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Networking your world

NHG-230PSE

1Gbps G.now phone wire over dual Giga LAN with 802.3bt POE adapter

USER'S MANUAL

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Foreword: G.now phone wire solution

Attention:

Be sure to read this manual carefully before using this product. Especially Legal Disclaimer, Statement of Conditions and Safety Warnings.

The NHG-230PSE is a high-performance G.now Wave-2 subscriber adapter engineered to deliver throughput exceeding 1.7 Gbps over existing copper infrastructure. Designed for seamless coexistence with ADSL, VDSL, and G.fast services, it allows for high-speed upgrades without disrupting legacy systems. Equipped with dual Gigabit LAN ports and IEEE 802.3bt PoE++ support, it provides a robust dual 90W power budget for high-draw devices. This solution is optimized for FTTX/MDU/MTU network access infrastructure, connecting to a G.now IP DSLAM to enable rapid deployment of UHD 4K Video streaming without the need for new cabling. The integrated splitter and dual RJ-11 ports ensure simultaneous high-speed data and analog voice service on a single pair.

Caution:

The NHG-230PSE is for **indoor** applications only. This product does not have waterproof protection, please do not use it in outdoor applications.

Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions before using the device.

- **DO NOT** open the device or unit. Opening or removing the cover may expose you to dangerous high voltage points or other risks. ONLY qualified service personnel can service the device. Please contact your vendor for further information.
- **Use ONLY** the dedicated power supply for your device. Connect the power to the right supply voltage (110V AC used for North America and 230V AC used for Europe. NHG-230PSE supports 54 VDC power input.
- **Place** connecting cables carefully so that no one will step on them or stumble over them. DO NOT allow anything to rest on the power cord and do NOT locate the product where anyone can work on the power cord.
- **DO NOT** install nor use your device during a thunderstorm. There may be a remote risk of electric shock from lightning.
- **DO NOT** expose your device to dampness, dust or corrosive liquids.
- **DO NOT** use this product near water, for example, in a wet basement or near a swimming pool.
- **Connect ONLY** suitable accessories to the device.
- **Make sure** to connect the cables to the correct ports.
- **DO NOT** obstruct the device ventilation slots, as insufficient air flow may harm your device.
- **DO NOT** place items on the device.
- **DO NOT** use the device for outdoor applications directly and make sure all the connections are indoors or have waterproof protection place.
- **Be careful** when unplugging the power, because it may produce sparks.
- **Keep** the device and all its parts and accessories out of the reach of children.
- **Clean** the device using soft and dry cloth rather than liquid or atomizers. Power off the equipment before cleaning it.
- This product is **recyclable**. Dispose of it properly.

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Chapter 1. Unpacking Information

1.1 Check List

Carefully unpack the device and verify all contents against the provided package checklist.

Package Contents:

	  
1 x NHG-230PSE	Accessory: 4 x Rubber Feet, 1 x DC54V /4.25A Desktop Adapter, 1x AC Power cord

Notes:

1. **Unpacking and Inspection** Immediately inspect the package for any missing or damaged components. Please retain the original carton and all packaging materials for future transport or repair services (RMA).
2. **Technical Support** Should you encounter any hardware or software issues, please contact your authorized local vendor for assistance.
3. **Power Safety & Specifications** To prevent equipment damage, only use power supplies that meet official specifications. The **NHG-230PSE** requires a **DC 54V / 4.25A** power source. Ensure the input voltage is compliant before connection.

4. **Usage Environment** The included power adapter is **commercial grade**. It is not intended for use in harsh industrial-grade environments or applications.
5. **Telephone Connection** For analog telephone services, ensure the device is connected exclusively to the designated **PHONE port**.
6. **Digital User Manual** Locate the QR code on the bottom of the unit to download the electronic User Manual. (Note: The QR code icon provided in this document is for reference only.)

Chapter 2. Installing the NHG-230PSE

2.1 Hardware Installation

This chapter describes how to install the NHG-230PSE and establish the network connections. The NHG-230PSE may be installed on any level surface (e.g. a table or shelf or rail). However, please take note of the following minimum site requirements before one begins.

