



5G with Peplink

Prepare for the 5G Future with Peplink



“How has Peplink prepared for 5G?”

5G is the Future. We believe that 5G is the future of telecommunications and mobile networks. It is as revolutionary and groundbreaking if not more so than 3G was. This is because it will enable a number of technologies that have been held back by the capabilities of previous generations of mobile networks. Once 5G networks around the world are in place and providing millimeter wave networks, industries such as IoT, mobile gaming, and augmented reality will flourish. But just remember that 5G does have its own limitations. While mmWaves do provide incredibly fast download and upload speeds, it comes at the expense of stability and reliability. At some frequencies, even the leaves on trees or rain can cause disconnects.

5G Ready. That is why Peplink has been preparing for 5G's arrival all the way back in 2017 when we launched our 5G-ready EPX router. Since then, we have continued to develop our 5G capable hardware so that users all over the world can easily transition to 5G. In addition to that, we have revamped our WAN bonding and hot

failover to be 5G compatible. So no matter which 5G frequency you are on, you can rest assured that you will have a stable and fast internet connection.

Software Solution. Peplink's preparation for 5G doesn't stop at just hardware. We have also been developing software and firmware that would give you the most out of your connections, no matter if it is 3G, 4G, or 5G. Our proprietary SpeedFusion technology takes sessions and splits them into packets before encrypting them and sending them across multiple networks. When the packets arrive at the receiver, they are decrypted and reformed into the session. This results in secure communication, faster transmission speeds, and enables other technologies to give you unbreakable connectivity.



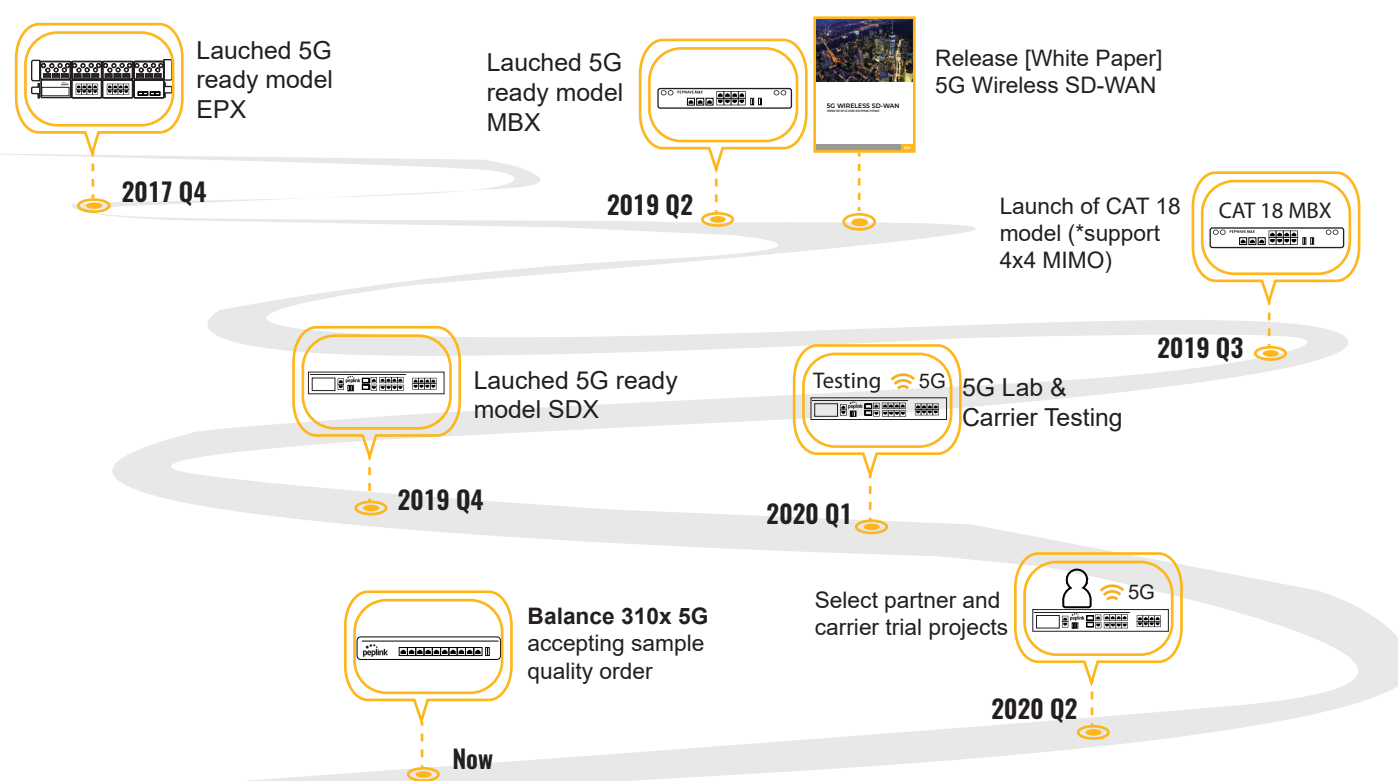
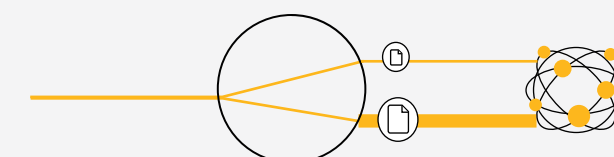
Hot Failover. Another technology at work during the transmission of data is our hot failover. The way it works is that when you lose connection to your WAN, the hot failover will seamlessly transfer your connection to an alternative WAN. This is done in a way that ensures that you not only maintain connection to your persistent session, but you might not even realize that it happened. With 5G's higher radio frequencies, losing connection may become more common but with hot failover, you won't need to worry about it.

