FIRSTNET®
Built with AT&T

CONNECTED VEHICLE

Version 3.2.23

Contents:

What is FirstNet?

FirstNet is the only nationwide wireless broadband communications platform dedicated to America's first responders and public safety community. This reliable, highly-secure communications platform brings reliability to public safety agencies and first responders—helping them make faster and better decisions to keep themselves and the public safe.

FLEET MANAGEMENT

The next generation fleet tracking device
GO9

The Fleet Management GO9, now FirstNet Ready®

The latest device built to support your fleet now and into the future. The GO9 offers state-of-the-art GPS technology, g-force, monitoring, IOX® expandability, engine and battery health assessments, and communication on the 4G/5G networks.

Vehicle Telematics

Telematics and other connected-vehicle technologies are becoming a critical component of modern-day situation awareness to dispatch resources and protect drivers.

Using a patented tracking algorithm, the GO9 accurately recreates vehicle trips and analyzes incidents. The GO9 also offers in-vehicle alerts to instantly notify drivers of infractions and - with hardware Add-Ons - provides live coaching for driver's on-road performance. The GO9 does not require a dash-mounted antenna or any wire splicing.

Top Features

- Easy installation
- LTE Connectivity
- Small form factor device
- Breakthrough accident detection and notification
- External device expandability via IOX Technology
- Built-in auto-calibrating accelerometer and gyrometer
- Near-real-time vehicle data
- End-to-end cybersecurity
- Supports Band 14 and FirstNet requirements out-of-the-box

Security

Platform security is designed for end-to-end protection of your data.

- GO device and network interfaces use authentication, encryption, and message integrity verification.

- GO devices are individualized. Each device uses a unique ID and non-static security key - making it difficult to fake a device's identity.

- Over-the-air updates use digitally-signed firmware to verify that updates come from a trusted source.

- Use of independent third-party experts to validate the platform from end to end.

- FIPS 140-2 validated by NIST (certificate #3371).
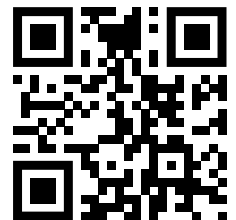
Upgrade to the next generation of GPS vehicle tracking devices. Learn more at www.att.com/fleetmanagement

Technical Specifications and Features

Interfaces

Engine Management
Legacy OBD (SAE J1850 PWM/VPW, ISO 9141-2, and ISO 14230 (KWP2000))
Single W ire CAN (GM 33.3 kbps, Fiat/Dodge 50 kbps)
ISO 15765 CAN (including WWH-OBD, GMLAN, VW TP2.0) @ 125/250/500 kbps
Medium Speed CAN @ 125/250/500 kbps
J1939-13 Type 2
TTL CAN
2- or 3-wire install support (for older vehicles/asset tracking)
Input/Output
Buzzer
LEDs - Ignition, GPS, Cellular
IOX (more details below)
Internal GPS/Cellular antennas

Cellular

GO9 LTE ATT
LTE (CAT-1): Bands 2/4/5/12/14, 3G: Bands 2/5

GPS Receiver

72-channel engine (GPS/GLONASS)
Under 1 second Time-To-First Fix for hot and aided starts
Concurrent GPS & GLONASS system
A-GNSS
Accuracy: ~2.5m
Firmware upgrade in the field possible

I/O Expandability Support (IOX)

Currently supports a combination of up to 5 of the following:
Driver ID
Hours of Service (HOS)
Garmin
Iridium Satellite
AUX - 4 per IOX (Digital or Analog)
Serial Port and Additional CAN for third-party device integration
Driver Feedback via external Buzzer and GOTALK
Substance Spreader
Relay control
Alert

Environmental and Electromagnetic Compatibility (EMC)

Operating Temperature -40 to +85 °C
SAE J1455
Thermal Shock (Section 4.1.3.2)
Humidity Cycle (Section 4.1)
Temperature Cycle (Section 4.2)
Mechanical Vibration (Section 4.10)
Operational Shock, Transit Drop, Handling Drop (Section 4.11.x.x)
Inductive Switching, Burst Transients, Starter Motor Engagement
(Section 4.13.2.2.1)
Coupled Transients (Section 4.13.2.2.2)
Electrostatic Discharge Handling, Operational and non-operational
(Section 4.13.2.2.3)
Radiated Immunity
Radiated and Conducted Emissions

