

# SHIELD MegaFi 2 User Guide



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# Welcome

This MegaFi 2 User Guide goes over details about what is in the box, installation instructions, local and cloud access to the device, and its specifications.

In addition to the MegaFi 2 User Guide, additional information and support for your device can be found at <u>https://www.nextivityinc.com</u>.

## **Customer Responsibilities**

The customer is responsible for the following:

- Providing and configuring the connected devices and configuring the MegaFi 2 router as needed for internet and/or private wide area network access.
- Providing Internet access:
  - Via the AT&T or FirstNet activated SIM on the wireless WAN connection; or
  - Via a wired ethernet connection to the WAN port.
- Providing power and environmental operating conditions within the following ranges:

Parameter	Value
Temperature Range	-30°C to +65°C [-22°F to 149°F]
Operating Humidity	(Non-Condensing) 0 to 95%
Power	DC: 9 to 36 VDC power – device accepts PoE+ (802.3at) on WAN/LAN2 port only
	NOTE: MegaFi 2 power adapters are not interchangeable with other devices. Only use the power cord supplied and approved by Nextivity with your MegaFi 2.

- 1. Accept the End User License Agreement and change the default password when first logging into the local graphical user interface (Mission Control), when locally connected to the device at <a href="https://192.168.113.1">https://192.168.113.1</a>.
- **2.** Register your MegaFi 2 through the <u>Nextivity Cloud Portal</u>. See Section 5: *Cloud Access via the Nextivity MegaPortal* for more information.
- **3.** Other responsibilities are specified in your End User License Agreement as well as your agreements with AT&T, FirstNet, and other providers.

## **Frequently Asked Questions**

- Q How do I determine if MegaFi 2 will improve my cellular network connectivity?
- A If your enterprise or agency is located within an area in which AT&T is licensed to provide cellular service and your signal strength is two bars or fewer, MegaFi 2 may be a good solution for you. MegaFi 2 is designed to support up to 256 connected devices and is designed to provide the highest-power wireless connection (WWAN) and a wired network connection (WAN) for all your edge router needs.

High-power mode will only work on Band 14. AT&T and FirstNet can help determine if your nearest tower supports Band 14.

- **Q** What changes will I notice to my mobile service once I install the MegaFi 2?
- A data session made through MegaFi 2 will have improved signal strength, coverage, and clarity resulting in generally higher uplink speeds and lower transmit packet loss in challenging coverage areas.

Connected phones with Wi-Fi turned on will experience better calls with fewer drops.

- **Q** Does the MegaFi 2 require professional installation?
- A Professional installation is not necessary for traditional in-office or in-home use. If installing in a vehicle or where an external antenna is needed, a professional installer is highly recommended. AT&T and FirstNet can arrange to have your device professionally installed, and a quote can be obtained from AT&T, FirstNet, or your authorized seller.
- **Q** How do I log into my device for the first time?
- A Connect a computer (mobile phone not recommended) locally to the device with an ethernet cable or via the Wi-Fi connection:
  - 1) Open your computer browser window and enter <a href="https://192.168.113.1">https://192.168.113.1</a> and accept any browser certificate warnings to get to the local Mission Control login page.
  - 2) At the Mission Control login screen, enter "**admin**" as the username and the default password, which is available from the router's label or LCD display, and click **Login**.
  - 3) When the End User License Agreement appears, complete the information at the bottom of the form and click **Apply**.
  - 4) When directed, update your password AND press **Save**.
- **Q** How do I get support if I have more questions?
- A Contact the representative that sold you your MegaFi 2 or see our <u>SHIELD MegaFi 2</u> <u>product page</u>. You can also email support at <u>support@nextivityinc.com</u>.

# **Safety Precautions**

- When installing the equipment, all the requirements of the manufacturer and the referenced standards must be met.
- There are no user serviceable parts inside.