2.2 Pre-installation Requirements

2.2.1 Pre-Installation Overview

Before proceeding with the hardware installation, ensure your environment meets the necessary power requirements, provides sufficient physical space, and allows for optimal proximity to connected network devices.

2.2.2 Support & RMA Services

Netsys is committed to ensuring the best performance of your device. If you encounter any technical issues, please contact your authorized local dealer for professional support. **Important:** Should the device require an RMA (Return Merchandise Authorization) for repair, please ensure the complete unit, including all original power supplies—is shipped back for diagnostic testing.

2.2.3 Site Requirements Checklist

Please verify the following installation requirements:

Power Supply: Must be DC 54V / 4.25A.

Ventilation: Place the unit in a cool, dry environment. Maintain at least 10cm (4in) of clearance at both the front and back for adequate airflow.

Environmental Protection: Avoid direct sunlight, heat sources, and areas with high electromagnetic interference (EMI).

Cabling Preparation: Ensure all necessary network cables and connectors are ready and meet specified standards.

Signal Integrity: Do not bundle or strap phone lines together with AC power lines. Ensure the telephone line is dedicated and free of analog voice signals.

Interference Avoidance: Avoid installing the device near radio amplifying stations, power transformers, or other high-interference equipment.

2.3 General Rules

Before proceeding with any connections to the NHG-230PSE, please adhere to the following installation guidelines:

- **Ethernet Port (RJ-45)**

  Cabling Standards & Distance Limits To ensure stable connectivity, use **Cat 5e or higher** UTP/STP cables for 1Gbps speeds. For legacy 10/100Mbps connections, Cat 5 or Cat 3/4 cables are supported. Please ensure the Ethernet cable length does not exceed the **100-meter** limit between the device and the end node.

- **G.NOW Port (RJ-11)**

1. Wire Gauge: Use 24–26 AWG twisted pair. (Avoid 28 AWG+).
2. Pin Assignment: The connection uses the center of two pins of the 6-pin RJ-11 connector.
3. No Polarity: The port is non-polarized. User may connect the two wires in either orientation without issue.

RJ-11 Pin out Assignments

Pin#	MNEMONIC	FUNCTION
1	NC	Unused
2	NC	Unused
3	**G.now**	**Used**
4	**G.now**	**Used**
5	NC	Unused
6	NC	Unused_

- **Phone port (Internal Splitter)**

  ISDN Interface Compatibility

  The NHG-230PSE supports both ISDN U (2-wire) and S/T (4-wire) interfaces. When connecting to an external telephone or terminal device, ensure that it is fully compatible with the specific interface (U or S/T) being utilized.

2.4 Connecting the NHG-230PSE

Ethernet and PoE Port Functionality The **NHG-230PSE** is equipped with two Ethernet ports that support both high-speed data connectivity and **Power over Ethernet (PoE)**.

- **Compatibility:** Connected devices must support **Auto-negotiation**, 10Base-T, or 100Base-TX standards (except for legacy devices operating exclusively in half-duplex mode).
- **High-Power PoE Output:** These ports are designed to power **Powered Devices (PDs)** with either built-in or external PoE splitters. This includes high-demand applications such as **IP cameras, VoIP phones, wireless Access Points (APs), and sensors** requiring high-power delivery of **up to 90W** (802.3bt compliant).

Notes:

1. The RJ-11 LINE port is used to connect the device to the incoming line from a G.now IP DSLAM or a G.now Single Master Adapter.
2. Connection Topology & Constraints The NHG-230PSE must be connected to a Master device (such as a DSLAM or Master Adapter) via telephone wiring.

- Prohibited Connections: Peer-to-peer connections between two NHG-230PSE units, or direct connections between two Master devices, are not supported.
- Status Monitoring: Please monitor Link Quality LED during the initialization process to ensure a stable connection is established.
- When inserting a RJ-11 plug, make sure the tab on the plug clicks into position to ensure that it is properly seated.
- **Do not** plug an RJ-11 phone jack connector into the Ethernet port (RJ-45 port). This may damage the NHG-230PSE. Instead, use only twisted-pair cables with RJ-45 connectors that conform to Ethernet standard.

