



600 Series Router Quick Start Guide

Document: 8435 v1.1



Declaration of Conformity

We: Eseye Design Limited

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Declare under sole responsibility that the product family Hera 604 to which this declaration relates, is compliant with the essential requirements of:

- RoHS Directive 2015/863/EU
- WEEE Directive 2012/19/EU
- Ecodesign Directive 2009/125/EC
- Batteries Directive 2013/56/EU
- Radio Equipment Directive (RED) 2014/53/EU
- The Low Voltage Directive 2014/35/EU
- The EMC Directive 2014/30/EU

Name: Jon Darley

Position: Director of Things

Place and date of issue: Guildford, July 2019

Year of affixing CE Mark: 2019



Getting started

The Hera is designed for wall-mounting.

Choosing a location



Read all warnings before choosing a location for the Hera.

Locate the Hera in a weather-protected, stable, vibration-free environment.

- **Operating temperature:** -20°C to +55°C (-4°F to 131°F)
- **Relative humidity:** 0-95%, non-condensing



Consider cellular signal strength, WiFi strength and signal interference from other equipment when choosing an installation location.



Consider if you need to easily see and access any antenna connectors, cable connection points, and LED indicators on the top, front, and bottom panels.

Wall-mounting the Hera

Before you begin

You will need:

- To install the security plate – Security Torx screwdriver (T10 tip)
- Tape measure
- Spirit level
- Pencil
- Masking tape
- Cross head Pozidriv/Philips screwdriver
- Drill – Metric Ø 5mm Imperial Ø 3/16"
- 4 x Plastic wall plugs/anchors – Metric Ø 5mm, L30mm Imperial Ø 3/16", L1 1/4"
- 4 x pan head wood screws – Metric Ø 3.5mm, L30mm Imperial Ø #6, L1 1/4"

1. If a SIM card is supplied, ensure it is fully inserted in the Hera.



The socket is a push-to-insert, push-to-release type socket. When the SIM is properly inserted, it clicks into place and sits flush with the edge of the SIM slot.

2. If required, fit the SIM security plate (see below).
3. The printing process may have distorted the template image.
4. If the template is accurate, fix the page to the wall using the spirit level and tape. Alternatively, use the Hera to mark the drill holes.
5. Drill holes and prepare them with the wall plugs/anchors.
6. Attach the cellular cables (Primary and RX Div) and if required, WiFi antennas, to the Hera.
7. Mount the Hera on the wall using the recommended fixings.
8. Position all antennas for optimal performance.
9. Insert the power connector.
10. Plug the mains adaptor into a dedicated socket, then switch on.
11. Ensure all cables and antennas are securely anchored to avoid intermittent connection problems.
12. Configure the Hera using the supplied web user interface.

For information about connecting to the Hera, see *Configuring Hera connections* below.

Fitting the SIM card security plate

- Use a Security Torx screwdriver (T10 tip) to fit the security plate across the Hera SIM card slots.



Configuring Hera connections

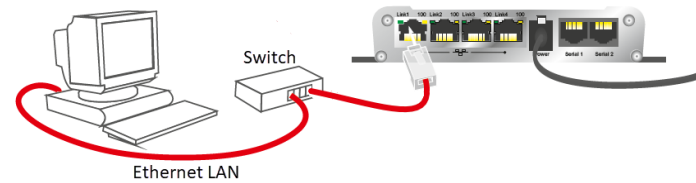
Connect to the Hera with an ethernet cable or over WiFi.



Eseye may include a unique **Configuration Information Sheet** with each Hera Series Router. Use this information to connect, log into, and configure the Hera. If the sheet is not included, your service provider or reseller will advise you of the contents.

Configuring a wired connection

- Use an ethernet cable to connect from the Hera ethernet port **Link1** to a PC or laptop, either directly or via an ethernet switch.



Configuring a WiFi connection



If there is no SSID information supplied, use a wired connection to the Hera Series Router.

1. Ensure the Hera WiFi LED is illuminated.
2. Search wireless networks on your WiFi-enabled device. Connect to the network that matches the SSID.
3. At the prompt, type the WiFi username and passphrase exactly as supplied.

Logging in to the Hera Series Router

1. Using a browser on your device, type the supplied **Web Interface IP** into the address bar. For example:
http://192.168.0.1
2. Press return.
3. At the prompt, enter the supplied credentials, then select **OK**. The Hera Series Router web interface appears.

