

AIRGAINCONNECT® AC-HPUE™

Multi-Band High Power LTE Antenna-Modem

The AirgainConnect FirstNet Ready™ AC-HPUE high power user equipment (HPUE) built for FirstNet® MegaRange™, delivers the maximum allowed radiated power directly to the LTE antenna elements. The uplink signal is the weakest link in the LTE connection, which can be problematic in fringe coverage areas or inside buildings such as parking structures. When the uplink is disconnected, the user gets no service in the downlink. AirgainConnect's patented technology eliminates the loss over the coax cables from the vehicle router to the roof-mounted antenna, providing 10 times the transmit power when compared to the router's conventional modem. The result is deeper building penetration and higher uplink data speeds at the edge of the network.

AirgainConnect AC-HPUE 6-in-1 is a rugged outdoor mobile antenna with integrated Cat-12 LTE modem, designed to meet the most demanding connectivity needs of public safety and fleet vehicles. AC-HPUE provides two high gain multi-band LTE antennas and one band 14 LTE antenna powered by an HPUE LTE modem. AC-HPUE also supports two high gain tri-band Wi-Fi antennas (with support for Wi-Fi 6, Wi-Fi 6E, and Wi-Fi 7), and an active GNSS element inside a single robust and compact housing.

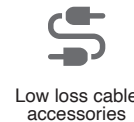
AC-HPUE attaches to the router WAN port via Ethernet data cable or directly to a laptop via USB cable. Wi-Fi and GNSS antennas connect to the router just like all other Airgain fleet antennas. This means your router can be seamlessly used for Wi-Fi, location-based services, and managed using your existing network management system.

- Innovative design eliminates cable loss, and increases antenna transmit power
- Rugged design
- IP67 rated
- Made in North America
- Antennas: 3 x LTE (built-in), 2 x Wi-Fi, 1 x GNSS
- US Patent 10,511,086 B1
- US Patent 11,165,132 B2

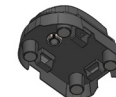
Applications

Whether you are a first responder (e.g., police, fire, EMS), or in a public safety support role (e.g., bus, rail, courier, utility, waste or water management, security), AC-HPUE provides a quick and easy way to upgrade to band 14 LTE service.

AirgainConnect's patented technology boosts coverage for fleet and enterprise users on a wide variety of cellular bands and can be added alongside your current vehicle antenna, providing a dual modem redundant solution.



Bolt Mount



Magnetic Mount



Suction Cup Mount

Standard Configurations

AC-HPUE-C3W2G-EI-Q-WH-5M	3 x LTE, 2 x Wi-Fi, 1 x GNSS, and Ethernet Injector bundle (includes 10ft power cable and 1ft Ethernet Cable). Color, White. 5 meter cable length.
AC-HPUE-C3G-EI-Q-WH-5M	3 x LTE, 1 x GNSS, and Ethernet Injector bundle (includes 10ft power cable and 1ft Ethernet Cable). Color, White. 5 meter cable length.
AC-HPUE-C3-EI-Q-WH-5M	3 x LTE and Ethernet Injector bundle (includes 10ft power cable and 1ft Ethernet Cable). Color, White. 5 meter cable length.
AC-HPUE-C3W2G-EI-Q-BL-5M	3 x LTE, 2 x Wi-Fi, 1xGNSS, and Ethernet Injector bundle (includes 10ft power cable and 1ft Ethernet Cable). Color, Black. 5 meter cable length.
AC-HPUE-C3G-EI-Q-BL-5M	3 x LTE, 1 x GNSS, and Ethernet Injector bundle (includes 10ft power cable and 1ft Ethernet Cable). Color, Black. 5 meter cable length.
AC-HPUE-C3-EI-Q-BL-5M	3 x LTE and Ethernet Injector bundle (includes 10ft power cable and 1ft Ethernet Cable). Color, Black. 5 meter cable length.

Mounting Gaskets

Must choose one of the mounting gasket part numbers to be included along with the HPUE/EI bundle (Select based on vehicle type)

AC-HPUE-FG-BL	AC-HPUE mounting gasket that conforms to 2020+ Ford Interceptor/Explorer (replacement part only). Color, black.
AC-HPUE-FG-WH	AC-HPUE mounting gasket that conforms to 2020+ Ford Interceptor/Explorer (replacement part only). Color, white.
AC-HPUE-SG-BL	AC-HPUE mounting gasket that fits vehicles with flat roof (no ribs, replacement part only). Color, black.
AC-HPUE-SG-WH	AC-HPUE mounting gasket that fits vehicles with flat roof (no ribs, replacement part only). Color, white.
AC-HPUE-F19G-BL	AC-HPUE mounting gasket that conforms to 2016-2019 Ford Interceptor (replacement part only). Color, black.
AC-HPUE-F19G-WH	AC-HPUE mounting gasket that conforms to 2016-2019 Ford Interceptor (replacement part only). Color, white.
AC-HPUE-FEXPD18G-BL	AC-HPUE mounting gasket that conforms to 2018+ Ford Expedition (replacement part only). Color, black.
AC-HPUE-FEXPD18G-WH	AC-HPUE mounting gasket that conforms to 2018+ Ford Expedition (replacement part only). Color, white.
AC-HPUE-F15021G-BL	AC-HPUE mounting gasket that conforms to 2021+ Ford F-150 (replacement part only). Color, black.
AC-HPUE-F15021G-WH	AC-HPUE mounting gasket that conforms to 2021+ Ford F-150 (replacement part only). Color, white.

Electrical Data

Ethernet Injector +12 VDC

Ignition sense

Sleep sense (sleeps when the router sleeps)

Power conditioning built to automotive standard ISO 7637-2

LTE Modem

Cat 12, 3GPP Release 12+

Band 14 output power: 1.25W (Class 1) Element 1

Bands 2, 4, 5, 12, 17, 29, 30, 66 output power: 200mW (Class 3) Elements 2 & 3

Transmit bandwidth: 1.4 MHz through 20 MHz

WCDMA capabilities on bands 2, 4, 5

Wi-Fi Antennas

IEEE 802.11 a/b/g/n/ac/ax Wi-Fi 6, 6E, 7

Frequency Range	Elements 4 & 5	2.4/4.9-6.0 GHz
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GNSS Data - Ceramic Patch Antenna Specification

GNSS Data - LNA Specification

Bandwidth	1561 – 1602 MHz	Noise Figure	1.2 dB
Gain@Zenith	2.5 dBi	Gain	28 dBi
Polarization	R.H.C.P.	Voltage	3.3V~5.6V
Axial Ratio	3.0 dB Typ.	Current	9.6±1mA@3.3V

Mounting Data

Dimensions	Height	3.27" (83.1 mm)
	Width	5.79" (147.0 mm)
	Length	7.95" (201.9 mm)
Weight	1.7lbs (771g)	
Mount	Bolt Mount	
Color	White (WH), Black (BL)	

SIM Card

3FF Micro SIM card support

Environmental Data

Operating Temperature	-30°C to +70°C
Extended Operating Temperature	+70°C to +80°C