



## USER'S MANUAL FOR **NXG-Vision**

*(Next Generation FTTx Micro UPS)*

For Model Numbers:  
**PS18L-U2 & PS18L-U7**

### VISUAL INDICATORS AND CONTROL SWITCHES



#### VISUAL INDICATORS

1	System Status	Color-Green	NXG-Vision is receiving AC power load to operate under normal conditions.
2	DC	Color-Green	NXG-Vision is working off Standby Power.
3	Mute	Color-Yellow	Flashing-Audible Alarm silenced for 24hrs Solid-Audible Alarm silenced until manually enabled.
4	Battery	Color-Red	Service or replace battery, or battery is not installed in NXG-Vision

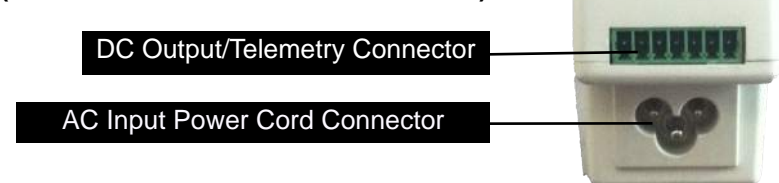
#### CONTROL SWITCHES

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 to re-enable Audible Alarm function.	
6	N.I.R - (Function #1)	Allows NXG-Vision capability to "Cold Start" Vdc power from Battery Pack when AC line power is not present and new or replacement Battery Pack is connected. When new or replacement pack is connected, press and hold for 3 seconds	
	N.I.R. (Function #2)	Allows for Output Vdc line power reset of Optical Network Terminal when AC line power is present. 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 Indicator 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 standby power for outage scenario. When battery is removed from unit, battery indicator will illuminate after 15 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.

#### CONNECTION POINTS FOR VAC (INPUT) AND VDC/TELEMETRY (OUTPUT) (BOTTOM VIEW OF MODEL PS18L-U7)



#### NOTE:

**MODEL PS18L-U2 OFFERS A 2 CONDUCTOR HARD WIRE VDC OUTPUT CABLE ONLY IN PLACE OF THE 7 CONDUCTOR VDC/TELEMETRY OUTPUT OFFERED WITH MODEL PS18L-U7.**

MODEL	AUDIBLE ALARM	VISUAL ALARM	RELAY ALARM TO ONT
PS18L-U7	YES	YES	YES
PS18L-U2	YES	YES	NO

**\*RELAY ALARM FROM PS18L-U7 TO ONT (OPTICAL NETWORK TERMINAL) RELAYS BATTERY ALARMS: 1. LOW BATTERY; 2. ON BATTERY; 3. BATTERY MISSING; 4. REPLACE BATTERY**

### 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 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 with this device. Device is rated and approved for use with PowerTec Solutions International 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 PS18L-U2 and PS18L-U7 (Next Generation FTTx Micro UPS) and all package accessories as listed below.