Accelerometer & Gyroscope

3D accelerometer and 3D gyroscope. Full-scale acceleration range of ±8g and an
angular rate range of ±250 dps
Acceleration and angular rate output data rate of 1.66 kHz

Mechanical

Weight: 70 g (0.15 lb)
Dimensions: 75 mm L x 50 mm W x 23 mm H
Housing: Flame retardant black ABS

Electrical

Voltage 12 V and 24 V systems supported
Current (at 12 V)
Operating Mode: 60-300 mA
Operating Mode + IOX: Up to 2 A
Sleep Mode: 1.5 mA
Resettable overcurrent protection to IOX

Compliance

Standards: FCC, IC, PTCRB

Over-the-Air (OTA) Support

Firmware Updates: For maintenance, new features, and custom applications
Parameters: For turning additional features on/off
Almanac/Ephemeris Data: For quicker GPS latch

In-cab Buzzer

Decibel Output: >85 dBA at 10 cm
Driver Feedback: Harsh braking, harsh acceleration, harsh corners, over-revving,
excessive idling and speeding, engine-based seatbelt violations (when available),
and custom
Test Mode: Diagnostic beeps for validating GPS and wireless connection

Voltage Recording

Curve-based voltage logging to detect weak batteries, failing alternators,
and failing starters.

64-Mb Non-volatile Flash Memory

Main Data Memory: Up to 80,000 logs in offline mode (out of coverage)
Accident Data Memory: Buffer records over 100 minutes of second-by-second data
(6,000 logs). Last 72 records (1.2 minutes) are sent instantly on accelerometer-triggered
accident-level events.

Recording Parameters

Patented curve-based GPS/voltage/accelerometer/engine data logging algorithm for
fewer, more accurate data points.

Intelligent Ignition

Non-engine-based ignition detect on voltage and movement, allowing for 3-wire
installation. Ideal for older vehicles with no engine information and covert installation for
asset recovery.

Upgrade to the next generation of GPS vehicle tracking devices.
Learn more at www.att.com/fleetmanagement

Why FirstNet?
Fleet Management GO9, which is now FirstNet Ready® helps you go further with visibility and control of your large mixed fleets. Anchored by our highly secure, highly reliable
global network, leading-edge platforms, innovative ecosystem, and our award-winning customer service, we have flexible, powerful solutions to meet your business goals.

MISSION CRITICAL PUSH-TO-TALK SOLUTIONS

FirstNet Rapid Response

Powered by 3GPP Mission-Critical Performance

Instant Communications integrated with 3GPP mission-critical performance

Mission-critical communication standards integrated in a feature-rich push-to-talk solution built with and for public safety

FirstNet, Built with AT&T, in public-private partnership with the FirstNet Authority, is bringing public safety users a new option to help improve the way they connect to the critical information they need.

FirstNet Rapid Response is a mission-critical based push-to-talk solution that offers FirstNet-eligible customers a 3GPP-based solution that combines a rich set of features with mission-critical performance on the FirstNet Network:

This new exciting offer provides powerful features that include:

- User Profiles and Roles - Make it possible for the Rapid Response admin to manage users through templates that they can assign to each Rapid Response user to choose from when logging in.

- Operational Status Messaging - Quickly send instant or form messages to dispatchers or authorized users in selected talk groups.

- Emergency Calling – Users can declare a state of emergency, which prioritizes their call over all other push-to-talk traffic. Functionality is available within the app or via hard key on select devices.

- User Check – Authorized users can remotely monitor another user's battery level, signal strength (Wi-Fi and cellular) and current location. Available on select operating systems.

- User Disable/Enable – Authorized users can remotely disable and enable FirstNet Rapid Response and secure messaging on user devices. This does not include disabling the device.

- Video Streaming - Users can also select a streaming video option to send and receive near real-time streaming video to individual users, defined groups or ad hoc groups. Users can even simultaneously stream video while receiving/initiating push-to-talk call.

Benefits

- Integration into the FirstNet Network with Mission Critical Quality of Service treatment on the FirstNet Network. Mission Critical QoS ensures voice and data traffic have the highest priority on the FirstNet network.