## **Limitation of Liability**

In no event shall Nextivity, nor its directors, employees, agents, suppliers or End Users, be liable under contract, tort, strict liability, negligence or any other legal or equitable theory with respect to the Products or any other subject matter of this Agreement (i) for any lost profits, cost of procurement of substitute goods or services, or special, indirect, incidental, punitive, or consequential damages of any kind whatsoever or (ii) for any direct damages in excess of (in the aggregate) the fees actually received by

Nextivity from End User with respect to the Products actually purchased and paid for.

## **FCC Statement**

This mobile router complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This mobile router has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable 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 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 to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into 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 Note

▲ **CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **RF Exposure Information**

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20-inches during normal operation.

### **Patents**

This product is covered by Nextivity, Inc., U.S. patents and patents pending. Please refer to <u>www.nextivityinc.com</u> for details.

## Trademark

The Nextivity logo is a trademark of Nextivity, Inc.

<sup>©</sup>2025 AT&T Intellectual Property. All rights reserved. FirstNet and the FirstNet logo are registered trademarks and service marks of the First Responder Network Authority. All other marks are the property of their respective owners.

## **Legal Disclaimer**

For further information on terms of service and other conditions go to <u>https://nextivityinc.com/legal</u>.

## **Contact Information**

### **Technical Support:**

Email:	support@nextivityinc.com
Phone:	+1 (858) 485-9442 Option 1
Support Business Hours:	6:00 AM - 5:00 PM PST
Sales:	
Phone:	+1 (858) 485-9442 Option 2

### Warranty

Nextivity, Inc. provides a limited warranty for its products. For details, please refer to <u>https://www.nextivityinc.com/warranty</u>.

# **Online Technical Support**

For online self-help support, FAQs, documentation, go to

<u>https://nextivityinc.com/products/shield-megafi-2-hpue/</u> and scroll down to the About the Shield MegaFi 2 section.

## **User Guide Purpose**

The purpose of this document is to provide the user with an introduction to the SHIELD MegaFi 2 wireless WAN router. This guide will also provide details on installation and some interoperability scenarios.

 NOTE: All images used in this document are used only for displaying examples of configurations and may not reflect the user's current device.

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# **1 | Introduction**

The SHIELD MegaFi 2 is an integrated High Power User Equipment (HPUE) device that functions as a 5G multi-port router and Wi-Fi hotspot, operating across all AT&T bands. It is the first device to combine 5G connectivity with HPUE performance—delivering up to six times the power of standard wireless devices.

With this advanced power output, the MegaFi 2 provides reliable broadband connectivity for FirstNet users and enterprises, even in remote locations and deep indoor environments where traditional signals cannot penetrate. The device includes a graphical display for real-time monitoring of performance and system status, and incorporates Nextivity's IntelliRange<sup>®</sup> technology for optimized coverage.

## **1.1 Features and Benefits**

- FirstNet Trusted<sup>™</sup> device (Visit <u>nextivityinc.com/solutions/firstnet</u> for more information.)
- Supports 5G and NSA and LTE Cat 20
- Power Class 1 on LTE Band 14; Power Class 3 on all other AT&T bands
- Upgradeable to Power Class 1 on 5G n14 as the network evolves
- Industry-leading range, coverage, penetration, and capacity (Maximizes connection availability in challenging environments)

- High-speed cellular data rates:
  - Peak D/L: Up to 1.0 Gbps (NSA), 1.0 Gbps
  - Peak U/L: Up to 0.55 Gbps (NSA) / 0.90 Gbps
- Integrated GPS and location services
- Built-in Wi-Fi hotspot
- Intuitive graphical interface for system status and connectivity indicators
- Dual-SIM functionality (available through future software update)

### **Available Kit Options**

The SHIELD MegaFi 2 router is available in the three following kit configurations:

- SHIELD MegaFi 2 Mobile SKU: M4D-UC-V01
- SHIELD MegaFi 2 Fixed SKU: M4D-UC-F01
- SHIELD MegaGo 2 Case
  - SKU: M4D-UC-G01 (FirstNet, black)
  - SKU: M4D-UC-G02 (FirstNet, orange)
  - SKU: M4D-UC-G03 (AT&T, black)

#### Learn more about SHIELD MegaFi 2:

www.nextivityinc.com/products/shield-megafi-2-hpue/

## 1.2 Description

The MegaFi 2 router has nine (9) subminiature version A (SMA) connectors that are labeled: **GNSS, CELL 4, CELL 3, WiFi 1, WiFi 2, WiFi 3, CELL 2, CELL 1**, and **HPUE**. The **PWR** (power port) is also located in between these connectors.



