



**HPE** aruba  
networking

# HPE Aruba Networking Enterprise Private 5G solution

Making it simpler for enterprises to deploy  
and manage private 5G

**HPE**   
GreenLake



### Key benefits

- End-to-end solution with simplified purchasing, implementation, management, and support
- Comprehensive visibility with insight into subscribers, applications, and service levels
- Reduced complexity of 3GPP through zero touch provisioning and configuration wizards
- Ease of use with integrated radio management
- Single point of contact for support
- Lower risk by leveraging proven, industry-leading core technology from Athonet, a Hewlett Packard acquisition

### Why private cellular?

Across diverse verticals — manufacturing, energy, transportation, government, public venues, and others — enterprises are increasingly looking to private cellular experiences for deterministic access, dedicated capacity, and extended range. Private cellular networks can augment Wi-Fi using a highly reliable, flexible kind of wireless connectivity.

With private cellular networks at the enterprise edge, businesses can better support:

- High-speed mobility to support robotics and automated vehicles, indoors and outdoors
- Policy-driven performance, latency, and quality for critical communications and other strategic applications
- Wider-area coverage with the ability to transmit and receive over greater distances
- Less RF interference by using locally allocated spectrum
- Device-level control with Subscriber Identity Module (SIM)-based authentication

### Simplification is key

Despite compelling use cases for private cellular, enterprises have struggled to implement networks due to its complexity. Traditionally, private cellular networks have relied on technology components from up to 7 vendors, plus assistance from communication services providers knowledgeable in 3GPP to configure and manage the solution. Spectrum often needed to be acquired from mobile operators, hindering the purchasing processes and adding significant cost.

HPE Aruba Networking Enterprise Private Cellular masks the complexity inherent in private cellular network deployments. To make it easier for enterprises to purchase, deploy, and manage private cellular networks, our solution includes everything needed: cloud-based core and radio management, core software and HPE server(s), indoor and outdoor small cell radio options, and SIMs or eSIMs. For U.S. markets, the offering also includes a Spectrum Access System (SAS) to enable use of shared spectrum in the 3.5 GHz band known as Citizen's Broadband Radio Service (CBRS), thereby eliminating the need to acquire spectrum from mobile operators. Most importantly, configuration automation enables network administrators to manage their own enterprise networks without extensive training and be up and running in minutes.



## Core components of the HPE Aruba Networking solution

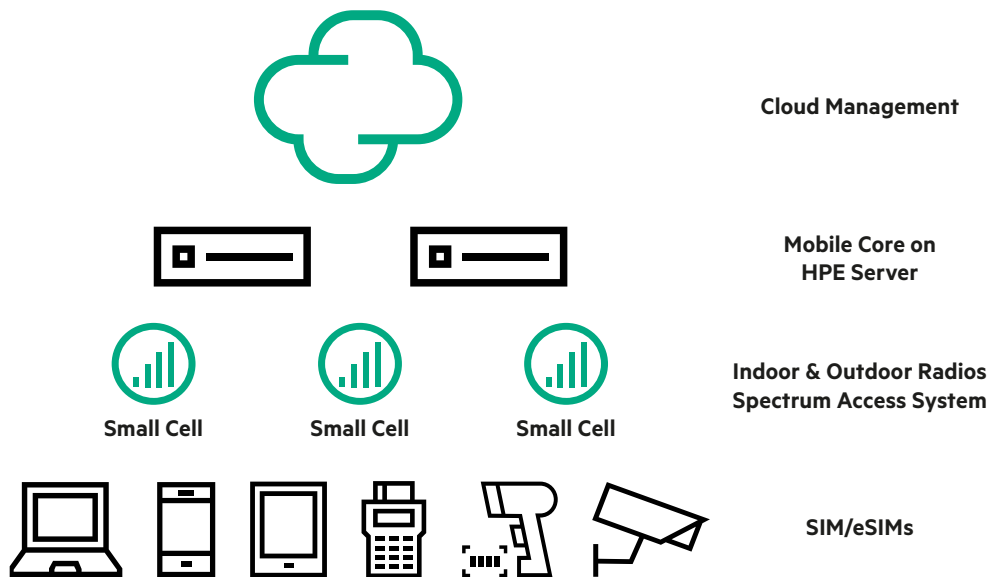


Figure 1. Components of the HPE Aruba Networking solution

HPE Aruba Networking Private 5G includes the following components—all pre-integrated and supported by HPE:

- **Cloud-based core and radio management** is a federated, multi-tenant management layer that has a similar look and feel as HPE Aruba Networking Central for ease of use. It includes zero touch provisioning and wizards for greater automation.
- **Core appliance** consists of an HPE ProLiant server pre-loaded and pre-configured with software from Athonet, a Hewlett Packard Enterprise acquisition.