WAN Smoothing. Where hot failover maintains integrity of your persistent sessions, WAN Smoothing maintains that your sessions are jitter-free. WAN Smoothing utilizes intelligent algorithms to detect packet loss and to immediately replace the lost packets. Other methods of mitigating packet loss such as FEC are also deployed to ensure that your sessions are completely jitter-free. And although 5G promises sub 1ms latencies, it doesn't prevent packet loss so on its own, 5G will still have jitters.



Bandwidth Bonding. Bandwidth bonding combines data at the packet level, giving a single user the ability to use all of the bandwidth from bonded connections. This is useful when bandwidth is scarce or if you are in need of bandwidth capabilities beyond what a single connection can provide. This is particularly important during this transitional period from 4G to 5G because Peplink's bandwidth bonding is capable of bonding 4G and 5G connections together to give you both the speed of 5G and the stability of 4G.

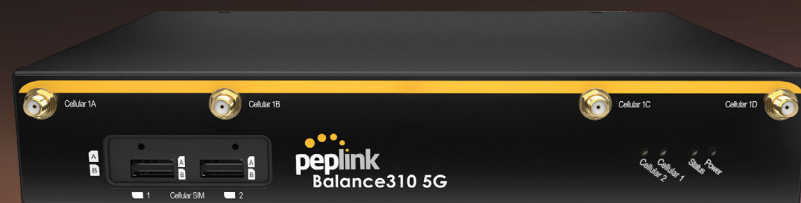
Bandwidth Overflow. monitors network bandwidth usage and switches to the most suitable connection as bandwidth usage changes. This allows network users to access high bandwidth connections when needed or switch to less costly connections when bandwidth usage is low. The result is a more optimised connection.



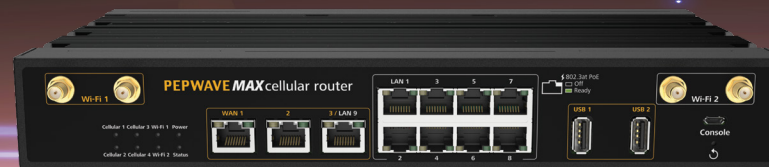
Getting Started with 5G[📶]

Upgrading to 5G. If you are ready to begin upgrading to 5G, Peplink has got you covered. Whether you are a small business operating locally or an international business with dozens of offices around the world, Peplink provides a range of 5G ready routers suitable to any situation.

Balance 310 5G[📶]



MBX 5G[📶]



PDX 5G[📶]



SDX 5G[📶]



SDX Pro 5G[📶]



EPX 5G[📶]