- Simple, seamless migration from the AT&T Enhanced Push-to-Talk service, which is FirstNet Ready**®**. Existing FirstNet customers who have AT&T Enhanced push-to-talk can easily migrate their service and talk groups to this new public safety service.

- Take advantage of a large variety of devices, accessories, and platforms to support users.

- Integrate with Motorola's Critical Connect solution. Critical Connect provides a consistent framework and user experience for LMR-LMR and LMR-broadband systems across all LMR technologies (P25, DMR and analog.

FirstNet Rapid Response

Powered by 3GPP Mission-Critical Performance

Use the devices that work best for you

FirstNet Rapid Response users can choose from a wide range of devices and platforms, many which would already be familiar to AT&T Enhanced Push-to-Talk users. Choose from a growing list of FirstNet Ready® smartphones, tablets, and push-to-talk-centric devices that are tested and certified through the FirstNet device approval process to ensure optimal performance.

See a list of supported devices at firstnet.com/FirstNet Rapid Response.

Interoperable with Land Mobile Radio (LMR)

FirstNet Rapid Response can seamlessly interoperate with almost any Land Mobile Radio (LMR) system, helping to extend your coverage, grow capacity, and provide a layer of redundancy while offering you advanced features not typically available on your radio.

Manage talk groups, contacts, and more with the web-based Corporate Administration Tool (CAT)

Administrators can create talk groups and contacts and push them to devices in near real-time. This helps to eliminate the need to physically configure individual devices.

Designed for medium to large organizations, the CAT offers an interface that allows organizations to manage authorized user access, set user modes and client app versions. You can access the tool on multiple devices via a browser.

Security

FirstNet Rapid Response is a highly secure solution designed to meet the needs of first responders. The FirstNet network applies standard 128-bit LTE wireless encryption. In addition, FirstNet Rapid Response applies Advanced Encryption Standard (AES)-256-bit encryption to voice, data, and video.

More than just voice

Today's critical communications extend beyond just voice communications. First responders need a full suite of capabilities to provide situational awareness. With FirstNet Rapid Response, users can communicate one-to-one or one-to-many, just like a radio, while appreciating the convenience of a mobile phone.

While voice remains the primary feature for public safety push-to-talk users, texting and file sharing and streaming video, built to the mission critical standards, allows public safety users to share rich and detailed information that may be impractical to share via other means. Afforded the highest priority of any data service on the FirstNet network and built for robust reliability, sharing of multimedia files enables greater situational awareness and more informed decision making.

Users can track and share their location, send and receive highly secure messages (including PDFs, pictures, video) and communicate with Land Mobile Radios.

Easy management with integrated dispatch

As a supervisor, you can direct the action on the ground from your desktop or laptop computer with the FirstNet Rapid Response Web Dispatch solution. Guide your team and locate and communicate with individual members or teams. For time-sensitive communication, you can even override the push-to-talk communication channel to deliver important messages with the click of a mouse. Key features include:

• Simultaneous sessions (Dispatch)

• Affiliation monitoring (Dispatch)

• Remote affiliation (Dispatch)

Sonim 5G has landed
And landed hard.

FIRSTNET.
Built with AT&T
READY

3 YEAR
COMPREHENSIVE
WARRANTY

Introducing Sonim XP10.
Where 5G performance meets ultra-rugged design.

The speed, performance, and capabilities of 5G are tremendous assets for anyone who relies on a smartphone to do their job. But for those who work in extreme environments, it's rarely available in an ultra-rugged device.

Until now. Tested and validated to meet MIL-STD-810H standards, XP10 is as tough as they come. And now, with 5G, larger 5.5" screen, longer battery life, and easy access PTT button with support for Rapid Response and FirstNet PTT, your team can communicate and run mission critical applications faster, more efficiently than ever.

Sonim XP10 is ultra-rugged 5G performance.

Features

FirstNet Ready® for Public Safety to instantly and securely connect in any situation, when and where it matters most.
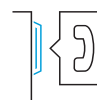
Large PTT button that offers easier-than-ever access for instant communication

5000mAh battery provides reliable power for entire work shifts and beyond without recharging.

Goodix Echo and **Noise Cancellation Technology** lets you hear and be heard louder and clearer, even in the noisiest conditions

Built to industry-leading **Rugged Performance Standards,** the XP10 makes your smartphone even smarter by standing up to even the most hazardous conditions.

