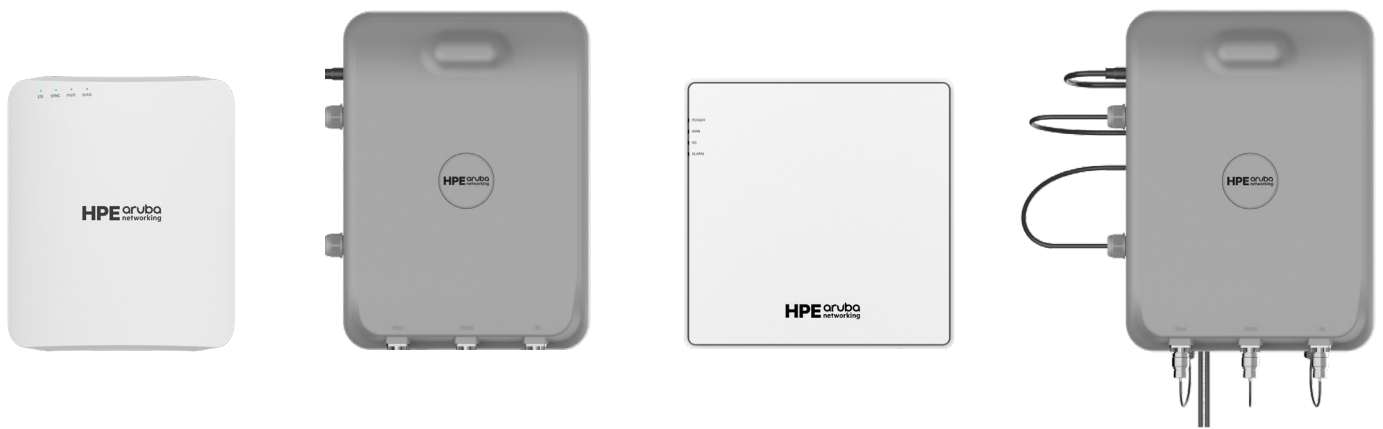


# HPE Aruba Networking Private Cellular Small Cell Radios

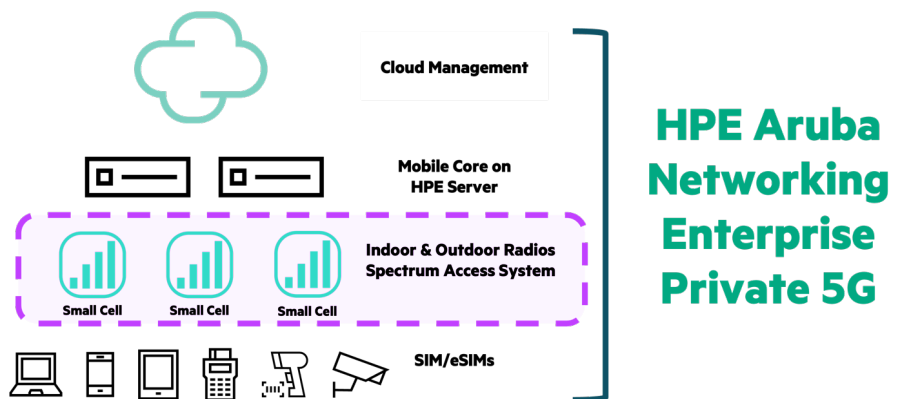


## Private cellular benefits

- Deterministic network access for guaranteed priority, latency, and bandwidth per application per device.
- Wider area coverage due to higher power limits, and higher radio receiver sensitivity that allow private 4G/5G can cover more area per access point.
- Segmentation of mission-critical traffic for separate network for business-critical applications that operates over relatively clean spectrum, especially in crowded environments
- High-speed mobility that requires fewer handoffs and is ideal for robotics, autonomous vehicles, and warehouse operations.

## Product overview

Enterprises are increasingly adopting private cellular networks to complement their existing Wi-Fi to deliver pervasive coverage across a wide range of use cases. HPE Aruba Networking 4G and 5G Small Cell Radios deliver the performance and range as part of our end-to-end, pre-configured offering—HPE Aruba Networking Enterprise Private 5G—that makes it simpler to purchase, manage, and deploy. Our radios are optimized for enterprise use and can be configured using wizards and zero-touch provisioning, cutting deployment time.



**Figure 1.** The end-to-end HPE Aruba Networking Enterprise Private 5G offering, based on award-winning technology from Athonet, a Hewlett Packard Enterprise acquisition, simplifies the adoption and management of private cellular networks.

## Key verticals and use cases

Verticals	Sample private 5G use cases
<b>Manufacturing/ Warehousing</b>	Industrial automation, automated material handling, connected worker, remote monitoring/sustainability
<b>Large Public Venues</b>	Contactless ticketing, back-of-the-house systems, video backhaul, live streaming, mobile point of sale
<b>Healthcare</b>	Clinical communications, diagnostic imaging
<b>Education</b>	Massive data backhaul from security cameras, wide area outdoor coverage, large venues (see above)
<b>Transportation</b>	Logistic optimization, port operations
<b>Energy</b>	Remote monitoring, digital oil field/solar/wind farm, employee safety
<b>Government</b>	Public safety, transportation and healthcare use cases

Figure 2. Key industries and use cases for private cellular.