Future Proof Design



Performance Focus

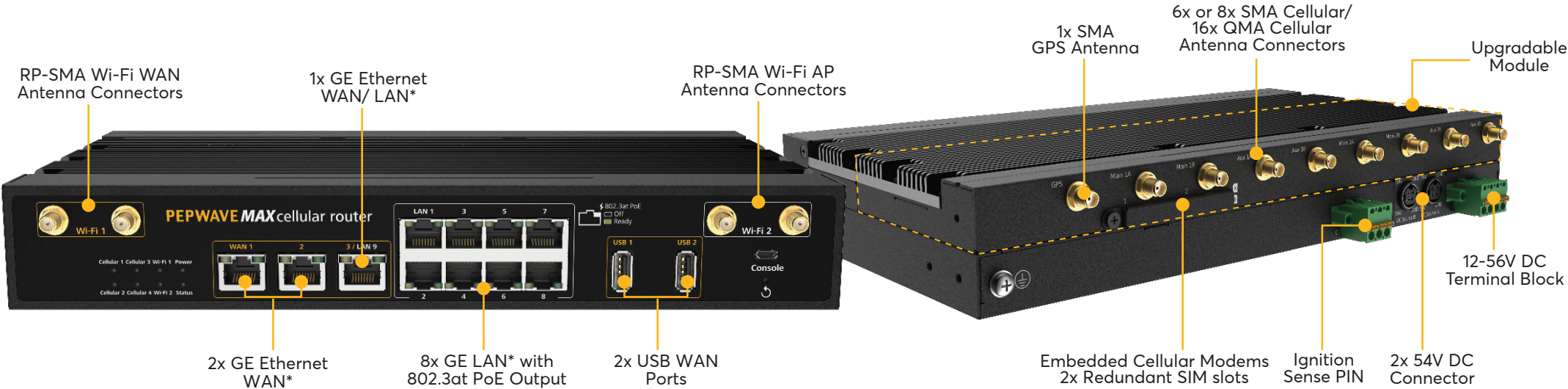


Concurrent Network Connectivity

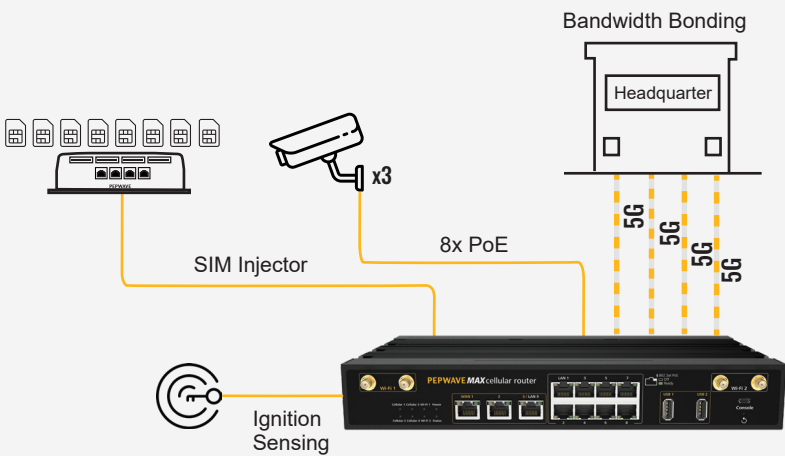


Wireless First SD-WAN

MBX 5G is a quad cellular mobile powerhouse. With 4 SIM slots and multi-radio capabilities, it provides both speed and reliability by combining the best of 5G and LTE. In addition, it comes in a compact form, allowing it to be deployed in a wide variety of situations such as vehicles, vessels, and branch networks. The MBX 5G is also SIM injector compatible and allows for upgradable modules for even further customization to suit your needs perfectly.

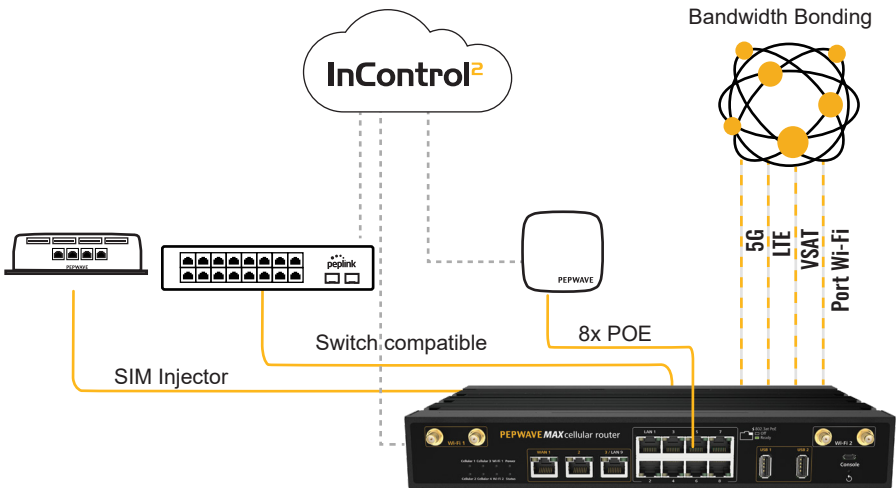


*WAN 3 is configured as a LAN port by default, configuration is changeable on the Web Admin