On the other side of the device, there are:

- SIM Slot
- DISPLAY Button
- Ports WAN/LAN2 with PoE capability and LAN1



On the top of the device, there is an LCD Display. For more detailed information on the LCD Display, go to Section 3, *SHIELD MegaFi 2 LCD Display*.



Underneath the device, you will find a label that shows the following device information:

- Model
- IMEI
- Serial Number
- MAC address
- Default IP address to access the Mission Control GUI
- Mission Control log-in username and default password
- SSID name and default password



# 1.3 What's Inside the Kit/Box

The SHIELD MegaFi 2 comes in two (2) different kits. The different kits with their respective list of parts are listed below.

### SHIELD MegaFi 2 Fixed Kit:

- High Power MegaFi 2 Router
- AC power adapter
- SIM Ejector Tool (not pictured)
- Ethernet cable
- Paddle antennas 5x Cell (black), 3x Wi-Fi (black)
- GPS antenna



### SHIELD MegaFi 2 Mobile Kit:

- High Power MegaFi 2 Router
- Locking DC power cable
- SIM Ejector Tool
- Roof mount 9-in-1 antenna includes 4x Cellular, 3x Wi-Fi, 1x HPUE and 1x GPS connection
- Ethernet cable



# 2 | Hardware Installation

Depending on the kit, 'Fixed' versus 'Mobile', refer to the appropriate section and steps below for installation details.

# 2.1 Install the SIM Card (Fixed or Mobile Kits)

• NOTE: If the SIM card has been pre-installed, skip this part.

1. Remove the SIM card cover by pressing a thumbnail or flathead screwdriver in the gap between the metal and plastic. You should now see the edge of the black SIM tray.



- 2. Remove the SIM tray with the included SIM Ejector Tool by inserting the tool into the hole on the SIM tray; the tray should pop partway out. Remove the SIM tray completely.
- 3. Insert your activated SIM into the tray.



 NOTE: Flip the tray around so that the tray is notched so the card can be inserted the correct way. Press the cover back into place.

## 2.2 Fixed Kit: Fixed or Office Installation

Below are detailed steps for installing the Fixed MegaFi 2 kit.

**NOTE:** Only use the power cord supplied with your MegaFi 2.

### **Attach the Antennas**

 Attach each paddle antenna to its respective port as illustrated by holding the antenna straight and twisting the base to thread onto the connector. Do not overtighten. Finger-tight is sufficient. For optimal signal reception, alternate the antenna orientations as shown below.



- 2. Connect the 5 bigger black paddle Cellular antennas to the HPUE and CELL ports, and connect the 3 smaller black WiFi antennas to the WiFi 1, WiFi 2, and WiFi 3 ports and the GPS "puck"-style antenna to the GNSS port. Please note, WiFi ports have a pin, while the HPUE and CELL ports do not. WiFi antennas do not have a pin, while Cellular antennas do have a pin. Connecting a Cellular antenna with a pin to a WiFi port with a pin will damage one or the other or both.
  - NOTE: SMA connectors have a maximum torque of 3-5 inch-pound torque limit. Over-torquing can cause damage and void warranty.
- **3.** For best performance it is highly recommended to locate the MegaFi 2 near a southern facing window with an unobstructed view of the sky for best GPS coverage.
- **4.** The MegaFi 2 device needs to be installed more than 20 inches away from any users, per FCC rules.