Configuring the cellular connection

The Hera is preconfigured to connect to a cellular network using an Eseye AnyNet SIM.

Warranty

- Use only Eseye-approved mains power adaptors. Using the Hera with any other mains power adaptor will invalidate the warranty.
- Do NOT open the casing under any circumstances, as it will invalidate the warranty. There are no user-serviceable components inside the Hera. If a fault develops with the product, contact your service provider or reseller.
- Only manufacturer-authorised personnel may replace the Hera batteries. This ensures fitting of approved parts, and fully complies with Battery Directive 91/157/EEC and local legislation regarding responsible recycling and correct disposal. Failure to comply will invalidate the warranty.
- Take all reasonable precautions when choosing the site and installing the Hera. Read and understand all warnings and installation instructions. Eseye Design are not liable for consequential loss or damage that occurs because the warnings and installation instructions in this guide were not followed.
- Do not insert or remove a SIM card when the Hera is powered on. This will cause problems with the Hera functionality. Always power off before inserting or removing a SIM card.

Warnings



Keep away from direct sunlight.



Do not place the unit close to a heat source (such as other electrical equipment).



Do not enclose the unit in unventilated housing, where heat may accumulate.



The supplied antennas are not for outdoor use. If using an outdoor antenna, ensure it provides adequate lightning protection.



Avoid locations exposed to heavy soiling, such as exhaust from machinery, liquid or airborne particles from industrial processes, or excessive dust.



Locate the Hera within 1 metre of a mains power outlet.



Use only an approved mains power adaptor. Using alternative power adaptors may damage the unit, will invalidate the warranty, and may invalidate the Hera regulatory approval.



Do not modify the mains power adaptor.



A falling device can cause injury. Do not mount more than 2 metres above the floor.



The Hera uses radio signals and cellular networks, and is not guaranteed to connect in all possible conditions. Never rely solely upon any wireless device for life-critical communications.



Position cellular antennas at least one metre away from people in normal operation.



The Hera incorporates a GSM radio module, which receives and transmits radio frequency (RF) energy when powered on. Never install your Hera where prohibited, or if it may cause interference or danger.



When installing in healthcare facilities, observe on site mobile phone usage restrictions, as some medical equipment may be sensitive to RF energy. This includes implanted medical equipment, such as cardiac pacemakers and hearing aids. We recommend testing for interference before installing the Hera permanently.



Post a clear, visible warning alongside the Hera to inform people with medical implants of the potential danger of radio frequency interference.



RF energy may interfere with TV sets; radios; computers; and inadequately shielded equipment if the Hera is in close proximity.



Do not operate GSM equipment, including the Hera, on aircraft, in order to prevent interference with communications systems. Offenders may have their cellular services suspended or banned, and may also face legal action.



Do not operate the Hera in the presence of flammable gases, fumes, or potentially explosive atmospheres. Do not operate the Hera anywhere that blasting operations are taking place.