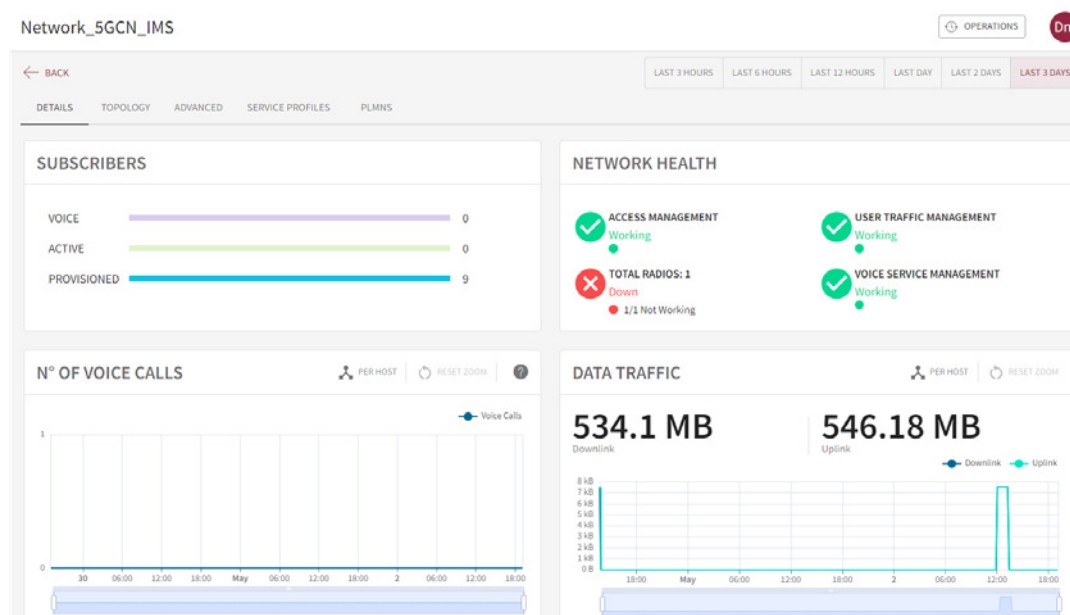
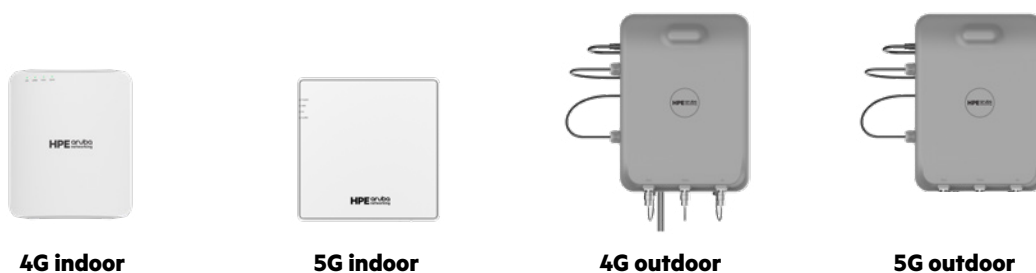


Figure 2. Management and operations for 4G/5G private cellular networks



- **Combo 4G/5G core software** is the brains of the cellular network and includes mobility control, subscriber management, and policy enforcement functions deployed on a HPE ProLiant server. The software includes all 4G and 5G services so organizations can begin with 4G (often to support existing device types) and then migrate to 5G without needing to upgrade the software version. Our private cellular solution is built on award-winning 4G/5G core technology developed by Athonet, a Hewlett Packard Enterprise acquisition, and has been deployed at more than 500 enterprises over more than 15 years.
- **HPE ProLiant server.** HPE ProLiant Gen11 DL325 is a scalable platform that delivers exceptional compute performance, memory density, and scalability plus the high-speed data transfer rate needed to run mobile core technology. The HPE ProLiant server is engineered to optimize IT services with a cloud operating experience, built-in security, and optimized performance for workloads to drive business forward.
- **Small cell radios** with indoor and outdoor options to support a variety of enterprise user endpoints and use cases. All small cells are backed by HPE Aruba Networking and managed using cloud-based management.



**Figure 3.** HPE Aruba Networking Small Cells. 4G options are available for enterprises in the US with 4G device ecosystems

- **SIM/eSIMs** come in either a physical or virtual form factor and are sold in packs of 10 to simplify purchasing. They can be provisioned via CSV files, APIs, or manual updates using our cloud-based management interface. Note that SIM technology is not backwards compatible; therefore, a 4G SIM must connect to a 4G small cell radio and a 5G SIM to a 5G radio.
- **Spectrum Access Service (SAS).** Private mobile networks can work with slices of public networks or shared spectrum. Our enterprise solution is designed to be used with shared or lightly licensed spectrum. This spectrum in the U.S. (known as CBRS) operates on band n48 and uses a Spectrum Access Service to protect incumbents. By using CBRS, enterprises can deploy a private cellular network without the additional costs and contractual requirements associated with carrier contracts (U.S. only).





## Why HPE?

HPE Aruba Networking's enterprise private cellular solution is built on proven mature technology developed by Athonet, a Hewlett Packard acquisition. With more than 500 enterprise and 25 service provider customers, Athonet has a proven track record of success that dates back to 3G.

Our enterprise solution offers the simplicity that enterprises require with a similar look and feel as Wi-Fi and a cloud management interface that masks 3GPP cellular complexity. In the future, HPE will continue to integrate configuration and management using HPE Aruba Networking Central as the common framework for shared services that span wired, Wi-Fi, and private cellular.

## Learn more at

[arubanetworks.com/products/wireless/private5g](https://arubanetworks.com/products/wireless/private5g)

Make the right purchase decision.  
Contact our presales specialists.



Contact us

Visit [ArubaNetworks.com](https://ArubaNetworks.com)

