MAX BR1 Mini 5G

Affordable 5G for Mass IoT





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Is the MAX BR1 Mini 5G suitable for me?



What is the MAX BR1 Mini 5G?

The MAX BR1 Mini 5G is a small form-factor, affordable, and long-lasting 5G device that is optimally suited for mass deployments, such as M2M, IoT, or mobile applications. It can also serve as a convenient, full-featured router for higher bandwidth applications. Some customers even use it in their homes. If you already have an existing network, you can add the BR1 Mini 5G as a 5G adapter. It can function as a gateway or router for multiple WANs. The BR1 Mini 5G is designed with strict security compliance in mind. We have specifically tailored the device to exclude Wi-Fi and GPS functionality, making it an excellent choice for networks that require a highly secure connection.



How fast is this device?

The MAX BR1 Mini 5G has a rated throughput of 300Mbps.

The 5G modem of the MAX BR1 Mini 5G has a 3.4 Gbps downlink data rate and a 900Mbps uplink data rate.

If 5G service is not available in the region, the BR1 Mini 5G can also support LTE (CAT-20). The cellular data rate is 1.6 Gbps in downlink and 200 Mbps in uplink.

The complete datasheet can be found here.



Is it suitable for mobile use?

Certainly! The BR1 Mini 5G's rugged metal enclosure makes it suitable for mobile use. It can function in ambient temperatures ranging from -40 oF to +149 oF. It's also equipped with an industrial Micro-Fit power connector for secure power installation in vehicles and extreme locations.



What certifications does the MAX BR1 Mini 5G have?

The MAX BR1 Mini 5G has FCC, CE, and RoHS certifications. It is also certified for Electromagnetic Compatibility (EN 61000) and Fire Protection in Railway Applications (EN 45545-2).





What are the differences between the MAX BR1 Mini 5G and the MAX BR1 Mini (HW3)?

Here is the general comparison between BR1 Mini (HW3) and the BR1 Mini 5G.

	BR1 Mini (HW3)	BR1 Mini 5G
Quick Look	,	
Router Throughput	300Mbps	300Mbps
SpeedFusion VPN Throughput (No Encryption)	80Mbps	80Mbps
SpeedFusion VPN Throughput (256-bit AES)	20Mbps / 60Mbps*	20Mbps / 60Mbps*
Cellular data rate (Downlink/Uplink)	CAT-7: 300 Mbps/150 Mbps CAT-6: 300 Mbps/50 Mbps CAT-4: 150 Mbps/50 Mbps	5G: 3.4Gbps / 900Mbps CAT-20: 1.6Gbps / 200 Mbps
Interface		
Ethernet Port	3x 1000M Ethernet Port	3x 1000M Ethernet Port
Wi-Fi	Wi-Fi 5	N/A
Power Input		
 4pin Molex Micro-Fit Connector 	Yes	Yes
- Power over Ethernet	802.3at PoE	802.3at PoE
Features		
GPIO	Yes	Yes
Ignition Sensing	Yes	Yes
Wi-Fi WAN	Yes #	Yes #
Hot Failover	Yes #	Yes #
Smoothing	Yes #	Yes #
Bandwidth Bonding	Yes #	Yes #
BYO eSIM	Yes &	Yes

[#] Requires a PrimeCare Subscription or a Feature Pack add-on-license (MAX-BR1-MINI-LC-FS) & Available with Firmware 8.4.0 or above





What is the Peplink eSIM Data Plan?

With Peplink eSIM Data Plan, you can access on-demand data plans and only pay for what you need. Peplink eSIM Data Plan is an all-in-one solution offering access to not only SpeedFusion connect but also cellular data. Click here to learn more.



What is the best use case for the MAX BR1 Mini 5G?

The answer isn't set in stone. From M2M/IoT to mobile applications, the MAX BR1 Mini 5G has got you covered. Click <u>here</u> and we can work out a cost-effective solution with the best overall performance together.

What is included with the MAX BR1 Mini 5G?



What's in the package?

Along with the router, there is a 12V2A 4-pin power supply, and 4x LTE/5G Antennas.



Is a warranty included with this product?

All products come with a one-year PrimeCare plan which provides warranty services. The CarePlan can be extended on a year-by-year basis.

CarePlan offerings can be purchased from our Certified Partners or directly from the Peplink eStore at the time of the sale or thereafter.

PrimeCare Model (SKU no. ending with -PRM)	PrimeCare+	PrimeCare
MAX BR1 Mini 5G	1-Year 2-Year 4-Year	<u>1-Year</u> <u>2-Year</u>
MAX-BR1-MINI-5GN-T-M-PRM	<u>1-16ai 2-16ai 4-16ai</u>	<u>4-Year</u>





What is PrimeCare?

PrimeCare makes SpeedFusion networks easier to build. It's a subscription that bundles InControl, a warranty, SpeedFusion license upgrades, and FusionHub licenses with standard RMA.



What is PrimeCare+?

PrimeCare+ is an upgrade to PrimeCare. It includes everything offered in PrimeCare and comes with advanced hardware replacement RMA and 24x7 ticket support.



Which PrimeCare Plan should I buy for the BR1 Mini 5G?

PrimeCare Plan A is suitable for the BR1 Mini 5G.



How do I know whether my router is a PrimeCare device?

If you look at the silver label underneath your device, the SKU of your product should have a -PRM suffix.



What is SpeedFusion Connect?

