AirgainConnect® Fleet™

5G Vehicle Gateway

AirgainConnect Fleet, or AC-Fleet™, is an integrated 5G modem, Wi-Fi 6 router and high performance antenna solution designed for mounting to the roof of any vehicle. The compact housing has been certified to thrive in the most rugged outdoor conditions and is a mere 2 inches (5.1 cm) tall to be more covert and less obstructive. Manage each device locally or manage a fleet of devices remotely with a subscription to Airgain's cloud services.
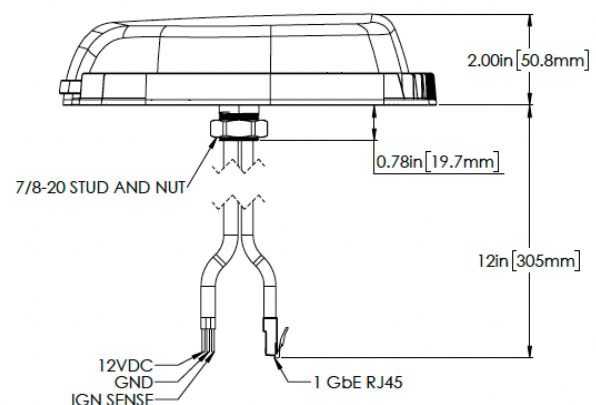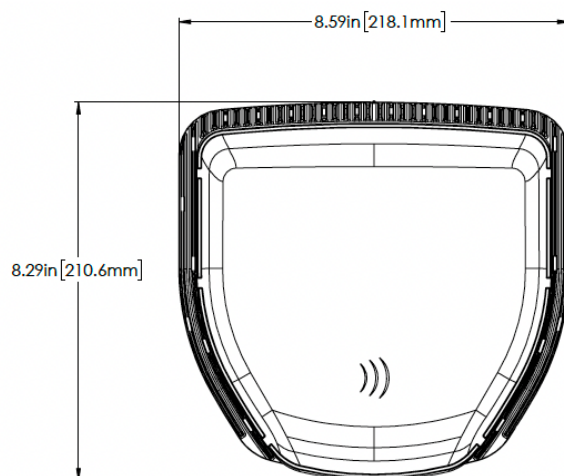
FEATURES

- 5G FR1 (sub-6GHz) and LTE Cat 19 modem with 4x4 MIMO

- 1 GbE RJ45 LAN connection

- Dual-band simultaneous Wi-Fi 6 (2.4 & 5-6GHz) with 2x2 MU-MIMO

- Integrated GNSS

- Download multiple eSIM profiles with preloaded bootstrap

- Ignition sense for automatic power-up and adjustable power-down timer

- Ultra-low 2.0" height

- IP67 and IP69K ingress protection

- Available in black or white

ADVANTAGES

- All-in-one solution simplifies installation

- Easy to configure locally or remotely over the cloud

- Avoid cellular dead zones with automatic carrier switching

- Eliminates RF cable loss for better performance

- Omni-directional radiation pattern provides uniform coverage

- Includes pre-attached mounting foam for installation on uneven surfaces

- Up to 5 year limited warranty with an active cloud subscription[1]

- Covered by one or more patents and pending applications[2]

[1] See terms and conditions at https://www.airgain.com/product-support/antenna-plus-product-support/

[2] For a list of the patents covering this product please visit https://www.airgain.com/patents/

8.59in [218.1mm]

8.29in [210.6mm]

2.00in [50.8mm]

0.78in [19.7mm]

7/8-20 STUD AND NUT

12in [305mm]

12VDC
GND
IGN SENSE

1 GbE RJ45

AC-Fleet in white attached to roof of 2020+ Ford Explorer

TECHNICAL SPECIFICATIONS

CONNECTIVITY

Cellular	Modem	5G NR FR1 and 4G LTE Cat 19 DL / Cat 18 UL
	MIMO	4x4 DL and 2x2 UL
	5G NR Bands (NSA & SA)	n1, n2, n3, n5, n7, n8, n20, n25, n28, n38, n40, n41, n48 (SA), n66, n71, n75 (SA), n77, n78, n79
	4G LTE Bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71
	3G WCDMA Bands	1, 2, 4, 5, 6, 8, 19
	Carrier Aggregation	Up to 7CA for 4G LTE and EN-DC for 5G NR
	eSIM	SGP.x2 compliant MFF2 with preloaded bootstrap profile which allows for downloading up to 4 additional MNO profiles
Ethernet	LAN	1 x 1.0 GbE
	Cable	1 ft non-removable, flat, shielded CAT6 with male RJ45 connector (female-to-female RJ45 coupler included)
Wi-Fi	Bands	Dual-band simultaneous Wi-Fi 6 (2.4 & 5-6 GHz)
	MIMO	2x2 Multi-User (MU-MIMO)
	Standard	Complies with IEEE 802.11ax
	Clients	Up to 64
GNSS	Bands	L1 GPS/Glonass/Beidou/Galileo
	Transmission	Integrated LNA and passive antenna

TECHNICAL SPECIFICATIONS

ENVIRONMENTAL

Temperature	Operating: -30°C to 70°C (-22°F to 158°F)* *reduced performance when operating at or above 70°C
	Storage: -40°C to 85°C (-40°F to 185°F)
Humidity (Non-Condensing)	95% RH at 60°C Operating and Storage
Ingress Protection	IP67 (dust tight and water immersion up to 1 meter)
	IP69K (dust tight and up to 80°C high pressure water jets)
Corrosion	IEC 60068-2-52 and SAE J2334 salt spray
Shock and Vibration	Conformance to ISO MIL-STD-810G, SAE J1455 and EN61373