Hassle-Free Deployment and Management with **SonimWareTM Software Tools**

sonim.

Sonim XP10 technical specifications

Core Platform/Functions

Operating System	Android 12, Google AER certified
Chipset	Qualcomm SM4350 Pro, 2xA76@2.2GHz, 6xA55@1.9GHz
Bands	LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B20/B25/B26/B29/B30/B38/B39/B40/B41/B42/B43/B46/B48/B66/B71 UMTS: B1/B2/B4/B5/B8 5G Bands: n2/n5/n14/n25/n30/n41/n48/n66/n71/n77/n78
Wi-Fi	802.11 a/b/g/n/ac/mc Dual Bands Hotspot capable up to 10 connections
Memory	6GB RAM/128GB UFS ROM Supports up to 1TB MicroSD external memory
Preloaded Applications	Sonim SCOUT, AT&T EPTT

Connectivity

Bluetooth	BT5.1 with BLE
Messaging	SMS, MMS (Text, Image, Audio, Video)
GPS	GPS L1 & L5/A-GPS, GLONASS, Galileo, BD
NFC	Yes
Sensors	Accelerometer, Ambient Light, Barometer, Compass, Gyroscope, Fingerprint, Proximity
Languages Supported	English, Spanish
VoLTE	Yes
Real-Time Text (RTT)	Yes

Battery

Capacity	5000mAh Li-Ion, Removable
Battery Life	Talk: 30 Hours, Standby: 500 Hours
Wireless Charging	Yes

Display

Size/Type	5.5" Gorilla® Glass Victus®
Resolution	1080x2160
Colors	16.7M

Physical Characteristics

Size	161x77.5x16.4mm
Weight	320g
Dedicated Keys	PTT Key, Volume Keys, Emergency Key, Application Key
Ports	USB-C, SecureAudioTM Connector, Charging Pins
SIM Type	Dual 4FF SIM Single Standby
Rugged Certifications	Class I, Div 2, Groups A, B, C, D; Class II, Div 2, Groups F, G; Class III, Div2; MIL-STD-810H; IP68; IPX9K
Operating Temperature	-20C - + 55C

Audio

Microphone	Dual mic solution with Goodix Noise and Echo Cancellation
Speaker	Dual front-facing loud speakers; output 100dB+
HAC	M4/T3 Hearing Aid Compatible

Multimedia

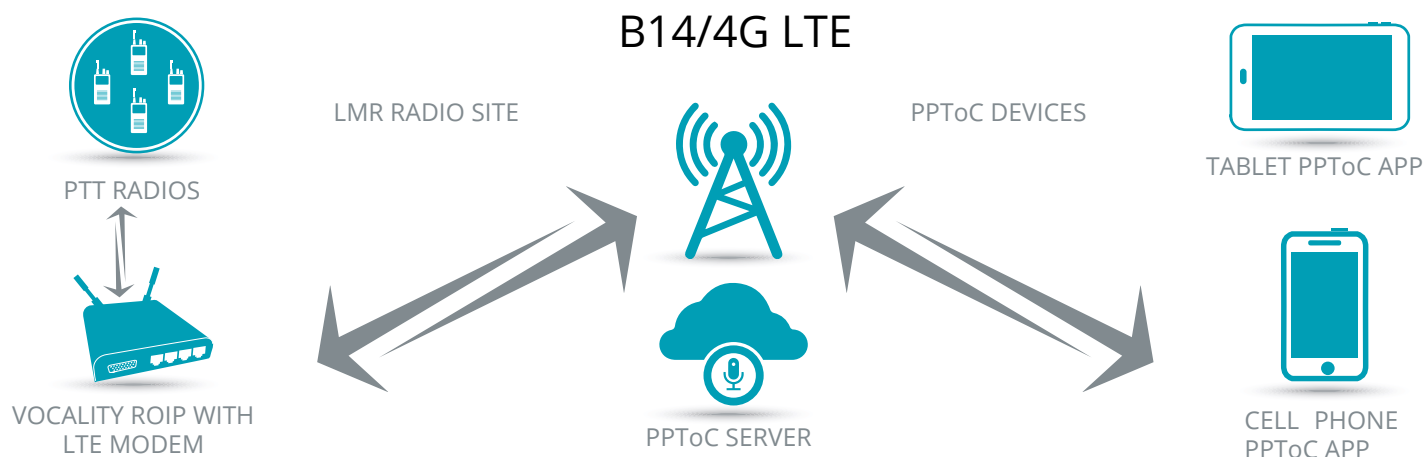|	
Audio Formats	AMR-NB, AMR-WB, AAC, AAC+, AAC+V2, MP3, FLAC, APTX, Vorbis
Video Formats	3GPP, MP4, AVI, MOV, MPEG-4, VP8, VP9, H.263, H.264, H.265
Graphic	JPEG, PNG, BMP, GIF, WebP, HEIF
Media Player	Yes
Camera	Dual rear 50MP standard and 8MP wide; 8MP front
LED Flashlight	Yes