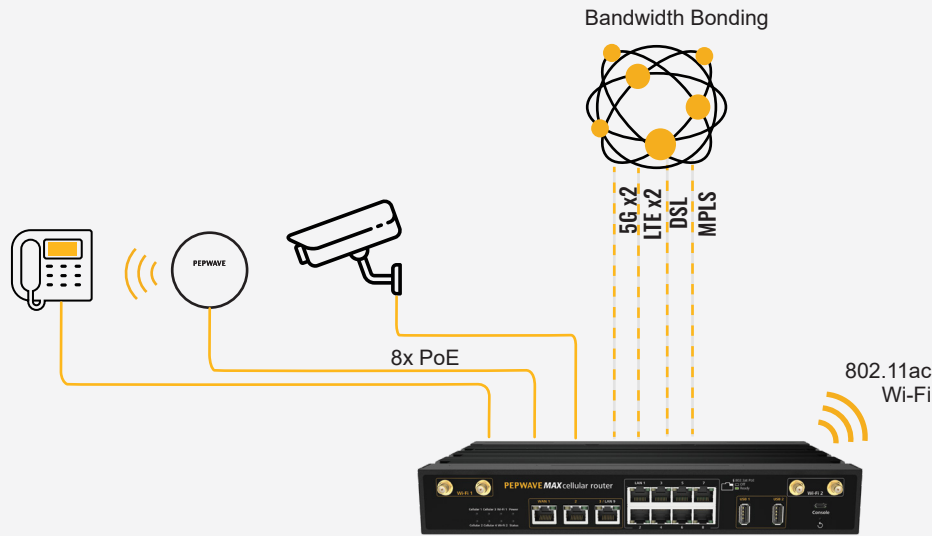
- Compatible with SIM injectors to optimize for deployment needs.
- Automatic traffic steering to the most suitable connection to ensure optimal experience.
- Throughput is greatly increased with multiple cellular connections and Bandwidth Bonding.
- Bandwidth Bonding combines the bandwidth of multiple WANs into 1 so that a single device can use the bandwidth of all the WANs.
- Ignition Sensing capabilities make it ideal for emergency services that may require connectivity while the vehicle is off.

Public Safety



- Quad cellular for additional coverage, speed, and reliability.
- Multi-radio to maximise coverage.
- Flexible deployment for a wide range of uses, including vehicles, vessels and branch networks.

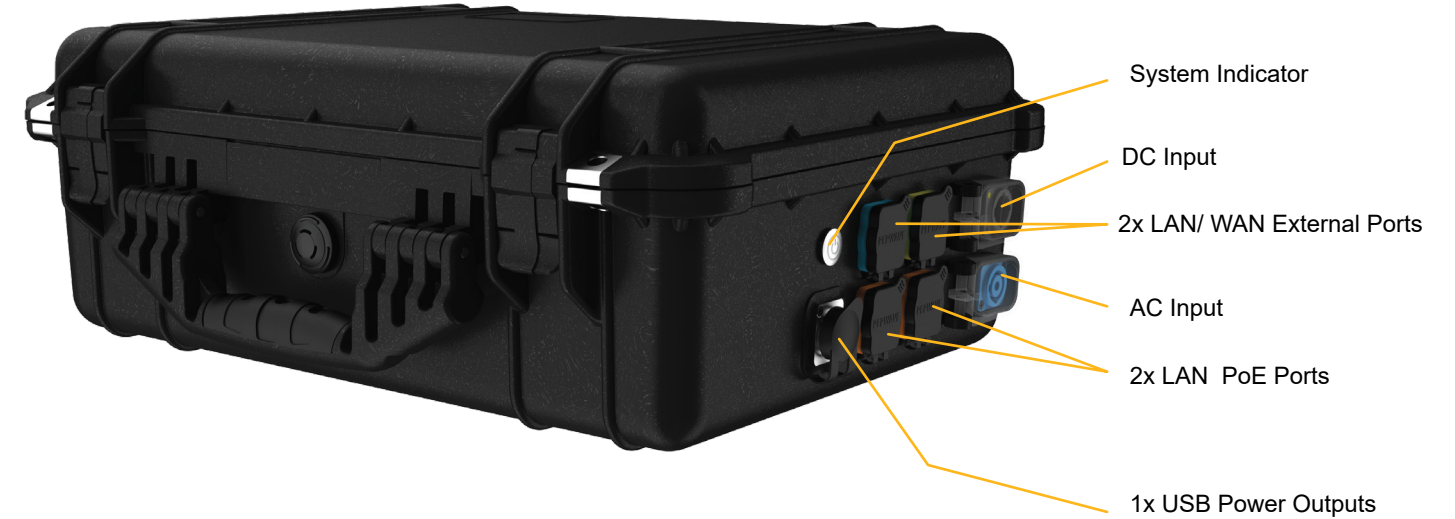
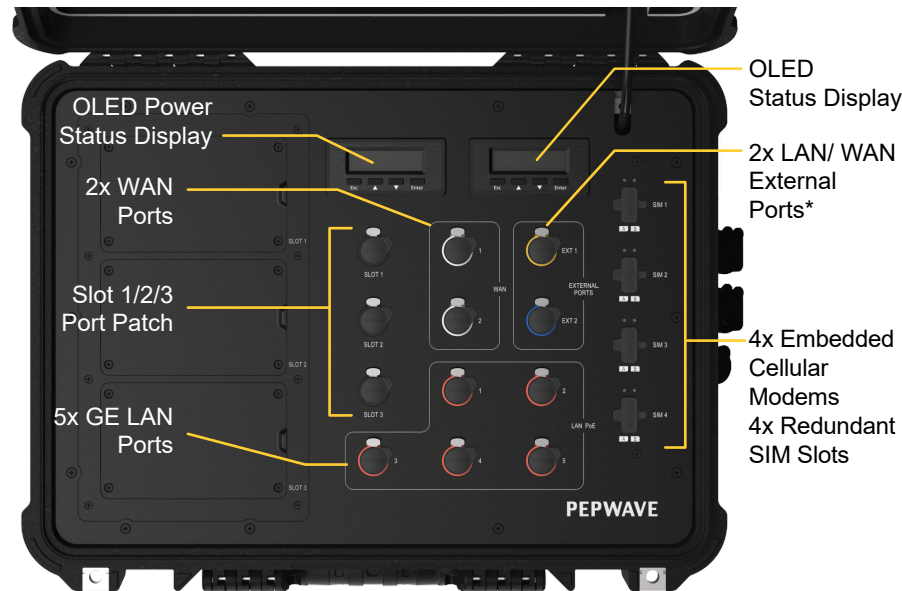
Transportation