### **Connect Power**

1. Plug the power cord into the labeled PWR port and plug the AC power adapter into a standard wall outlet.

• **NOTE**: Use only the AC power adapter supplied with your MegaFi 2, as other power adapters may not have enough current to properly power the device.





NOTE: The MegaFi 2 device can also be powered ON by PoE+ (Power over Ethernet+) via its WAN/LAN2 port. For more information about power to the MegaFi 2 device, refer to Section 6.7 Power (Fixed and Mobile).

### **Boot Up**

About 10 seconds after connecting to power, the display should show a startup screen with the Nextivity logo. Within a few minutes, an illuminated Internet icon on the display should indicate a successful connection to the Internet.



Refer to Section 3, SHIELD MegaFi 2 LCD Display, for further details on the display information.

## 2.3 Mobile Kit: Vehicle or Mobile Installation

NOTE: Installing and activating a SHIELD MegaFi 2 router in your vehicle is straightforward for those familiar with installing other after-market antennaconnected systems. If you are planning a self-installation and are not a professional, it is recommended that you seek guidance from someone with hands-on experience with similar products. For help locating an expert installer, contact Nextivity support at <u>support@nextivityinc.com</u>.

Below are detailed steps for the MegaFi 2 Mobile kit.

### **Required Hardware and Tools**

- NOTE: Nextivity does not provide screws or other hardware that may be needed to secure the MegaFi 2 and related components as installation varies widely depending on how and where in the vehicle the system is installed.
- Screwdriver or other hand/power tools as needed
- Hardware for installation
- NOTE: Before you start drilling holes or permanently attaching the MegaFi 2 to the vehicle, make sure the cables from the antenna will reach from the mounting point of the antenna to the location of the installed MegaFi 2, leaving enough cable length for stress relief before connecting to the SMA connectors. See more information in the section below titled *Connect Antenna Cables to MegaFi 2*.

#### Mount the Antenna on the Roof

The MegaFi 2 uses the Panorama Dual Sharkfin style antenna. Click on the link to find more information on the antenna at <u>https://panorama-antennas.com/product/gpsxd4x-6-60-4x4-mimo-4g-5g-sharkfin-antenna/</u>.

- 1. Select a location for the antenna. For best performance it is highly recommended to locate the antenna:
  - A. At least 30 inches from all other antennas
  - B. Within 15 feet of where you will mount the MegaFi 2 unit, so the connection cables can reach the MegaFi 2 unit in the vehicle
  - C. At least 12 inches from the edge of the roof
  - D. 20 inches or more from vehicle occupants per FCC rules for use of the MegaFi
- 2. Mount the antenna per the instructions of the antenna manufacturer.

- NOTE: Please follow the detailed installation instructions for the Panorama Dual Sharkee antenna at <u>https://panorama-antennas.com/sw3-1025-installation-instructions-a4/</u>. Below are the installation highlights.
- A. Review the mounting requirements and select a proper mounting location.
- B. Prepare and drill a hole
- C. Fitting the antenna
  - 1) Prepare mounting surface. Drill hole etc. as per standard instructions.
  - 2) Remove nut, washer. Remove pad liner.
  - 3) Feed cables through hole.
  - Firmly press down on antenna to affix to mounting surface, ensure that the seal skirt splays out into the surface.
  - 5) Assemble shakeproof washer and nut tighten to 5Nm.
  - 6) Check that the antenna is firmly secure to mounting surface and that sealing boot edges have splayed out into surface to form a seal.
- D. Route and appropriately terminate cables to the MegaFi 2 device as instructed in the section titled *Connect Antenna Cables to MegaFi* 2 (below).

### Install the SHIELD MegaFi 2 Unit Inside the Vehicle

- 1. Place the unit on a suitable flat surface within the vehicle, leaving clearance for cable and power connections. The location should be dry and as far away from openings as is reasonable and be within easy reach of the antenna cables.
  - NOTE: Leave at least a 2-inch space (air gap) open above the MegaFi 2 to ensure proper cooling and never place any other devices directly on the MegaFi 2.
- **2.** Secure the unit with four screws appropriate for the material the MegaFi 2 is being mounted on.
  - NOTE: Installation on a metal plate will improve performance in very hot conditions.