POWER

Specifications	Input Voltage	7-36 VDC with software configurable minimum operating voltage to prevent dead vehicle battery (capable of operating at 5V during transient events)
	Ignition Sense	Automatic power-up and configurable power-down timer
	Cable	1 ft non-removable, shielded multi-conductor with exposed power (red), ground (black) and ignition sense (white) wires
	Compliance	ISO 7637-2, ISO 16750-2 and IPC-9592B Class II
Consumption (@12V)	Standby Mode (Vehicle Off)	0.66 W
	Idle	10 W
	Peak	15 W

CERTIFICATIONS

Regulatory	FCC
	IC/ISED
	PTCRB
Carrier	AT&T
	T-Mobile
Public Safety	T-Mobile Connecting Heroes
Safety	IECEE Certification Bodies Scheme
	IEC 62368-1
Vehicle	MIL-STD-810G
	SAE J1455
	ISO 7637-2
	ISO 16750-2
Materials	WEEE
	RoHS 2
	REACH
	California Prop 65

RELIABILITY

MTBF	30+ years (Telcordia SR-332 at 25C)

TECHNICAL SPECIFICATIONS

SOFTWARE CONFIGURATION

Simplified configuration with separate basic and advanced mode settings

Avoid cellular dead zones by enabling automatic carrier switching

Configure device as a wireless Access Point

Optional Depot Mode for Wi-Fi as WAN connectivity

Stream GNSS data to 3rd party platforms such as Track Star

Define routing policies

Secure network with firewall

Manage user accounts

Install new firmware or saved configuration settings

Download system logs

CLOUD SERVICES

Monitor and configure devices remotely

Organize devices into an easy-to-manage group

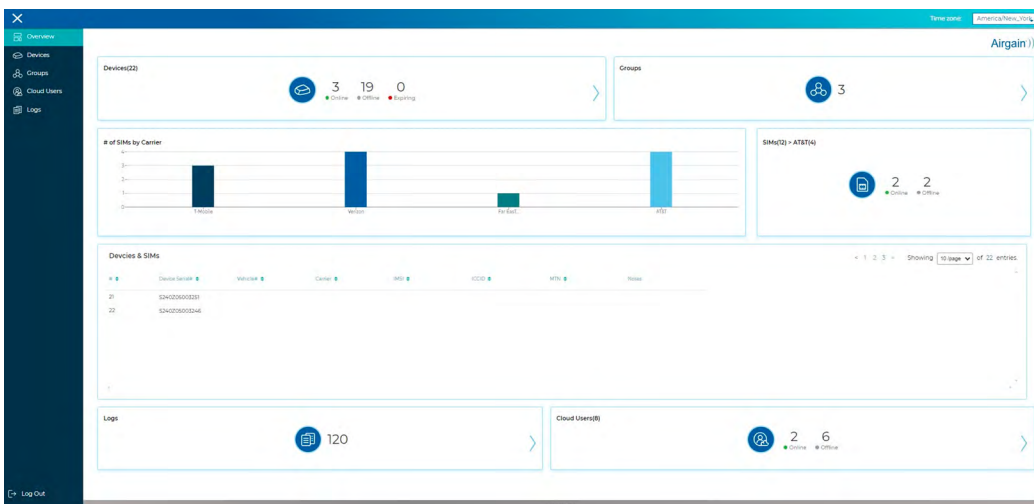Activate multiple devices at once and up to 4 eSIM profiles in a single device

Optimize cellular connectivity with eSIM profile management and prioritization

Update firmware over the air

Enable event notifications

Manage cloud users

Download cloud logs

Screenshot of AC-Cloud dashboard.

PART NUMBERS	DESCRIPTION
VEHICLE GATEWAYS	
CY-AF5G-B-NAT	AC-Fleet 5G vehicle gateway, black, 1 foot Ethernet and power cables, bolt mount with pre-attached mounting foam, first year of cloud subscription and limited device warranty included
CY-AF5G-W-NAT	AC-Fleet 5G vehicle gateway, white, 1 foot Ethernet and power cables, bolt mount with pre-attached mounting foam, first year of cloud subscription and limited device warranty included
CLOUD SUBSCRIPTIONS	
CY-AFC1	1 additional year cloud subscription for AC-Fleet (includes up to a 5 year limited device warranty)
CY-AFC3	3 year upfront cloud subscription when purchased with AC-Fleet (includes limited device warranty)
CY-AFC5	5 year upfront cloud subscription when purchased with AC-Fleet (includes limited device warranty)
OPTIONAL ACCESSORIES	
CY-AF5G-RK	Remount kit for AC-Fleet with replacement adhesive pad, mounting foam and conductive pads
CY-AFCL	Cigarette lighter power adapter for AC-Fleet with 15 feet of cable
CY-AFWM	Wall mount AC/DC to cigarette lighter power converter for CY-AFCL
CY-AFP3	3 ft 20 AWG power, ground and ignition cable
CY-AFP10	10 ft 20 AWG power, ground and ignition cable
CY-AFP15	15 ft 20 AWG power, ground and ignition cable
CY-AFP30	30 ft 20 AWG power, ground and ignition cable
CY-AFE3	3 ft Cat6 shielded Ethernet cable with male connectors on both ends
CY-AFE10	10 ft Cat6 shielded Ethernet cable with male connectors on both ends
CY-AFE15	15 ft Cat6 shielded Ethernet cable with male connectors on both ends
CY-AFE30	30 ft Cat6 shielded Ethernet cable with male connectors on both ends
AP-MAG	Universal magnetic mount adapter, compatible with AC-Fleet
AP-SCM	Universal suction mount adapter, compatible with AC-Fleet
AP-XTQ	1.25" bolt extension kit for installations on thicker roofs, up to 1.5" hole diameters, and between ribs of Ford Explorer

For mounting instructions please visit https://www.airgain.com/products/airgainconnect-fleet/.