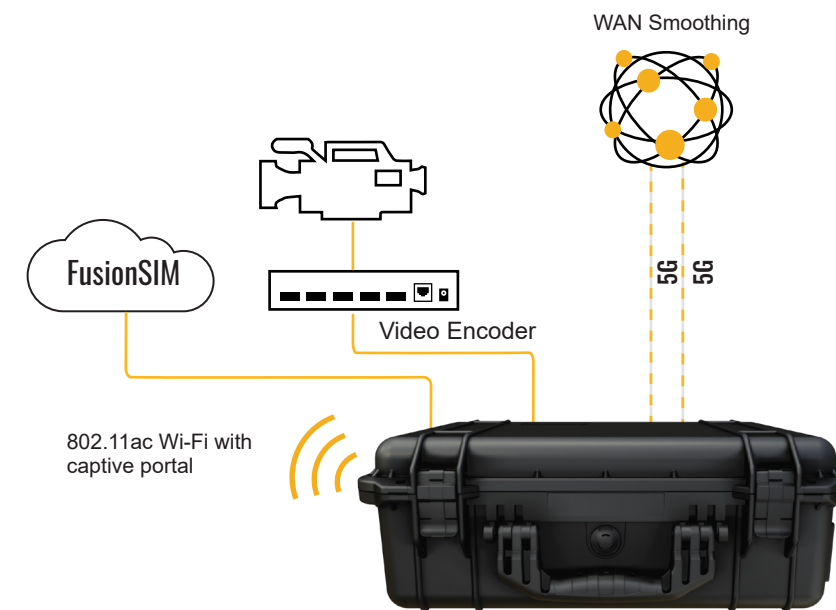
- Remote Central Management with either private controller or via cloud.
- Customize network configurations and instantly push them out to multiple devices with the press of a single button.

Enterprise

PDX 5G is a rugged, all-in-one portable device designed for remote and outdoor deployments. It comes with a quad cellular router, antennas, batteries and much more. All enclosed in a single, weather resistant case that provides protection from most outdoor situations. As an all-in-one device, the PDX 5G offers unrivaled mobility and instant connectivity.



- Provides consistent performance even in challenging environments.
- Built-in Wi-Fi Access Point. Supports a wide range of connection types for robust connectivity all packaged in a robust case.



- Supports a wide range of connection types for robust connectivity all packaged in a robust case.
- Supports eSIM and FusionSIM for versatility of deployment when additional data plans are needed. Ready to be deployed at any time to anywhere in the globe.

Balance 310 5G

Best of both worlds.
Speed and Reliability.