### **Connect Antenna Cables to MegaFi 2**

Connect the mount antenna leads labeled **GNSS**, **WiFi**, and **HPUE** to the corresponding **GNSS**, **WiFi** and **HPUE** connectors on the device. Connect the **CELL1**, **CELL2**, **CELL3**, and **CELL4** antenna leads to the corresponding CELL connectors on the device. Please note, WiFi ports have a pin, while the HPUE and CELL ports do not. WiFi antenna leads do not have a pin, while Cellular antenna leads do have a pin. Connecting a Cellular antenna lead with a pin to a WiFi port with a pin will damage one or the other or both. If location data is desired, make sure the GPS antenna has an unobstructed view of the sky.

 NOTE: SMA connectors have a maximum torque of 3-5-inch lbs. Over-torquing may damage the connectors and void warranty.



NOTE: It is also recommended to add stress relief to the end of the antenna cables right before connecting them to the SMA connectors on the MegaFi 2 device. This is accomplished by making a small loop of the cabling right before connecting the cable ends to the device.



### **Connect the Power**

- 1. Connect the DC power cable to your DC power source.
  - NOTE: Red = + Positive; Black = Negative; Orange = Ignition Sense; Blue = GPIO or Sleep Sense (not used in all applications). Recommended fuses: Ignition Sense (less than 1A), Positive (3A or more).
- 2. Connect the **DC power cable** to the port labeled **PWR** on the side of the device.



### **Boot Up**

Start or power ON the vehicle. The LCD display will illuminate with device status and information. The system may take a few minutes to fully boot up. When the unit is successfully connected, the Internet icon will illuminate on the display.

Refer to Section 3, SHIELD MegaFi 2 LCD Display, for further details on the display information.

# 3 | SHIELD MegaFi 2 LCD Display

After MegaFi 2 device powers ON, it will take the LCD display about 10 seconds to show the welcome screen. It will take the device about three to five minutes to fully boot up. The local management interface, Mission Control, MegaFi 2's Graphical User Interface (GUI), and an Internet connection will not be available during boot up. More information about Mission Control will be discussed in Section 4, *Log Into the MegaFi 2 - Mission Control*.

# 3.1 MegaFi 2 LCD Display - Status and Information

After the boot up process, the LCD Display will show the following status and information:

Indicator	Description
Signal Bars	1-5 bars lit based on signal strength available from the network
Network	4G or 5G
High Power	In High Power mode
Normal Power	Not in High Power mode
GNSS	GPS location is available
No GNSS	No GPS location available
Internet	Connected to WWAN or both a WWAN and WAN connection
No Internet	No WAN or WWAN connection available
Wi-Fi	Wi-Fi is enabled and ON
Wi-Fi Off	Wi-Fi is disabled and OFF

The LCD screen will rotate between three (3) different pages every 15 seconds. The indicators and information listed above will consistently be displayed on all 3 different pages.

#### Other device information displayed on page 1:

- Mission Control version
- IP address to access Mission Control
- Username and password to access Mission Control
- Serial number
- MAC address
- IMEI



Device information displayed on page 2:

• QR code – Scan to connect to MegaFi 2 via WiFi



#### Device information displayed on page 3:

- SSID names and passwords for both 2.4G and 5G Wi-Fi
- Number of Wi-Fi users currently connected
- SIM phone number



# 3.2 MegaFi 2 LCD Display – Overview of Settings

The LCD display screen will turn off after 600 seconds. The display screen can be turned on again by quickly pressing on the **DISPLAY** button located between the SIM card tray and the Ethernet ports.

Also, the LCD display screen is oriented to Portrait view but can be changed to Landscape view and the Detail Level is set to Full.