Inbox Accessories

Battery, Battery Cover, Wall Charger, USB-C Cable, Screwdriver, SIM Card, Quick Start Guide, Accessory Guide

All of the information listed or posted has been provided by the OEM. AT&T has not made any effort to independently verify such information

Push-To-Talk over Cellular Gateway

The Vocality RoIP PTT interoperability gateway offers users the most feature- rich and easy-to-use radio connectivity solution in the industry.

Intelligent Failover
Automatic and seamless switching based on network availability

Media Gateways
Compatible with industry leading dispatch solutions

Band 14

Optional Wi-Fi

Radios
Communicate using multiple radio models, frequencies and manufacturers

B14/4G LTE

LMR RADIO SITE

PPToC DEVICES

PTT RADIOS

VOCALITY ROIP WITH LTE MODEM

PPToC SERVER

TABLET PPToC APP

CELL PHONE PPToC APP

FEATURES AND BENEFITS

- Hand sized vehicle mountable RoIP gateway
- Mission Critical Push-To-Talk (MCPTT) compatible
- Connect up to four PTT radios
- Integrated B14/4G LTE
- Certified for use on AT&T and FirstNet
- Transport Layer Security and IPSec Tunnels
- Serial control of mobile radios
- Scalable audio port density

- Interconnect multiple radio manufacturers and frequencies
- Compatible with PPToC and FirstNet® apps
- Connect telephone users with radio users
- Keep communications private with advanced security features
- Improve connection reliability with automatic failover
- Simple setup and management via web interlace

SCAN ME

Vocality RoIP Installed in FirstNet Vehicle

PTT Kit for the Sonim XP10

The most powerful push-to-talk mount in the industry for any industry

Features & Capabilities

Loud and Clear: The only 20 watt amplified speaker to hear even in the noisiest of environments

On the Go: Easy drop in cradle design to quickly mount and charge your device

Distraction Free: DOT and Handsfree compliant* to keep your drivers safe and connected while on the road

What's Included

In the Box: Mounting post, NAC certified 2.4 amp smart wiring harness, lock and keys, 20 watt amplifier and speaker, palm mic, and an unmatched 3 year advance replacement warranty

Mounting options:

Mount Only: SKU: 4434R / MSRP: $99.95

Full PTT Mount Kit: SKU: 4437R / MSRP: $319.95

*Compliant for commercial vehicles

OUTLAST AND OUTPERFORM

RELIABLE COMMUNICATIONS ARE NON-NEGOTIABLE

APX two-way radios are designed for extreme durability, so you can count on them to work under the toughest conditions. From the rugged aluminum endoskeleton of our portable radios to the steel encasement of our mobile radios, APX is built to last.

HEAR AND BE HEARD

CLEAR COMMUNICATION CAN MAKE A DIFFERENCE
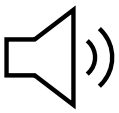
The APX family is designed to help you hear and be heard with unparalleled clarity, so you're confident your message will always get through. Multiple microphones and adaptive windporting technology minimize noise from wind, crowds and sirens. And the loud and clear speaker ensures you can hear over background sounds.

KEEP INFORMATION PROTECTED

EVERYDAY, SECURITY IS BEING PUT TO THE TEST

With the APX family, you can be sure that your calls stay private, secure, and confidential. APX supports multiple types of standard and custom encryption. The MACE hardware encryption module equipped within an APX radio provides a hardened tamper-resistant chassis for storing encryption keys.