#### CONTENTS OF NXG-Vision PACKAGE

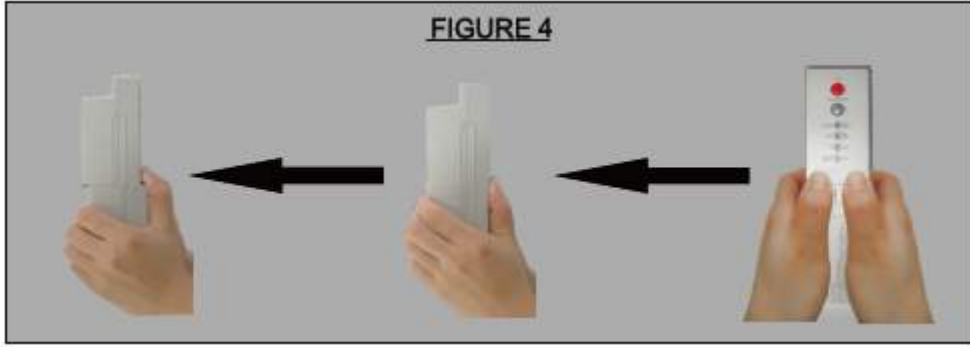
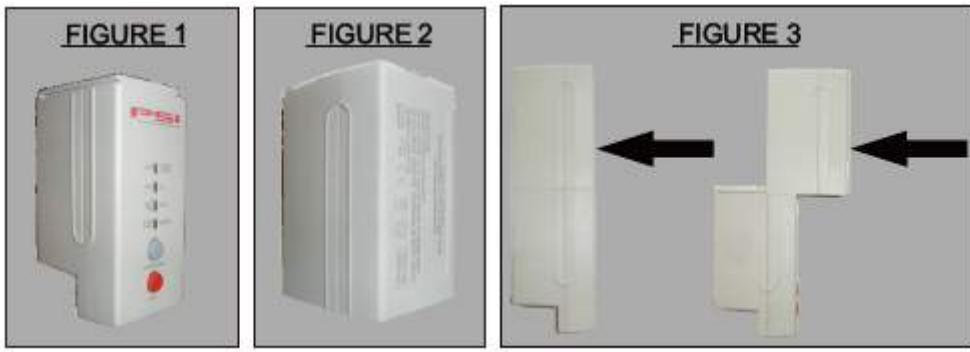
**NOTE:** Please verify all standard contents are accounted for upon receipt of NXG-Vision.

**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 (associated with Model PS18UN), or (1) Wall Mount Cradle w/ Cover (associated with Model PS18CR).

#### NXG-Vision INTRODUCTION

NXG-Vision is designed and intended for use as Desktop or Wall-mount (when ordered with optional Universal or Cradle wall mount enclosures) DC power supply and battery back up device for 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.



### INSTALLATION

A. Slide NXG-Vision Battery Pack (FIGURE 2) onto NXG-Vision Power Supply/Charger (FIGURE 1) 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:

1. Remove the NXG-Vision Battery Pack by sliding off in opposite direction of installation (FIGURE 4) and next follow "Installation Step A" above for installing the new NXG-Vision Battery Pack





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

**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	
<b>INPUT</b>	
Voltage Range	100Vac-240Vac
Frequency Range	50/60Hz
Input Power Cord	NEMA 5-15/3-Prong Power Cord
Output Ground Reference	Earth Grounded
<b>OUTPUT - ON AC</b>	
Output Voltage	12Vdc (Nominal)
Continuous Power Capacity	1.5A (18WATT)
<b>OUTPUT - ON BATTERY</b>	
Output Voltage	12Vdc (Nominal)
Continuous Power Capacity	0.8A (9.6WATT)
<b>BATTERY</b>	
Battery Type	Lithium Ion Battery Pack
Design Life	10-15 Years
Number of Battery	3.7V/2600mAH x 4
Typical Recharge Time	< 10 hrs
Replaceable Pack	Yes
<b>SURGE PROTECTION AND FILTERING</b>	
Lightning/Surge Protection	Yes (IEC 61000-4-5 2005 Level D)
<b>MANAGEMENT</b>	
Battery Auto-Charge	Yes
Remote Battery Alarming	Optional
Local Alarming (Audible/Visual)	Yes
Temperature Monitoring	Yes
Alarm Silence	
24 Hour Silence	Yes
Disable Indefinitely	Yes
ONT Reset	Yes
Cold Start "Emergency Standby"	Yes
<b>PHYSICAL</b>	
Maximum Dimensions (LxWxD)	6.4 x 1.69 x 1.96 (in)
Weight (lb.)	1.25 lb (with battery pack)
<b>ENVIRONMENT</b>	
Operating Temperature	-10C - 40C (14F - 104F) at full power
Operating Humidity	0-95% noncondensing within enclosure
Max Operating Eleaion	10,000ft (3,000m)
Storage Temperature	-30 - 65C (-22F - 149F)

### 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 the FCC to operate this equipment.



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