Notes:

1. Be sure each twisted-pair cable (RJ-45 Ethernet cable) does not exceed 100 meters (333 feet).
2. We recommend using Category 5~7 UTP/STP cables for Cable NHG-230PSEd connections to avoid any confusion or inconvenience in the future when you are attached to high bandwidth devices.
3. Use **24 ~ 26** gauge twisted pair phone wiring, we do not recommend 28 gauge or above.
4. Be sure the phone cable has been installed before NHG-230PSE is powered on.

2.5 G.NOW NHG-230PSE application

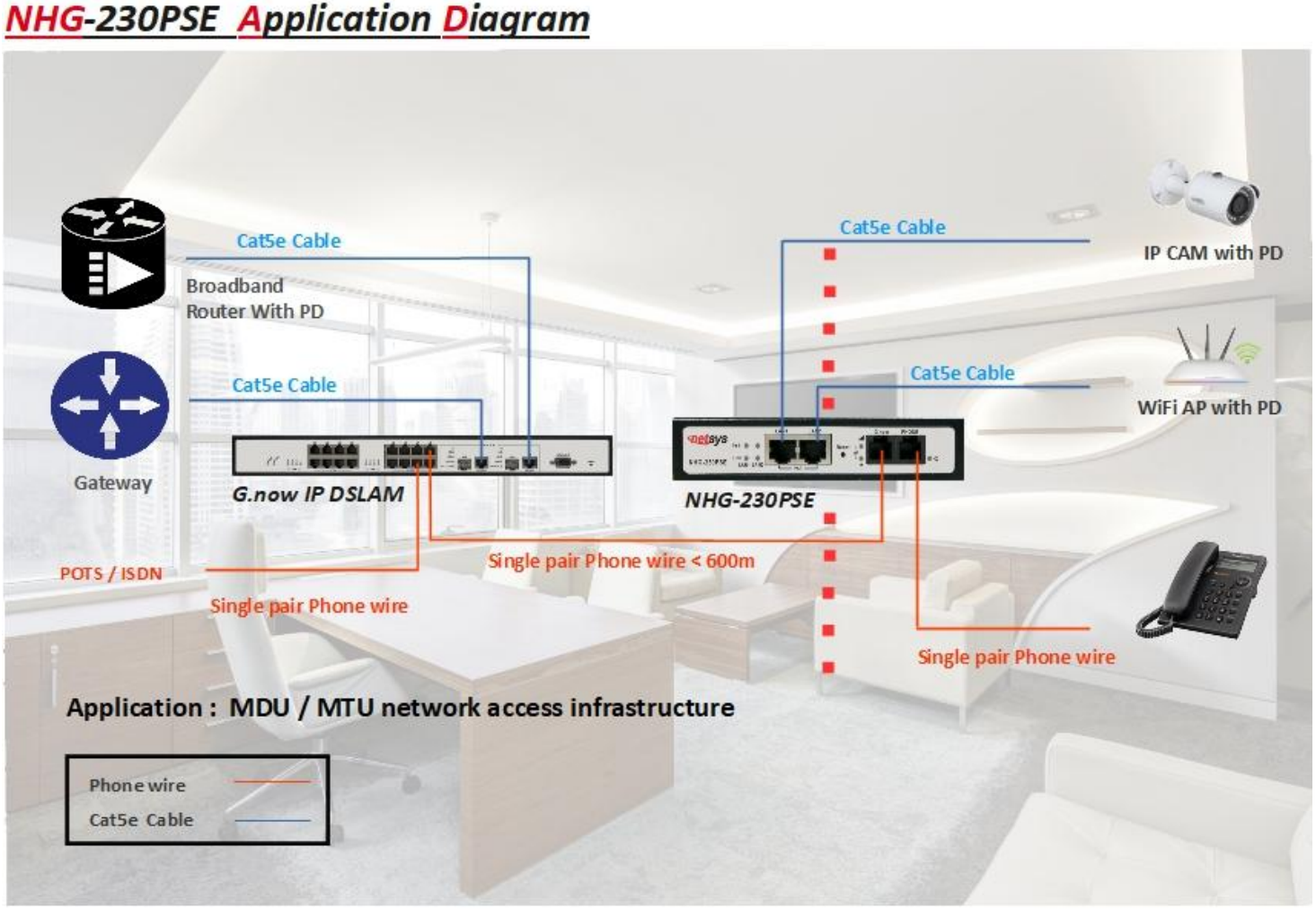

Figure 2.6 G.now IP DSLAM to NHG-230PSE point to point application diagram

Chapter 3. Hardware Description

This section describes the important parts of the NHG-230PSE. It features the front panel and rear panel.

