



Truestream Battery Back-Up Options

Back-Up Power for Home Phone Services during Power Outages

For many years, your home phone would allow you to stay connected to emergency voice services during a power outage. However, many of today's advanced home phone services require back-up battery power to continue functioning during an outage. To avoid a disruption of home voice service during an outage – and to maintain the ability to connect to 911 emergency services while using a corded phone, Truestream offers the option of purchasing back-up power for your voice service.

What Your Battery Can – and Can't – Do for You

Truestream's back-up battery options for optical network terminals allow you to continue to use your home voice services during a power outage while using a corded phone. Without a back-up battery or alternate power source such as a generator, customers will not be able to make any calls, including emergency calls to 911. The only way to maintain the ability to use your phone is by using some form of back-up power.

Our back-up battery is capable of providing power to Truestream equipment only. Home security systems, medical monitoring devices and other equipment will not run on this back-up battery.

Purchase and Replacement Options

If you are concerned about being able to contact 911 emergency services during a power outage, a back-up battery may be a good option for you. We offer three models, allowing you to select the best one for your needs:

	<u>Average Standby Time</u>	<u>Dimension</u>	<u>Weight</u> (*including battery)
Small	4 - 8 hours	6.1 x 3.5 x 1.22 in.	1.76 lbs
Medium	8 - 16 hours	6.1 x 3.5 x 2.28 in.	2.76 lbs
Large	12 - 24 hours	6.1 x 3.5 x 3.4 in.	3.76 lbs

You can purchase a back-up battery directly through Truestream. Our small back-up battery costs approximately \$125, the medium back-up battery costs approximately \$195, while our large back-up battery costs approximately \$265.

If you have any questions or would like to purchase a back-up battery, please call 1-888-485-2537.

These batteries will be professionally installed by our service technicians. If a battery back-up is requested after your service has been installed, a service fee may apply.

You can also purchase a back-up battery through local retailers or online. If you chose this option, please be sure to properly size your battery back-up device to provide your desired run time.



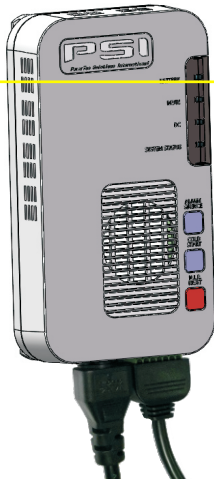
Expected Backup Power Duration

Back-up batteries are expected to last at least 4 or 24 hours (depending on which option you chose) on standby power.

Instructions for Proper Care and Use of Your Battery

Please follow the more detailed instructions included with your battery for proper use, storage and care of your battery to ensure that it will function as needed during a power outage. If you do not store your battery correctly, it may shorten its useful life. Environmental factors such as temperature can shorten your battery's useful life. We recommend that you store your battery above -22°F and below 149°F.

While these batteries are rechargeable, they will not last forever and should be replaced every 10 to 15 years, or when your device starts to make a loud beeping sound. That sound means that the battery is depleted and must be replaced. Contact us for purchase and replacement options. You should also periodically, as described in the instructions included with your battery, remove and test your battery to verify both the operation of the backup battery and its condition.



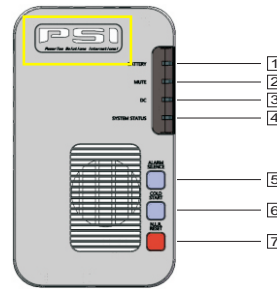
USER'S MANUAL FOR

NXG-Vision

(Next Generation FTTx Micro UPS)

For Model Numbers:
PS36L-P7

VISUAL INDICATORS AND CONTROL SWITCHES



VISUAL INDICATORS

1	Battery	Color-Red	Service or replace battery , or battery is not installed in NXG-Vision.
2	Mute	Color-Yellow	Flashing-Audible Alarm silenced for 24hrs. Soid-Audible Alarm Silence Until manually enable.
3	DC	Color-Green	NXG-Vision is working off Standby Power.
4	System Status	Color- Green	NXG-Vision is Recieving AC power load to operate under normal conditions.
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 NXG-Vision to cold start power off Battery Pack when AC line power is not present and new or replacement pack is connected, press and hold for 3 seconds.
7	N.I.R. Reset		Allows for DC line power reset of optical Network terminal.Press and hold for 3 seconds to reset/reboot optical network terminal.