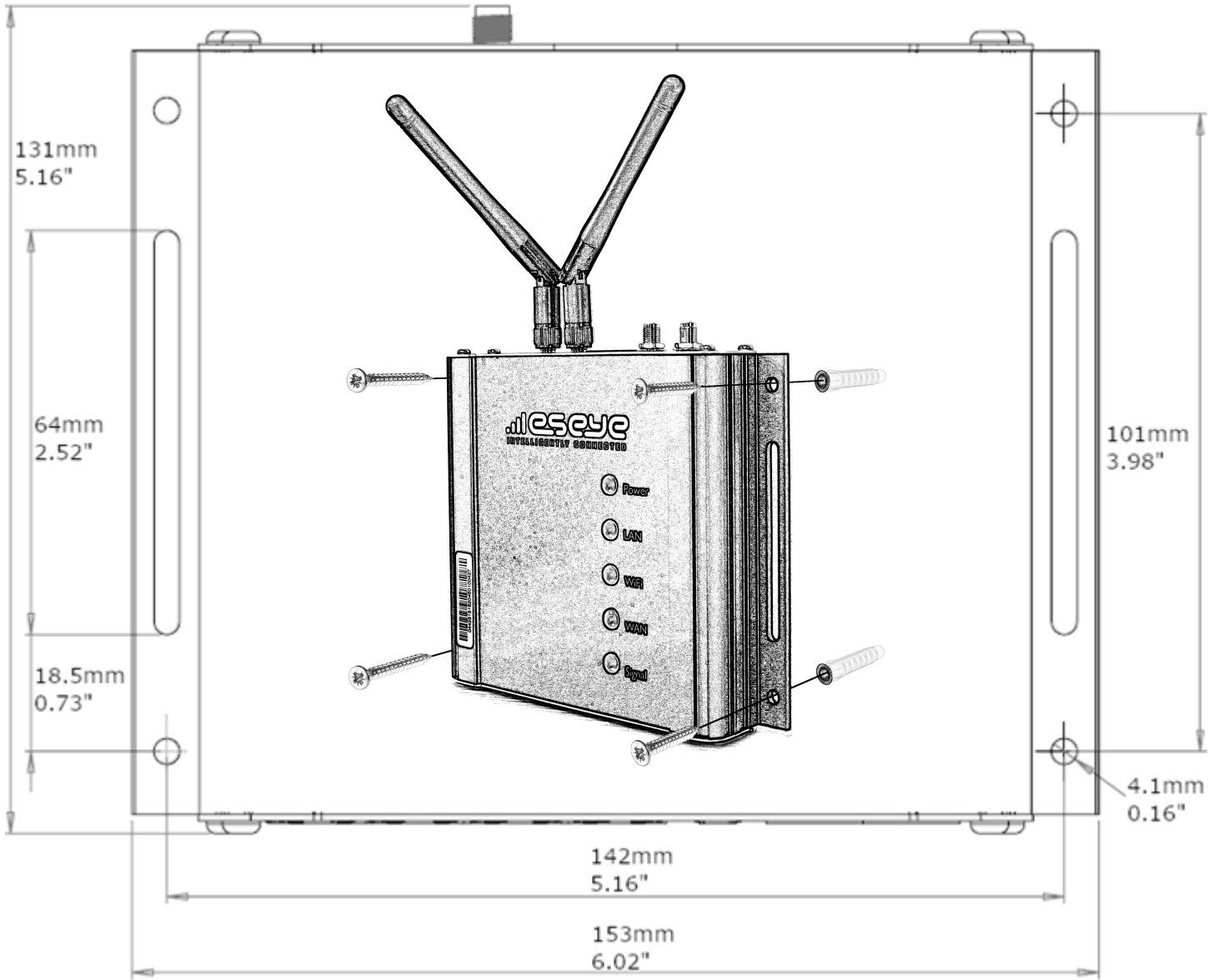
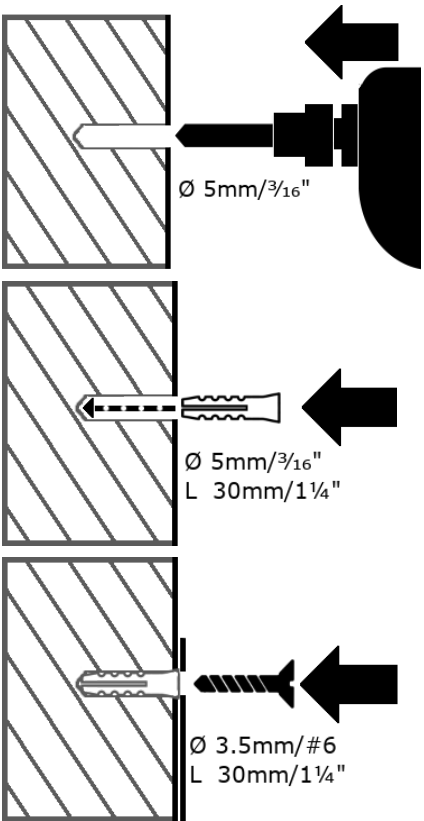



The Hera contains Lithium coin type batteries. Keep batteries away from children.