SpeedFusion Connect is Peplink's global network of SpeedFusion endpoints. With an active CarePlan or SpeedFusion Connect Usage data plan, you can utilize SpeedFusion wherever you are, eliminating the need for any additional hardware. Unsure of what you need? Check out this useful <u>post</u>.



Does the MAX BR1 Mini 5G employ Peplink's SpeedFusion technology or SpeedFusionVPN?

SpeedFusionVPN is included in all products. For the MAX BR1 Mini 5G, you can utilize the SpeedFusion technology, including Hot Failover, WAN Smoothing, and Bandwidth Bonding, with a feature pack add-on license, or a PrimeCare or PrimeCare+ subscription.





What is SpeedFusion technology?

Peplink's patented SpeedFusion technology is a powerful VPN tunnel equipped with a variety of technologies such as Hot Failover, WAN Smoothing, Bandwidth Bonding, and much more. This empowers users with the flexibility and tools required to achieve unbreakable connectivity in any vertical or scenario that they might find themselves in. Click here to learn more about SpeedFusion.



How can I purchase a license for SpeedFusion Connect with higher traffic speed and additional usage?

Easy. Look here!

Using the MAX BR1 Mini 5G



What size should the SIMs be?

The BR1 Mini 5G uses Nano-SIMs (4FF).



I see the unit has 2 SIM slots. Can they be used simultaneously?

The BR1 Mini 5G is a single modem device with 2 SIM slots. You can load 2 SIMs and switch between them, but only one can be used at a time.



What SIM options are available?

The BR1 Mini 5G supports physical SIM, Peplink eSIM, and BYO eSIM (2 profiles).



How do I activate BYO eSIM?

You can activate BYO eSIM on InControl. You can find more details here.





What voltage is required?

The router is furnished with a 12V2A 4-Pin power supply. However, you can supply the router with 10-30V via a 4-pin Micro-Fit connector or 802.3at Power over Ethernet on LAN 1. You can use the 2 power inputs simultaneously for redundancy.



What is the typical power consumption and the maximum power consumption?

The typical power consumption is 11W and the maximum power consumption is 13W.



Is there a way to protect vehicle batteries from drainage caused by the BR1 Mini 5G?

Yes. The MAX BR1 Mini 5G is equipped with a power port featuring ignition sensing capabilities. Ignition sensing allows the device to be connected to a vehicle's ignition system, enabling it to detect when the vehicle is turned on or off. This feature can be used to synchronize and automate the activation of electronic devices in vehicles, such as dash-cams and radios.



How can I set up GPIO?

You can learn more about the GPIO setup from our **Ignition Sensing Guide**.



Does the BR1 Mini 5G support Band 71?

Yes. It can support Band 71 which is a band provided by American internet service provider T-Mobile.



Licenses and Accessories



What is the BR1 Mini Feature Pack?

A feature pack offers you the experience of an array of advanced features for a fraction of the cost. There are a total of 5 technologies that will give you a professional-grade user experience:

- Ethernet WAN activation Enables the WAN interface on LAN 3
- Hot Failover Protect your connections with seamless failover
- Smoothing Minimize latency and reduces the impact of packet loss
- Bandwidth Bonding WAN aggregation to enhance bandwidth
- Wi-Fi WAN Enable Wi-Fi as one of the WAN sources
- SpeedFusion VPN Peer Increase from 2 to 5 peers
- SpeedFusion VPN Throughput (256-bit AES encryption): Increase from 20Mbps to 60Mbps

We intend to allow you to acquire the router at a very reasonable cost and add only the necessary options that meet your specific requirements. For more details, click here.



Where can I get the InControl license?

Every MAX BR1 Mini 5G router comes with a year's subscription to InControl (IC2) with a valid PrimeCare, so additional purchase is not required.



Can it connect to an OpenVPN server from a commercial VPN provider (ExpressVPN, ProtonVPN, etc)?

Yes. An optional license (<u>LIC-OPN-WAN</u>) will enable the OpenVPN WAN functionality.



What if I need more than 2 PepVPNs/SpeedFusion Peers?

The MAX BR1 Mini 5G has the capability for 2 PepVPNs/SpeedFusion Peers "built-in". 5 PepVPN/SpeedFusion Peers are enabled with a PrimeCare subscription or a BR1 Mini Feature Pack.





Can I connect PrimeCare devices to my existing FusionHubs?

Yes, you can. PrimeCare devices will not count towards the peer limit of any FusionHub that it is connected to. For example, a FusionHub 20 normally supports up to 20 peers. This is particularly useful for connecting numerous sites that only require little bandwidth such as PoS Terminals.

What can I do if I need support?



Does Peplink offer support for this product? What if I have difficulties setting it up?

First, Peplink Partners provide support to the users of the products they have sold, so always reach out to the place of purchase first.

For those who prefer self-service, Peplink has a very active <u>forum</u>. Among the regular forum users are Peplink Partners, Peplink employees and many very knowledgeable users. Generally, folks with questions get answers rather quickly. In the unlikely event of a suspected hardware or firmware issue, you can enter a <u>support ticket</u> with Peplink directly. In such cases, you will receive attention from some of the best engineers! Peplink supports its users like no other.



I can't access the Internet via the BR1 Mini 5G. What can I do?

Visit <u>this link</u> (troubleshooting section) for a basic software walkthrough and troubleshooting guide. If that doesn't work, reach out on <u>our forum</u> and the team will get you online.