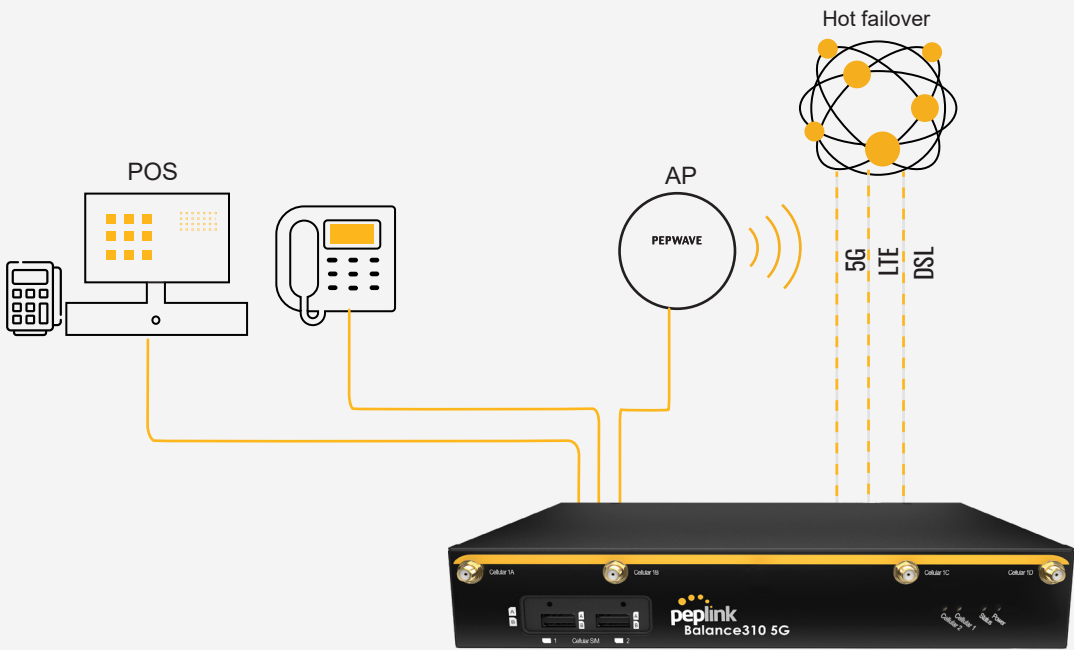
Extended Coverage

Traffic Steering

Manage your data plan
with eSIM and FusionSIM.

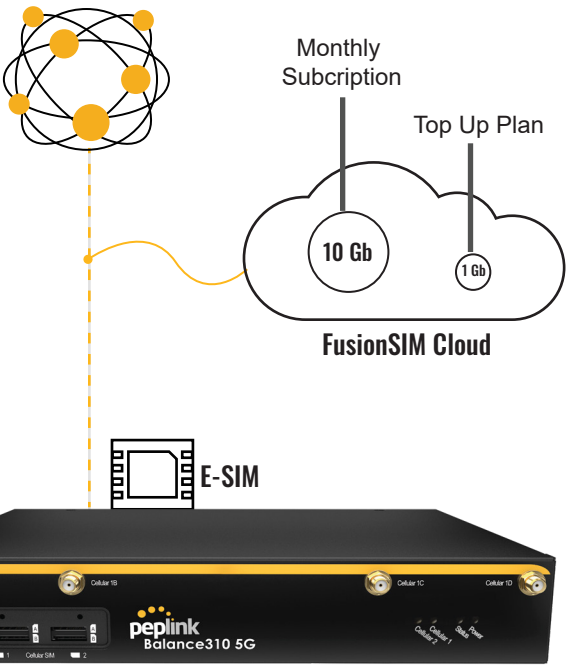
Remote Central
Management

Balance 310 5G is a dual cellular router designed to provide reliable and consistent connectivity. With a redundant cellular connection and hot failover, persistent connections are protected from sudden interruptions and breaks. The Balance 310 5G ensures that connections are maintained even when cellular connections are unstable.



- SpeedFusion automatically manages 4G and 5G connections to ensure speed and reliability.
- Automatic traffic steering to the most suitable connection to ensure optimal experience.

Branch Edge



- Manage and customize your data plans to suit your specific needs with eSIM and FusionSIM.
- Flexibility to easily scale operations when additional plans are needed thanks to eSIM and FusionSIM support.
- Remote Central Management with either private controller or via cloud.