3.1 Front Panel

The front panel provides a simple interface monitoring of the NHG-230PSE. (Figure 3.1)

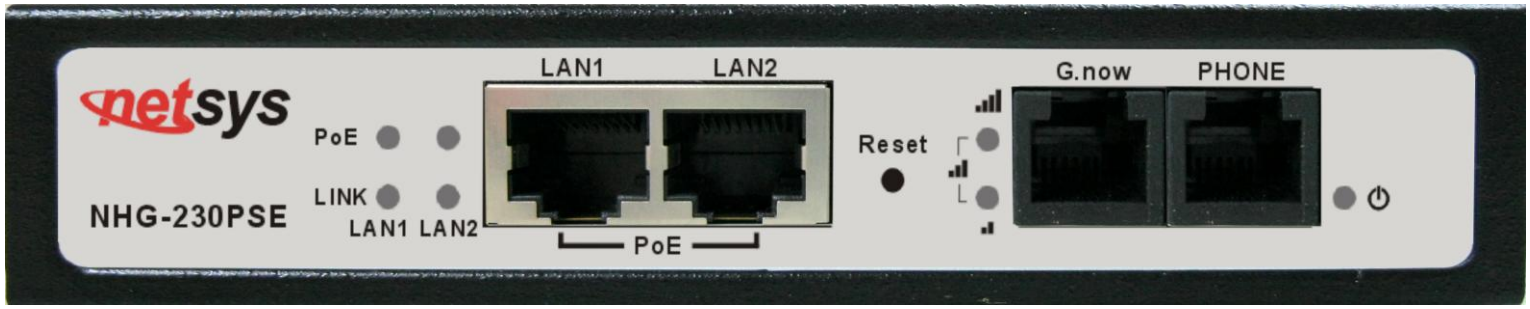

Figure 3.1 Front Panel

The table shows the description. (Table 3-1)

Table 3-1 Description of the NHG-230PSE front connectors

Connectors	Type	Description
LAN1 / LAN2	RJ-45	For connecting to an Ethernet equipped device.
G.now (Line port)	RJ-11	For connecting to G.now IP DSLAM or single master G.now device.
PHONE (Splitter port)	RJ-11	For connecting to PBX or phone set

3.2 Front Indicators

The NHG-230PSE has **Eight** LED indicators. The following Table shows the description. (Table 3-2)

Table 3-2 LED Indicators Description and Operation

LED	Color	Status	Descriptions
PWR (Power LED)	Green	On (Steady)	Lights to indicate that the NHG-230PSE power good
		Off	The device is not ready or has malfunctioned.
LAN 1-2 (Ethernet LED)	Green	On (Steady)	The device has a good Ethernet connection.
		Blinking	The device is sending or receiving data.
		Off	The LAN is not connected.
PoE 1-2 (PoE LED)	Green	On (Steady)	The device has a good PoE connection.
		Blinking	The device is detected to a PoE device, but the power supply does not feed to the PD.
		Off	The device is not connected to a PD device yet.
	Green	On / Blinking	G.now data rate **> 1000Mbps** by upstream plus downstream bandwidth and blinking when packet under transmission or broadcast.
	Green	Yellow	G.now data rate between **600Mbps** and **1000Mbps** by upstream plus downstream bandwidth. blinking when packet under transmission or broadcast.
	Yellow	On / Blinking	G.now data rate **< 600Mbps** by upstream plus downstream bandwidth. blinking when packet under transmission or broadcast.

The flowing figure shows the rear panel. (Figure 3.3)

Figure 3.3 Rear Panel

And the table shows the description. (Table 3-3)

Table 3-3 Description of the NHG-230PSE front connectors

Connectors	Type	Description
Power	Power Din Jack	External Power Adapter: Input: AC 100~240V, 50~60Hz Output: DC 54V / 4.25A
Ground ⏚	Ground terminal	Please connect the ground terminal to earth ground, to protect users and devices by lightning strike.

