ANTENNAPLUS by Airgain

USAT Connect What's Critical™

FLEET SOLUTIONS

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 modem, designed to meet the most demanding LTE 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, including the new 6 GHz ISM band for Wi-Fi 6E (802.11ax), 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.

- Unique design increases power at LTE antennas, increasing cellular coverage
- Rugged design for operation in all weather conditions
- IP67 rated rooftop installation
- USA factory ensures fast turnaround for customizations
- Antennas: 3x LTE, 2x Wi-Fi, 1x GNSS
- US Patent 10,511,086 B1

FIRSTNET Built with AT&T READY

Optimal MIMO Performance

Compact and Robust UV Resistant Housing

Full Outdoor Installation Ready

Customizable Cables and Connectors to Connect to Any Modem

Flexible Mounting Options

GNSS

Low loss cable accessories

Fast custom turnaround time

Bolt Mount

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.

Standard Configurations

AC-HPUE-C3W2G-Q-S-EI-WH-5M	MIMO LTE x 3, Wi-Fi 6 x 2, & GNSS, Ethernet Injector, Threaded Bolt Mount, SMA on GNSS, RP-SMA on Wi-Fi, White, 5m (16.4ft) coax
AC-HPUE-C3-Q-S-EI-WH-5M	MIMO LTE x 3, Ethernet Injector, Threaded Bolt Mount, White, 5m (16.4ft) coax
AC-HPUE-C3W2G-Q-F-EI-WH-5M	MIMO LTE x 3, Wi-Fi 6 x 2, & GNSS, Ethernet Injector, Threaded Bolt Mount, SMA on GNSS, RP-SMA on Wi-Fi, white, 5m (16.4ft) coax, Ford Interceptor Utility 2020+
AC-HPUE-C3-Q-F-EI-WH-5M	MIMO LTE x 3, Ethernet Injector, Threaded Bolt Mount, White, 5m (16.4ft) coax, Ford Interceptor Utility 2020+

Available in color white, customizable cable lengths up to 35 feet, Wi-Fi and GNSS configurations.

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
MIMO: 2 x 2, 4 x 2
Transmit bandwidth: 1.4 MHz through 20 MHz
WCDMA capabilities on bands 2, 4, 5

Wi-Fi		
IEEE 802.11 a/b/g/n/ac/ax Wi-Fi 6, 6E		
Frequency Range	Elements 4 & 5	2.4/4.9-6.0 GHz

GNSS Data - Ceramic Patch Antenna Specification	
Bandwidth	1561 – 1602 MHz
Gain@Zenith	2.5 dBi
Polarization	R.H.C.P.
Axial Ratio	3.0 dB Typ.

GNSS Data - LNA Specification	
Noise Figure	1.2 dB
Gain	28 dBi
Voltage	3.3V~5.6V
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)	

SIM Card

3FF Micro SIM card support

Environmental Data

Operating Temperature	-30ºC to +70ºC
Extended Operating Temperature	+70ºC to +80ºC
Dust & Waterproof Rooftop Housing	IP67
Vibration	MIL-STD-810G
Shock	IEC 60068-2-27-2008
Temperature & Humidity	IEC 60068-2-30-2008
Solar Loading	IEC 60068-2-5

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