Below is a list of LCD settings that can be modified in Mission Control. For detailed information on making any changes to the LCD screen, refer to online self-help support, FAQs, documentation, at <a href="https://nextivityinc.com/products/shield-megafi-2-hpue/">https://nextivityinc.com/products/shield-megafi-2-hpue/</a> and scroll down to the About the Shield MegaFi 2 section.

LCD Configuration	Settings
Screen Orientation	Portrait (default) or Landscape
Detail Level	Full (default) or Minimal
Turn off screen after (seconds)	600 (default), Always Off, Always On, or custom setting between (-1 and 3600)
Switch screen information (seconds)	15 (default), or custom setting of value smaller or equal to 60

# 4 | Log Into the MegaFi 2 - Mission Control

Mission Control is the built-in web interface that provides information about the SHIELD MegaFi 2 router and allows the user to configure settings to their preferences. This section describes how to log in to Mission Control.

# 4.1 Using the Mission Control Router Software

- 1. Connect an Ethernet cable between your computer and LAN1 port on the MegaFi 2.
- 2. Open a web browser to the following default LAN IP address: <u>https://192.168.113.1</u>
  - NOTE: Chrome seems to be the best browser to use for accessing the MegaFi 2 via Mission Control, but other browsers can be used.
- **3.** The first time you try to connect to MegaFi 2, a couple of connection warnings will display as shown below. Accept the first connection warning by clicking on '**Advanced**'.
  - NOTE: These connection warnings are typical of web browsers looking after the user when attempting to log on to specific devices or websites. Since we are aware of what we are connecting to, we can proceed as instructed. After logging off from MegaFi 2 for some time, the user will encounter these warnings again when attempting to reconnect. When this happens, proceed as instructed.

Your connection isn	't private
Attackers might be trying to steal yo messages, or credit cards).	our information from 192.168.113.1 (for example, passwords.
NET:ERR_CERT_AUTHORITY_INVALID	

4. Click on 'Continue to 192.168.113.1 (unsafe)' link to proceed.

Your connection isn'	t private
ittackers might be trying to steal you	ur information from 192.168.113.1 (for example, passwords.
nessages, or credit cards).	
ET:ERR_CERT_AUTHORITY_INVALID	
Hide advanced	Go back
his server couldn't prove that it's	192.168.113.1; its security certificate is not trusted by
s server couldn't prove that it's	192.168.113.1; its security certificate is not trusted by

- 5. The MegaFi 2's Mission Control GUI login page will now be displayed.
  - A. Enter the default password as found on the bottom label of the MegaFi 2 or from the display.
  - **NOTE:** username always defaults to 'admin'.
  - B. Click 'Login' to proceed.

		Mission	Control		
Current Status Connected	Signal Strength	Band	Access Point Name	WAN IP Address	Local IP Address
$\bigcirc$	al -	14		10.55.111.75	192.068.113.1
ATT	(Excellent)		broadband		
Log In					
Please enter your	r username and password.	odmin			
Password					
					Login Reset

6. When logging in for the first time, the EULA (End User License Agreement) will be displayed.A. Fill out the requested information and click 'Accept' to continue.