## Support for CBRS

Regulators are increasing unlocking shared spectrum for private cellular use. In the U.S., this is known as Citizen’s Broadband Radio (CBRS), which uses the B48/n48 band. Our 4G and 5G small cell radios for use in the U.S. include support for CBRS and work with a Spectrum Access System (SAS) that is included as part of the overall subscription. Versions with support for locally licensed bands in use in Europe and Asia are planned.

## Technical specifications

### 4G Small Cell Radios

### 5G Small Cell Radios



### Radio Specifications

Radio Type	LTE (3GPP Rel 15)		5G NR (3GPP Rel 15)	
	2x2 DL MIMO Support, DL 256QAM, UL 64QAM 2CC DL CA / 2CC UL CA		DL / UL 2 Layer MIMO with 256QAM	
<b>Power</b>	30dBm Max (Up to 24dBm per ant)	40dBm Max (Up to 24dBm per ant)	Max 30 dBm Max EIRP (Up to 23dBm per ant)	47dBm Max* (Up to 30dBm per ant)
<b>Concurrent User Endpoints</b>	8 Users per TTI; 64 Users (32 per Cell)		4 Users per TTI 16 ~ 64 Active Users (depend on bandwidth config)	
<b>Band Supported</b>	B48		n48	
<b>Bandwidth</b>	10/20 MHz channel support 40 MHz if carrier aggregation is enabled		10/20/30/40 MHz channel support	
<b>Throughput</b>	DL 160Mbps/UL 52Mbps@TDD Config 1 DL 220Mbps/UL 26Mbps@TDD Config 2		DL: 2 layer 256QAM 40MHz DDDSU 328 Mbs UL: 2 layer 256QAM 40MHz DSUU 168 Mbs	

\* Using external antenna



## Technical specifications

### 4G Small Cell Radios



Indoor SC-1425



Outdoor SC-1467

### 5G Small Cell Radios



Indoor SC-1535



Outdoor SC-1567

#### Interfaces

<b>Network</b>	1x RJ-45 1 Gbps (PD)	1x RJ-45 1Gbps (PD) 1x RJ-45 1Gbps	1x RJ-45 1Gbps (PD) 1x RJ-45 1Gbps 1x SFP	2x RJ-45 1Gbps (PD) 1x SFP
<b>Antenna</b>	4x Internal (5dBi) 1x Opt GPS (RP-SMA)	4x Internal (Dir 10dBi) 1x Internal GPS antenna	2x Internal (6dBi) 1x Opt GPS (SMA)	2x Internal (Dir 12dBi) (2x Ext (Nf) optional) 1x Internal GPS antenna
<b>Power</b>	802.3at (21W) 12V Adapter	802.3at (21W) 12VDC	802.3bt (Class 5) (28W) 12v Adapter	802.3bt (Class 6) (51w) 48VDC
<b>Timing Support</b>	PTP 1588 GNSS (w/GPS Antenna)	PTP 1588 GNSS	PTP 1588 GNSS (w/GPS Antenna)	PTP 1588 GNSS

#### Compliance and Certifications

<b>Certifications</b>	FCC, OnGo	FCC, OnGo	FCC, OnGo	FCC (OnGo in process)
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#### Mechanicals and Environmentals

<b>Dimensions</b>	10.4 x 8.3 x 3.1 (in) 265 x 210 x 80 (mm)	16.1 x 11.3 x 4.5 (in) 286 x 115 x 410 (mm)	9.4 x 9.4 x 2.7 (in) 240 x 240 x 69 (mm)	15.4 x 11.3 x 4.5 (in) 390 x 286 x 115 (mm)
<b>Weight</b>	4.5lbs (2kg)	12.2lbs (5.5kg)	3.3lbs (1.5kg)	11lbs (5kg)
<b>Temperature (Operational/Storage)</b>	-5° to 40° C -40° to 70° C (storage)	-25° to 55° C -40° to 70° C (storage)	0° to 40° C -5° to 50° C (storage)	-40° to 55° C -40° to 70° C (storage)
<b>Humidity</b>	Humidity: 5% to 95% RH	Humidity: 5% to 95% RH	Humidity: 5% to 95% RH	Humidity: 5% to 95% RH
<b>Mounting</b>	Ceiling or Wall (optional HPE Aruba Networking indoor AP mount adapter)	Pole Mounting (Outdoor hardware included, wall mounting will need a stand-off)	Ceiling or Wall (optional HPE Aruba Networking indoor AP mount adapter)	Pole Mounting (Outdoor hardware included, wall mounting will need a stand-off)
<b>MTBF</b>	301,000hrs	300,000hrs	TBD	TBD
<b>Outdoor Rating</b>		IP65 IEC 60068-2-11 200 Km/h wind load ETSI EN 300 019-2-4 GR-63-CORE		IP65 200 Km/h wind load



**Warranty**

Small cell radios include a 1-year warranty. Additional options are available to extend support.

**Geographic availability**

4G and 5G small cell radios will support CBRS in the US with additional support for Europe and Asia planned.

**For more information, go to**

[arubanetworks.com/products/wireless/private5G](https://arubanetworks.com/products/wireless/private5G)

**Make the right purchase decision.  
Contact our presales specialists.**



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