Appendix A: Cable Requirements

A.1 Ethernet Cable

A CAT 3~7 UTP (unshielded twisted pair) cable is typically used to connect the Ethernet device to the Modem. A: 10/100TX cable often consists of four pairs of wires, two of which are used for transmission. The connector at the end of the 10/100TX cable is referred to as a RJ-45 connector and it consists of eight pins. The Ethernet standard uses pins 1, 2, 3 and 6 for data transmission purposes. (Table A-1 10/100TX)

B: 1000TX cable often consists of four pairs of wires, all of which are used for transmission. The connector at the end of the 1000TX cable is referred to as a RJ-45 connector and it consists of eight pins. The Ethernet standard uses pins 1, 2, 3, 4, 5 and 6 for data transmission purposes. (Table A-1 1000TX)

Table A-1 RJ-45 Ethernet Connector Pin Assignments

PIN #	10/100TX		1000TX	
	Signal	Media Dependant interface	**Signal**	Media Dependant interface-cross
1	TX+	Transmit Data+	BI_DA+	Bi-directional pair A+
2	TX-	Transmit Data-	BI_DA-	Bi-directional pair A-
3	RX+	Receive Data+	BI_DB+	Bi-directional pair B+
4	POE+	+54vdc O/P	BI_DC+	Bi-directional pair C+ w/+54vdc
5	POE+	+54vdc O/P	BI_DC-	Bi-directional pair C- w/+54vdc
6	RX-	Receive Data-	BI_DB-	Bi-directional pair B-
7	POE-	POE Ground	BI_DD+	Bi-directional pair D+ w/ POE GND
8	POE-	POE Ground	BI_DD-	Bi-directional pair D- w/ POE GND

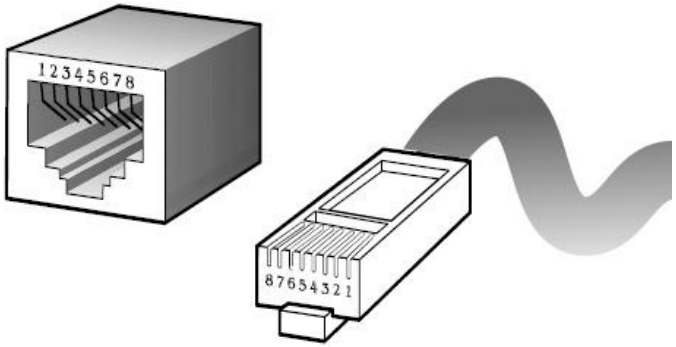

Figure A-1 Standard RJ-45 plug/connector

Figure A-2 Pin Assignments and Wiring for an RJ-45 Straight-Through Cable

Figure A-3 Pin Assignments and Wiring for an RJ-45 Crossover Cable

Appendix B: Product Specification

Key Features and Benefits:

- Dual 10/100/1000 Base-T LANs with IEEE 802.3bt PoE
- Auto-detect PD side device with IEEE 802.3af/at/bt
- Supports Mid-Span PoE mode
- Built-in IEEE 802.3bt PSE with support provides up to 90W for high-draw PD devices.
- Supports MTU (Jumbo frame) up to 2k bytes
- Advanced FEC (Forward Error Correction) mechanism
- Automatic retransmission to ensure zero packet loss
- Advanced NDIM technology for interference mitigation in MDUs with high density of users
- Automatic mitigation of Near-End Crosstalk (NEXT) between copper wires in a bundle
- Supports line port transmission up to 600 meters
- Leverages SISO channel to achieve high-speed throughput of up to 1.7 Gbps
- Supports IGMP (IPv4) and MLD (IPv6) Snooping for optimized IPTV and video traffic management
- built-in splitter for the phone port to allow simultaneous voice and high-speed
- Link quality indicator
- Built in surge protector
- Supports DIN-Rail (optional) / Bracket(optional) / Wall mount installation
- Metal case design
- Plug & play

Product Specification:

LAN port Interface:	Compliant with IEEE802.3 10 Base-T standard Compliant IEEE802.3u 100 Base-T standard Compliant IEEE802.3ab 1000 Base-T standard Compliant IEEE802.3af / at / bt standard Connector: 2 x RJ-45 with PoE MTU: 2k bytes
G.now line port Interface:	ITU-T G.9960 / 9961 / 9962 / 9964 Connector: 1 x RJ-11 for Line port 1 x RJ-11 for phone port (Splitter)
Reset button Switch:	Press and hold for 10 seconds to restore factory defaults
LED Indicators:	1 x Power LED 2 x Link/Active Status for LAN port 2 x PoE Indicator LED 3 x Link quality LED for G.now line port
Power Adapter:	100-240Vac to 54Vdc / 4.25A switching power adapter
Power injector Output:	Each POE port up to 90W
Temperature:	0°C ~ 50°C (32°F ~ 122°F) (Operating) -20°C ~ 70°C (-4°F ~ 158°F) (Storage)
Humidity:	10% to 90% (non-condensing)
Weight:	Approximately 400g
Dimensions:	137 x 100 x 27 mm (5.39" x 3.94" x 1.06")
Certification:	CE, FCC, RoHS Compliant

Appendix C: DIN-Rail mount installation

This appendix describes how to install DIN-Rail on the NHG-230PSE. The accessory is optional.

- Please refer to installing the DIN-RAIL as following step:
  1. Install the DIN-Rail mounting plate to the NHG-230PSE. (Figure C-1)
  2. Please use the suitable DIN-Rail to install, please refer to the dimensions of the DIN-Rail. (Figure C-2)
  3. Insert the top of the DIN-Rail into the top slots on the DIN-Rail mounting plate and the DIN-Rail mounting plate will snap into place. (Figure C-3)

Figure C-1

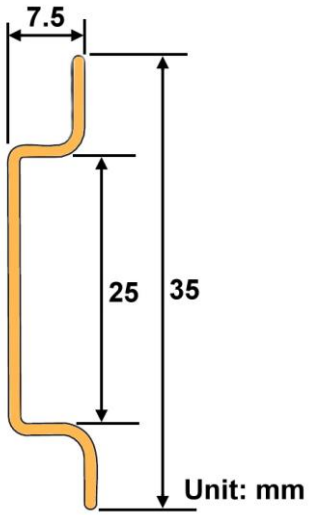

Figure C-2

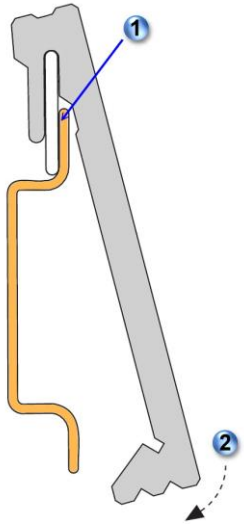

Figure C-3

Appendix D: Troubleshooting with LED Indicators

The NHG-230PSE can be easily monitored through its comprehensive panel indicators. These indicators assist the network manager in identifying problems the hub may encounter. This section describes common problems you may encounter and possible solutions.

1. Symptom:	POWER indicator does not light up (green) after power on.
Cause:	Defective External power supply
Solution:	Check the power plug by plugging in another that is functioning properly. Check the power cord with another device. If these measures fail to resolve the problem, have the unit power supply replaced by a qualified distributor.

2. Symptom:	Link indicator does not light up (green) after making a connection.
Cause:	Network interface (ex. a network adapter card on the attached device), network cable, or switch port is defective.
Solution:	2.1 Power off and re-power on the NHG-230PSE. 2.2 Verify that the NHG-230PSE and attached device are power on. 2.3 Be sure the cable is plugged into both the NHG-230PSE and corresponding device. 2.4 Check if the proper cable type is used and its length exceeds specified limits. 2.5 Check the NHG-230PSE on the attached device and cable connections for possible defects. 2.6 Make sure the phone wire must be connecting NHG-230PSE first, when powered on. 2.7 Replace the defective NHG-230PSE or cable if necessary.