	-grooment
	Nextivity Inc. ("Nextivity")
	End User License Agreement ("EULA")
	Version Date: July 25, 2023
BY ACCEPTING THIS EULA, ED APPROVED NEXTIVITY DISTRIB SERVICES IDEPINED BELOW, N FORTH THE TERMS THAT GOW REPRESENT THAT YOU HAVE T WILL NOT BE A PART OF THIS E	HER BY INDICATING YOUR ACCEPTANCE, BY EXECUTING A QUOTE OR ORDERING EQUIPMENT OR SERVICES DIRECTLY WITH US OR THROUGH A LITDR OR RESELLER (INDIVEVER TITLED, REFERRED TO HEREIN AS AN "ORDER"), OR BY DOWALGADING, INSTALLING AND/OR UTILENIG ANY OF TH OU AGREE TO THE TERMS AND CONDITIONS OF THIS EULA. THIS EULA IS A LEGALLY BINDING CONTRACT BETWEEN YOU AND NEXTRITY AND SET ISR THE LICENESS PROVIDED TO YOU HEREINDER. IF YOU ARE INTERING INTO THIS EULA ON BEHALF OF A COMPANY OR OTHER LEGAL ENTITY YO HE ALTHORITY TO BIND SOLVE INITY TO THIS EULA. ANY COMADES, AND/OR UTILETORS BY YOU TO THIS EULA WILL NOT BE ACCEPTED AN ULA. IF YOU DO NOT AGREE TO THIS EULA, YOU MUST NOT DOWNLOAD, INSTALL, OR USE THE SERVICES.
This Nextivity End User License Your use of: (1) the Nextivity equipm (2) the Nextivity on-pre-	Agreement ("EULA") is between Nextwity (or "we" or "ws") and the user ("User" or "Nou" or "Nou") of the Services, as defined below. This EULA applies incl ("Equipment"); may, include Onlines that initialize and enables the Equipment ("Installed Software");
<ul> <li>(3) the Nextwhy (boud-b)</li> <li>(4) the written and vis</li> <li>(5) any training or supp "Software." The So terms that may app</li> </ul>	and software that allows tou to manage and configure Your Equipment (" <b>Cloud Software</b> "); said insterials Neethority may provide to aid too in toor use of the Equipment, installed Software and Cloud Software (" <b>Documentation</b> "); and out services performed, either remotely or in penson, by Neethory (" <b>Support</b> "). The installed Software and Cloud Software may be referred to together as th finance, Equipment, Documentation and Support may be referred to collectively as the "Services." This EULA also incorporates any Epulpment-specif ly to the Equipment You acquire (" <b>Supplemental Terms</b> ").
<ul> <li>(3) the Nexturby cloud-bill</li> <li>(4) the written and via</li> <li>(5) any training or supp "Software." The So terms that may app</li> <li>Section 1. Using the Services</li> </ul>	ead software that allows too to manage and configure Your Equipment ("Good Software"), and wall materials teaching may provide to aid too in Your use of the Equipment, installed Software and Cloud Software ("Documentation"); and out sonkins performed, other exercising and periods, by Neothyl ("Support"), the installed Software and Cloud Software may be referred to together as th iftware, Equipment, Documentation and Support may be referred to collectively as the "Services." This EULA also incorporates any Equipmentspecif by to the Equipment You acquire ("Supplemental Terms").
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7. You will then be directed to update your password. Please update the password and Save.

#### **NOTES:**

- A factory reset restores the original default password. The password is only available from the printed label and on the LCD display.
- For further information regarding MegaFi 2 monitoring and configuration settings in Mission Control, refer to online self-help support, FAQs, documentation, at <u>https://nextivityinc.com/products/shield-megafi-2-hpue/</u> and scroll down to the About the Shield MegaFi 2 section.

# 5 | Cloud Access via the Nextivity MegaPortal

Once the MegaFi 2 has been set up, installed, and pre-configured to minimum requirements, it is time to register and connect the device to the Nextivity Cloud Portal, also known as MegaPortal.

## 5.1 Create Account and Sign In

- 1. To enable cloud management, open your computer browser window and enter <a href="https://megaportal.nextivityinc.net">https://megaportal.nextivityinc.net</a>.
- 2. The MegaPortal sign-in dialog box will appear after bypassing the warning messages.

×	NEXTIVITY
Email	
Passwor	d
	SIGN IN
New to	o Nextivity? Create an account. Forgot password?

- A. If your organization already has an account, contact your organization's administrator to create a user account.
- B. If your organization does not yet have an account, contact <a href="mailto:support@nextivityinc.com">support@nextivityinc.com</a> to create an administrative account for your organization.
- C. To create the first administrative account for your organization, you'll need to provide the following information:
  - Organization Name
  - Your Name
  - Phone Number
  - Email
- D. If you already have an account, enter the email and the password for your account and click Sign In. If MFA has been enabled on your account, enter the MFA code sent to you to complete the log in process.
- NOTE: For further information regarding MegaPortal for MegaFi 2, please refer to the MegaPortal Guide.