Front panel indicators

LED	State	Description
Power	Solid red	Unit is powered, software is not operating yet
	Solid green	Unit is powered and software is operating normally
	Flashing green in sync with another LED	Error on the port that is also flashing
	Flashing green independently after boot up period	Internal error
LAN	Off	No mains power or product failure
	Solid green – on	LAN connection available
	Flashing green (regular pattern) in sync with Power LED	Error on the LAN port
	Flashing green (irregular)	Data transfer
WiFi	Off	No LAN connection available
	Solid green – on	WiFi connection available
	Flashing green (regular pattern) in sync with Power LED	Error on the WiFi port
	Flashing green (irregular)	WiFi data transfer
WAN	Off	No WiFi connection available
	Solid green – on	WAN connection available
	Flashing green (regular pattern) in sync with Power LED	Error on the WAN port
	Flashing green (irregular)	WAN data transfer
Signal	Off	No WAN connection available
	Brief flash of red every five seconds	No signal detected
	Solid red	Cellular signal strength WEAK
	Solid orange	Cellular signal strength MEDIUM
	Solid green	Cellular signal strength STRONG
	Off	The modem is off



 **Disposal:** In accordance with EU directive 2012/19/EC, ensure that at end-of-life, you separate this product and its accessories from other waste and scrap, and deliver to the WEEE collection system in your country for recycling.

Declaration of Conformity with FCC rules for Electromagnetic Compatibility

The following section is for use with Hera Series Routers that have an FCC mark on the product label.

FCC ID: 2AASBH604V4 **Contains FCC ID:** N7NEM74B **IC:** 11329A-H604V4 **Contains IC:** 2417C-EM74B **Model:** H604V5

We, Eseye Design Limited declare under our sole responsibility that this device (H604v5) complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.


 **Caution: Exposure to Radio Frequency Radiation.**

The device shall be used in such a manner that the potential for human contact during normal operation is minimized. When connecting an external antenna to the device, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Federal Communications Commission Notice

This equipment has been tested and found 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 in a non-residential installation. 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 radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

 **FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.**

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product guidelines.

Modifications

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Eseye Design Limited may void the user's authority to operate the equipment. This device complies with ISSED's licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause interference; and
- This device must accept any interference, including interference that may cause undesired operation of the device

This radio transmitter (11329A-H604V4) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device:

- WLAN (UNII 1 and 3) - CORTEC P/N AN2450-5505BRS: 2.0dBi
- Cellular: Gantetech GA-GSM-06: 3.5dBi

The operation of the device in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems. This equipment complies with ISSED RSS 102 radiation exposure limits set forth for an uncontrolled environment. This equipment is installed to be operated with a minimum 20cm distance between the antenna and the user. Please note that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250- 5350 MHz and 5650-5850 MHz and these radars can cause interference and/or damage to LELAN (License Exempt Local Area Network) devices. Cet appareil est conforme au(x) standard(s) RSS exempts de licence d'Industrie Canada. Son exploitation est soumise aux deux conditions suivantes :

- cet appareil ne doit pas occasionner d'interférence et
- cet appareil doit supporter toutes les interférences, y compris celles qui pourraient provoquer un mauvais fonctionnement de cet appareil.

Le présent émetteur radio (11329A-H604V4) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés cidessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

- WLAN (UNII 1 and 3) - CORTEC P/N AN2450-5505BRS: 2.0dBi
- Cellular: Gantetech GA-GSM-06: 3.5dBi

L'utilisation de l'appareil dans la bande de fréquences 5150-5250 MHz est uniquement valable en intérieur pour réduire le risque de brouillage nuisible au fonctionnement des systèmes mobiles par satellite partageant les mêmes canaux. Cet appareil est conforme aux limitations de la norme IC RSS-102 concernant l'exposition aux radiations dans un environnement non contrôlé. Cet appareil doit être installé et utilisé avec une distance minimale de 20 cm entre l'antenne et le corps de l'utilisateur. Veuillez noter que les radars haute puissance sont définis comme utilisateurs principaux (i.e. utilisateurs prioritaires) des bandes 5250- 5350 MHz et 5650-5850 MHz, et que ces radars peuvent causer des interférences et/ou endommager les appareils LE-LAN (réseau local exempt de licence).

Declaración para usuarios en México

La operación de este equipo está sujeta a las siguientes dos condiciones:

- es posible que este equipo o dispositivo no cause interferencia nociva
- este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Este equipo está diseñado para operar con las antenas enlistadas y con una capacidad máxima de 2.0 dBi (WLAN)/ 3.5 dBi (Celular). El uso de antenas con este equipo no incluidas en esta lista o que tengan una capacidad mayor a 2.0 dBi (WLAN)/ 3.5 dBi (Celular), quedan PROHIBIDAS. La impedancia requerida de la antena es de 50 ohms.

- WLAN (UNII 1 and 3) - CORTEC P/N AN2450-5505BRS: 2.0dBi
- Celular: Gantetech GA-GSM-06: 3.5dBi

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