3. Symptom:	NHG-230PSE Link cannot be established for G.now port (Line port)
Cause:	NHG-230PSE G.now (Line port) LED is not light up when connecting to another Ethernet device.
Solution:	**3.1 Connection Sequence** Ensure the phone wire is connected between the **G.now IP DSLAM** (or single master adapter) and the **NHG-230PSE** before powering on the devices. The NHG-230PSE automatically calibrates the link quality based on the cable's length and condition. Failure to detect the device during the initial power-on sequence will result in a connection failure. **3.2 Cable Specifications** For optimal performance, we recommend using phone wires that meet the following criteria: • **Type:** 24 AWG, twisted pair. • **Condition:** Clean and rust-free. • **Maximum Length:** 600 meters. **3.3 Troubleshooting & Reset** Please power cycle the device (unplug and reinsert the power adapter) if: • The cable length has been changed. • The link fails to establish within 3 minutes.
Note:	To ensure optimal G.now throughput, please use Cat 5e or superior cabling. Ensure cables are not clustered, as excessive crosstalk will interfere with the transmission signal, leading to reduced data rates on the G.now ports.
4. Symptom:	NHG-230PSE Link cannot be established for LAN with POE port

Cause:	NHG-230PSE LAN port with POE LED is not light up when connecting to another networking device with PD
Solution:	**4.1 Connection Sequence** Ensure the Ethernet cable is connected between the **NHG-230PSE** and the **PD (Powered Device)** before powering on the devices. The NHG-230PSE automatically detects the PD and negotiates the link based on cable quality and length. If the connection is not established during the power-on sequence, the link may fail to initialize. **4.2 Cable & PD Requirements** • **Cable Specifications:** Use **Cat 5e or higher** twisted-pair cables. Ensure connectors are clean and free of oxidation. The maximum supported length is **100 meters**. • **PD Standards:** Powered devices must comply with **IEEE 802.3af / at / bt** standards and support **Mid-span** connections. • **Power Budget:** Verify that the total power demand of the PD does not exceed the NHG-230PSE's power feeding capacity to avoid overloading.
5. Question:	What is G.NOW?
Answer:	Marvell Unveils Game Changing G.now Technology Providing Fiber-to-the-Home (FTTH) Class Gigabit Broadband Services for the "Smart Life and Smart Lifestyle" Marvell launches G.now technology based on G.hn as an upgrade to VDLS2 over existing phone wiring

6. Question:	Connected NHG-230PSE within 300 meters RJ-11 phone cable got less than 10 Mbit/s
Cause:	6.1 Some testing programs which are based on TCP/IP protocol such as FTP, Iperf, NetIQ, the bandwidth of testing outcome will be limited by **TCP window size**. 6.2 Some operating systems limit the maximum bandwidth, such as windows series OS.
Solution:	We recommend testing G.now bandwidth best by Smartbit equipment (Packet generator), if you don't have Smartbit, we recommend test that by IPERF program, and TCP window size must be setted max. 64k, the parameter as iperf –c server IP address –i 1 –t 50 –w **65535** for client side.

System Diagnostics

Power and Cooling Problems

If the POWER indicator does not turn on when the power cord is plugged in, you may have a problem with the power outlet, power cord, or internal power supply. However, if the unit power is off after running for a while, check for loose power connections, power losses or surges at the power outlet. If you still cannot isolate the problem, then the internal power supply may be defective. In this case, please contact your local dealer.

Installation

Verify that all system components have been properly installed. If one or more components appear to be malfunctioning (e.g. the power cord or network cabling), test them in an alternate environment where you are sure that all the other components are functioning properly.

Transmission Mode

The default method of selecting the transmission mode for LAN ports (RJ-45) is 10/100/1000 Mbps auto-negotiation, for Line port (RJ-11) are auto-speed. Therefore, if the Link signal is disrupted (e.g. by unplugging the network cable and plugging it back in again, or by resetting the power), the port will try to reestablish communications with the attached device via auto-negotiation. If auto-negotiation fails, then communications are set to half duplex by default. Based on this type of industry-standard connection policy, if you are using a full-duplex device that does not support auto-negotiation, communications can be easily lost (i.e. reset to the wrong mode) whenever the attached device is reset or experiences a power fluctuation. The best way to resolve this problem is to upgrade these devices to a version that supports Ethernet and G.now.