# 6 | MegaFi 2 Specifications

# 6.1 Cellular

HPUE Support	PC1 operation on B14 (support for PC1 on n14 as network evolves)
5G Band Support	n1, n2, n5, n7, n25, n28, n30, n38, n41, n66, n71, n77 (support for n14 as network evolves)
LTE Band Support	B2, B4, B5, B12, B13, B14, B17, B18, B19, B25, B29, B30, B46, B66, B71
Peak D/L	Up to 1.0 Gbps (NSA), 1.0 Gbps
Peak U/L	Up to 0.55 Gbps (NSA), 0.90 Gbps
LTE Category	Cat 20
Approvals	FCC, PTCRB
Carrier	AT&T, FirstNet
Compliance	RoHS

# 6.2 Host Interfaces

2 Gigabit RJ-45 Ethernet port	1 WAN & 1 LAN
SIM	4FF NanoSIM +e-SIM
6x SMA Antenna Connectors	1x Band 14 HPUE, 4x Cellular, 1x GNSS
3x RP-SMA Antenna Connectors	Dual Band 802.11ax Wi-Fi 6

# 6.3 Security

802.1x/Radius authentication with Wi-Fi and Ethernet
Port forwarding and filtering
WPA2/WPA3 Personal and Enterprise
Address filtering

# 6.4 Wi-Fi

Band Support	Dual Band 2.4/5 GHz 2×2 MIMO 802.11 b/g/n/ac/ax
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Maximum Connected Users	256 clients
(Recommended)	

# 6.5 Satellite Navigation (GNSS)

Dedicated Multi-Band and Multi- Channel GNSS Receiver Supporting	GPS
Sensitivity	-162 dBm
Reports (Update Rate 1Hz)	NMEA, TAIP (PPS)
Reliable Store and Forward via Serial	UDP

# 6.6 Environmental

Operating Temperature (°C (°F))	-30 to +65 (-22 to +149)
Storage Temperature (°C (°F))	-40 to +90 (-40 to +194)
Operating Humidity	(Non-Condensing) 0 to 95%
Shock, Vibration, Thermal Shock	MIL-STD-810G
Road Vehicles - Electrical Test	ISO-7637-2
Ingress Protection	IP-54
Material Flammability	UL94

# 6.7 Power (Fixed and Mobile)

Input/Operating Voltage	9 to 36 VDC, device accepts PoE+ (802.3at) on WAN/LAN2 port only
Power Consumption	Standby: 60 mW, (MCU only, 2.4W (router mode, no RF transmission), Nominal 19.8W, Absolute Max, 22.2W)
Built-in protection against voltage transients including VDC engine cranking	
Ignition Sense with time delay shutdown	

# 6.8 Network and Routing

Custom APN	Static IP(s) provided by AT&T/FirstNet
Network Address Translation (NAT)	
LAN Segmentation	
WAN/LAN Connection Policy Management	
WAN Monitors	Connection Failure Recovery
Configurable MTU Size	Adjust for FirstNet WWAN and VPN specific requirements
Multiple LAN Support	
Customize Transmission Buffer Size	
Static Routing	
WAN Ethernet	

# 6.9 Supported Warranty

2-year Standard Warranty; Optional	For more information contact <a href="mailto:support@nextivityinc.com">support@nextivityinc.com</a> .
Warranty up to 5 years. Includes	
Unrestricted Device Software	
Upgrades	

# 6.10 Mechanical and Packaging

Weight 2lb 9 oz	
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### 6.11 Antennas

Fixed	Paddle antennas in box including, HPUE, Cellular, GPS, & Wi-Fi
Mobile	Vehicle mount antenna in box, including HPUE, Cellular, GPS & Wi-Fi.

# 6.12 Dimensions