Data Plan

FlexModule 5G

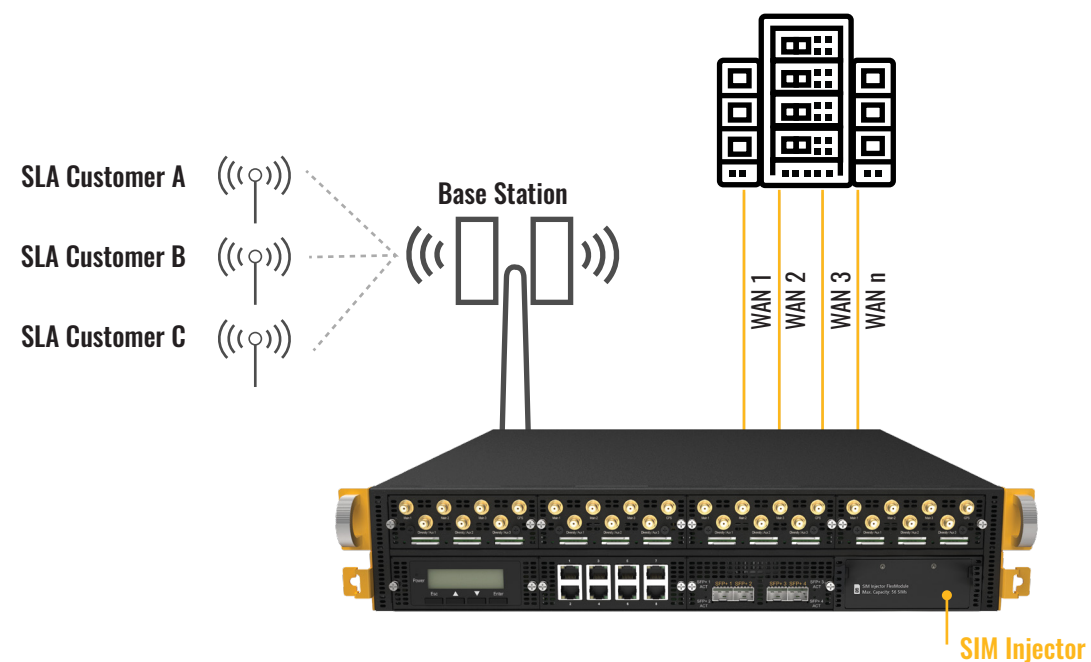
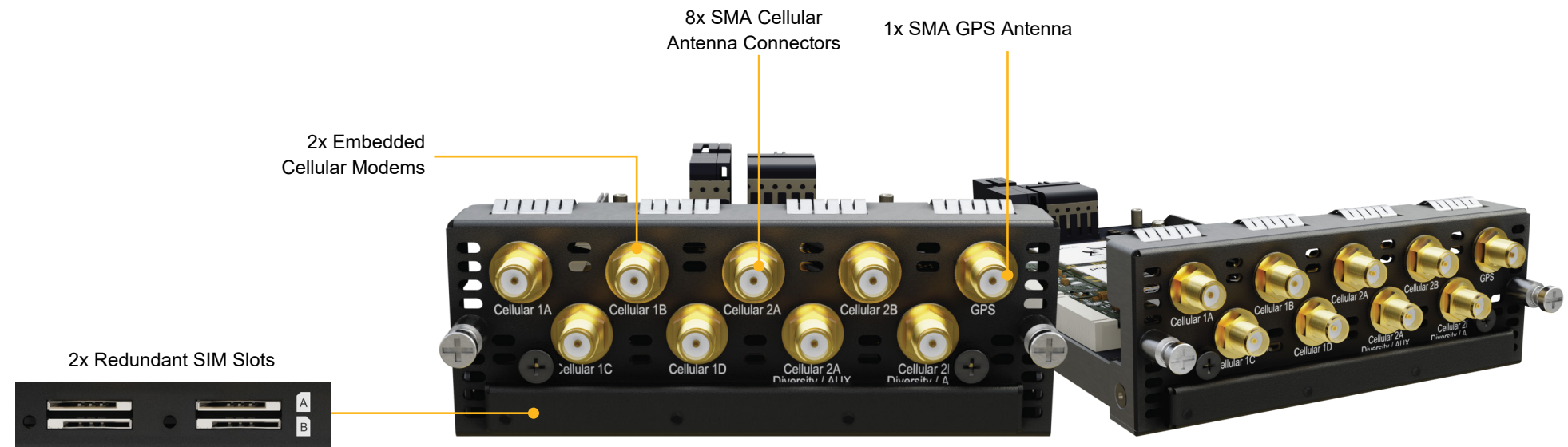
The FlexModule 5G is an upgradable module for the **EPX**, **SDX**, and **SDX Pro** routers. It includes 2x cellular modems, 2x redundant SIM slots, and 8x SMA cellular antenna connectors. With the FlexModule 5G, easily upgrade routers to support 5G bands, instantly providing the speed and bandwidth of 5G while maintaining reliable connectivity.

