pack)
ENVIRONMENT	
Operating Temperature	-10° - 49° (14° - 120.2°) at full power
Operating Humidity	0-95% noncondensing within enclosure
Max Operating Eleaion	10,000ft(3,000m)
Storage Temperature	-30° - 65° (-22° - 149°)

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MLConnect Battery Backup

Typical Installation for Y-Cable



Note: Refer to installation sheet included in box for assembling the battery backup. Wall mounting screws are **not** included with unit.

Installation Instructions for Connecting Y-Cable to AdTran 411 and Calix Router

1. Unplug the power cable of the Calix Router. **Note:** Power cable will no longer be needed while using battery backup.
2. Unplug the power cable of the AdTran 411 ONT. **Note:** Power cable will no longer be needed while using battery backup.
3. Connect the Y-Cable (green end with 7-pin connector) to the bottom of the battery backup.
4. Connect the other end of the Y-cable (end with 8-pin connector) to AdTran 411 ONT. **Note:** You will need to remove the protective black rubber cover on the left side of the ONT to insert cable.
5. Connect the last side of the Y-cable (end with round power plug) to Calix Router.

A new battery backup will power ONT for up to 24 hours. When battery backup is powering both the ONT and Calix Router, expect power to last approximately 5 hours. For voice/911 service to work during an outage, the ONT must have power to unit.

DON'T FORGET!

Check that your home phone is able to function when the power is disconnected from base. If it does not, then you will need to purchase a separate battery backup for the phone base that is not available from MLConnect.