Physical Configuration

If problems occur after altering the network configuration, restore the original connections, and try to track the problem down by implementing the new changes, one step at a time. Ensure that cable distances and other physical aspects of the installation do not exceed recommendations.

System Integrity

As a last resort verify the switch integrity with a power-on reset. Turn the power to the switch off and then on several times. If the problem persists and you have completed all the preceding diagnoses, then contact your dealer.

Appendix E: Compliance Information

FCC Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a computing device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the 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 the radio or television reception, which can be determined by turning 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. The equipment and the receiver should be connected to outlets on separate circuits.
4. Consult the dealer or an experienced radio/television technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could prevent the user's authority running the equipment.

If this telephone equipment causes harm to the telephone network, the telephone company will let you know in advance that temporary discontinuance of service may be needed. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of the right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes to its facilities, equipment, operations or procedures that could affect the

proper functioning of your equipment. If they do, you will be notified in advance of you to make necessary modifications to maintain uninterrupted service.

This equipment may not be used on the coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

FCC Warning

This equipment has been tested to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment can generate, use, and radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at owner's expense.

CE Mark Warning

This is a class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

RoHS Mark Warning

RoHS stands for Restriction of Hazardous Substances and impacts the entire electronics industry and many electrical products as well. The original RoHS, also known as Directive 2002/95/EC, originated in the European Union in 2002 and restricts the use of six hazardous materials found in electrical and electronic products. All applicable products in the EU market from July 1, 2006, must pass RoHS compliance. Directive 2011/65/EU was published in 2011 by the EU, which is known as RoHS-Recast or RoHS 2. RoHS 2 includes a **CE-marking directive**, with RoHS compliance now being required for CE marking of products. RoHS 2 also added Categories 8 and 9 and has additional compliance recordkeeping requirements. Directive 2015/863 was published in 2015 by the EU, which is known as RoHS 3. RoHS 3 adds four additional restricted substances (phthalates) to the list of six.

WEEE Warning

To avoid the potential effects on the environment and human health because of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the cross-out wheeled bin symbol. Do not dispose of WEEE is unsorted municipal waste and must collect such WEEE separately.

ErP Power Usage

This device is an Energy Related Product (ErP) with High Network Availability (HiNA). If it is not needed during certain periods of time, it can be unplugged to save energy.

Network Standby: 5 watts

Warranty

The original product that the owner delivered in this package will be free from defects in material and workmanship for one-year parts after purchase.

There will be a minimal charge to replace consumable components, such as fuses, power transformers, and mechanical cooling devices. The warranty will not apply to any products which have been subjected to any misuse, neglect or accidental damage, or which contain defects which are in any way attributable to improper installation or to alteration or repairs made or performed by any person not under the control of the original owner.

The above warranty is in lieu of any other warranty, whether express, implied, or statutory, including but not limited to any warranty of merchantability, fitness for a particular purpose or any warranty arising out of any proposal, specification or sample. We shall not be liable for incidental or consequential damages. We neither assume nor authorize any person to assume for it any other liability.

WARNING:
DO NOT TEAR OFF OR REMOVE THE WARRANTY STICKER AS SHOWN, OR THE WARRANTY IS VOID.

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部件名称	有毒有害物质或元素									
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬[Cr(VI)]	多溴联苯(PBB)	多溴二苯醚(PBDE)	邻苯二甲酸二(2-乙基己基)酯(DEHP)	邻苯二甲酸丁酯苯甲酯(BBP)	邻苯二甲酸二丁酯(DBP)	邻苯二甲酸二异丁酯(DIBP)
结构壳体	○	○	○	○	○	○	○	○	○	○
电路组	○	○	○	○	○	○	○	○	○	○
电源供应器	○	○	○	○	○	○	○	○	○	○
线材	○	○	○	○	○	○	○	○	○	○
包装及配件	○	○	○	○	○	○	○	○	○	○

○：表示该有毒物质在该部件所有均质材料中的含量均在 GB/T 39560 标准规定的限量要求以下。

╳：表示该有毒物质至少在该部件的某依均质材料中的含量超出 GB/T 39560 标准规定的限量要求。

上述规范仅适用於中国法律