Multiple SIM options supported.

Dual 5G radio for concurrent connectivity to multiple carrier networks.

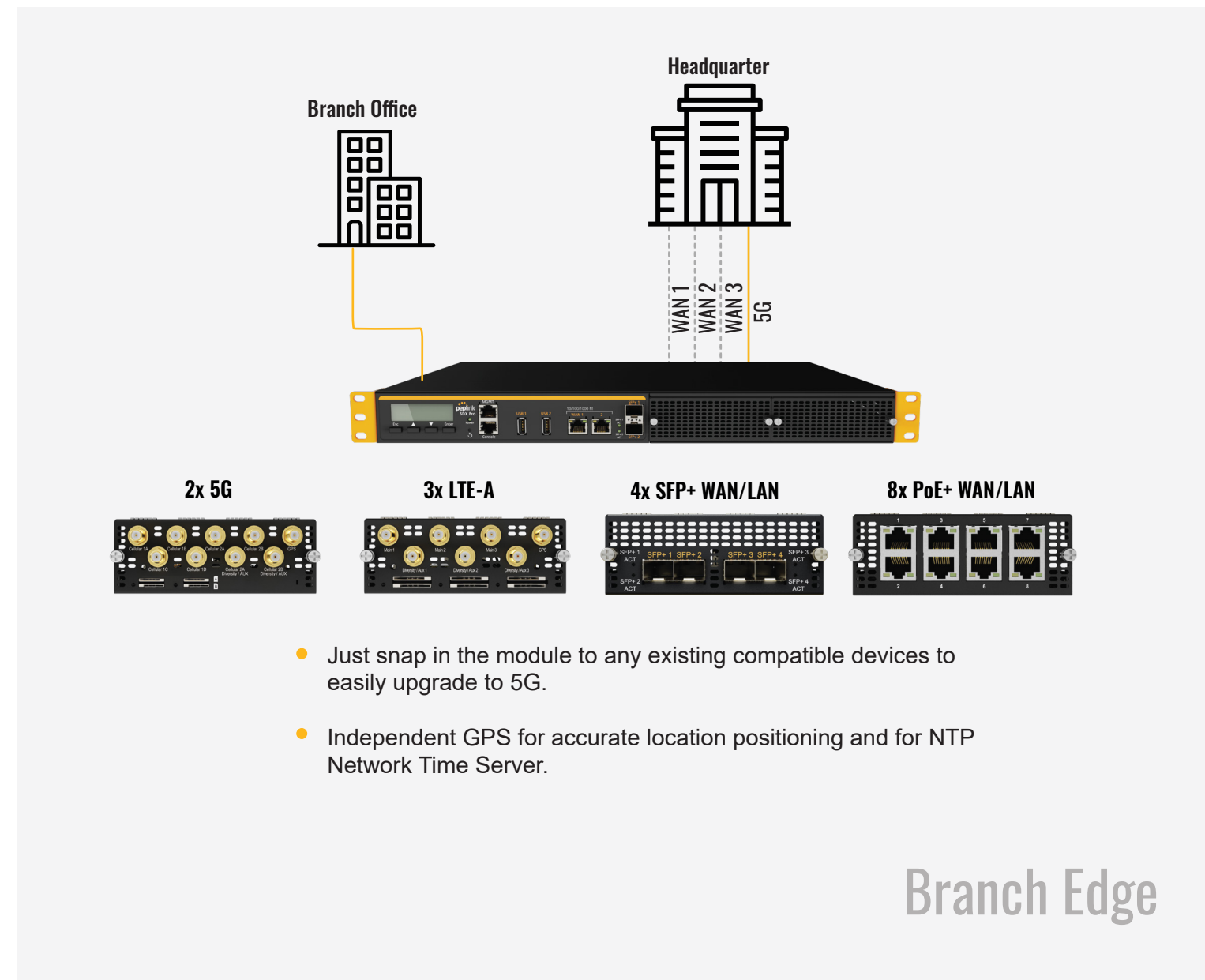
Choice of QMA connectors or SMA connectors for your deployment needs

Independent GPS for location positioning and NTP Network Time Server.



- Dual 5G radio for concurrent connectivity to multiple carrier networks.
- 4x physical SIM, 2x eSIM, and FusionSIM provides flexibility and freedom of choice for on-demand data plans.
- SIM injector compatible for easy SIM management and additional flexibility.

MSP



- Just snap in the module to any existing compatible devices to easily upgrade to 5G.
- Independent GPS for accurate location positioning and for NTP Network Time Server.

Branch Edge