VISUAL AND AUDIBLE STATUS/ALARM SIGNALS

STATE	VISUAL INDICATOR	AUDIBLE INDICATOR	DESCRIPTION
Normal	System Status Indication On		Operating under normal AC line power load and conditions, charges battery. Battery is connected and in good condition.
ON Battery	DC Indicator On		AC line power failure or AC cord disconnection. NXG-Vision is being supplied with battery power.
Replace Battery	Battery Indicator On	1/2 second audible indicator every 15 min.	Replace faulty or end of life battery.
Battery Missing	Battery Indicator On		NXG-Vision is operating on AC line power only without available stanby power for outage scenario. When battery is removed from unit, battery indicator will illuminate after 5 sec.
Low Battery	DC Indicator Flashes	1/2 second audible indicator 4 times per minute.	Battery has reached equal to or less than 30% remaining capacity on battery discharge.

WARNINGS

Review the following important safety warnings to avoid bodily injury or damage to equipment during installation or operation of this 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 eletrical 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 with this device. Device is rated and approved for use with **PowerTec Solutions Internation** Li Ion Battery Pack ONLY. Follow User Manual instructions for proper installation and removal of battery pack.



NO user-replaceable parts within this device. Do not remove cover for any reason.

NOTE: The reference to "NXG-Vision" within this User Manual refers to **PowerTec Solutions** Models PS36L-K7 (Next Generation FTTx Micro UPS) and all package accessories as listed below.

NOTE: Please verify all standard contents are accounted for upon receipt of NXG-Vision. 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.

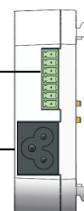
NXG-Vision INTRODUCTION

NXG-Vision is designed and intended for use as Desktop or Wall-mount (when ordered with optional Universal)DC power supply and battery back up device for Indoor 12Vdc Optical Network Terminals (ONT). The NXG-Vision not only provides constant supply of DC power during normal operating conditions, but offers battery backup power in case of electrical power outage. NXG-Vision also provides customer facing Network Interface Reset Intelligence to provide integrated ONT reset technology designed to reduce Provider OPEX.

CONNECTION POINTS FOR VAC (INPUT) AND VDC/TELEMETRY (OUTPUT) (BOTTOM VIEW OF MODEL)

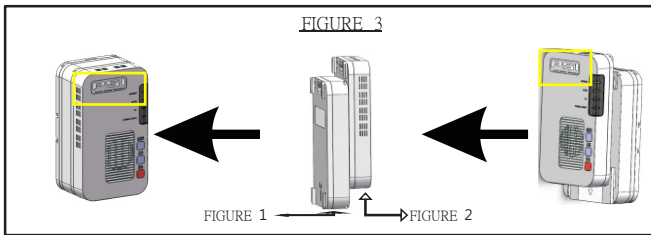
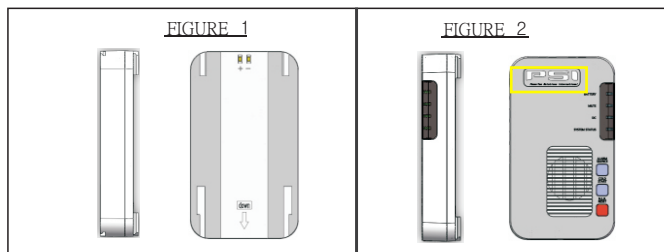
DC Output/Telemetry Connector

AC Input Power Cord Connector



MODEL	AUDIBLE ALARM	VISUAL ALARM	RELAY ALARM TO ONT
PS36L-P7	YES	YES	YES

***RELAY ALARM FROM PS36L-P7 TO ONT (OPTICAL NETWORK TERMINAL) RELAYS BATTERY ALARMS: 1. LOW BATTERY; 2. ON BATTERY; 3. BATTERY MISSING; 4. REPLACE BATTERY**



INSTALLATION

A. Slide NXG-Vision Battery Pack (FIGURE 1) onto NXG-Vision Power Supply/Charger (FIGURE 2) until NXG-Vision Battery Pack becomes fully flush with NXG-Vision Power Supply/Charger. You should hear a "click" when NXG-Vision Battery Pack is fully seated.

B. Connect provided AC Power Cord to AC Input Connector on bottom of NXG-Vision Power Supply/Charger.

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).

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

BATTERY REPLACEMENT

As long as AC line power is available, NXG-Vision can resume operation while battery is replaced.

PROCEDURE:

Remove the NXG-Vision Battery Pack by sliding off in opposite direction of installation (FIGURE 3) and follow "Installation Step A." above for installing new NXG-Vision 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 65°C

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 the FCC to operate this equipment.

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

TECHNICAL SPECIFICATION

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°C - 49°C (14°F - 120. 2°F) at full power
Operating Humidity	0-95% noncondensing within enclosure
Max Operating Eleaion	10, 000ft (3, 000m)
Storage Temperature	-30°C - 65°C (-22°F -149°F)

PSI
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