MADE FOR THE MISSION

APX RADIOS ARE INTUITIVE AND EASY TO USE FOR YOUR MISSION
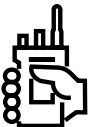
A distinctive "T-grip" shape allows devices to be easily held with gloved hands or in wet environments. Positive action controls minimize the risk of accidental operation, while extreme ergonomic models are designed for specialized conditions. Easy to read displays, day and night, placed just where you need them for 'at-a-glance' status, or no display for covert operations.

INTELLIGENCE IN ACTION

AN ECOSYSTEM OF CONNECTIVITY
HELPS TO KEEP YOU SAFE
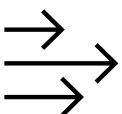
APX radios can prioritize emergency calls, send a signal automatically when they sense "man down" or a collision, provide a Bluetooth® beacon to find missing personnel, and automate responses to specific events or when detecting a geofence. And upon recognizing poor signal quality, APX radios can route voice and data over broadband.

APX 6000

RELIABLE.
RESPONSIVE.
READY FOR
ANYTHING.

Single-band portable radio for first responders.

APX 1500

SIMPLE. EASY-INSTALL.
MISSION-CRITICAL.

Single-band mobile radio.

FIRSTNET MEGARANGE SOLUTIONS

Get Maximum Wireless Coverage and Faster Broadband

An external roof-mounted antenna on your vehicle is your best bet for getting the best possible signal on FirstNet® and FirstNet® MegaRange™.

Bigger antennas deliver stronger reception and have more coverage area

- Extended signal range and more reliable connection, wherever you go
- Faster broadband speeds and lower latency improves HD video
- Use your vehicle as a Wi-Fi hotspot

The Belgian Shepherd is the industry's highest performance mobile antenna, designed specifically for FirstNet® and MegaRange™.

Belgian Shepherd HPUE

Made in USA

Roof-mounted antenna

Belgian Shepherd

Maximum range with HPUE

Futureproof your 5G!

AW-12

ASSURED WIRELESS

wireless radios in-vehicle

cradlepoint

R1900

Parsec is #1 in antenna performance

Scan the QR code with your phone to get product details.

Visit parsec-t.com for our full range of FirstNet antennas and accessories.

Belgian Shepherd / Belgian Shepherd (HPUE)

Key Specifications

Internal antennas	5G/LTE		
multiple configurations are available with different number and combination of internal antennas, for best signal strength	Wi-Fi BlueTooth GPS/GNSS	Peak Gain	5 dBi (FirstNet) 7 dBi (5G/LTE) 8 dBi (Wi-Fi)
Dimensions (LxWxH)	14.97 x 3.82 x 2.52 inches	Operating Temperature	-40°C to 85°C
		Waterproofing	IP67

Ordering Information

Part number	Description
PRO4BS2L14G15BS	Belgian Shepherd 4:1 HPUE, 2 LTE, Band 14, GPS, 15' cables, Black, Short bolt (0.6") Belgian
PRO4BS2L14G15B	Shepherd 4:1 HPUE, 2 LTE, Band 14, GPS, 15' cables, Black, Long bolt (1.25")
PRO10BS6L2WBG15BS	Belgian Shepherd 10:1, 6 LTE, 2 WIFI, Bluetooth, GPS, 15' cables, Black, Short bolt (0.6")
PRO10BS6L2WBG15BS	Belgian Shepherd 10:1, 6 LTE, 2 WIFI, Bluetooth, GPS, 15' cables, Black, Long bolt (1.25")

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MEGAMOBILE
FIRSTNET MEGAMOBILE VEHICLE INSTALLATION

6x more power than any other in-vehicle router

Assured Wireless designed and developed its patented technology to provide FirstNet® customers and mission critical enterprises the most reliably connected broadband devices available. It is commonly referred to as HPUE, or FirstNet® MegaRange™.

Insurance for your internet connection

Assured Wireless significantly improves data throughput on the uplink and extends coverage when your regular devices fail. It is the best insurance for your connections because it is the highest power device available and is exclusive to the FirstNet network.

This Ford Bronco installation

This Ford Bronco is equipped with our AW12 MegaMobile equipment bundle. The MegaMobile includes the AW12 modem, the AW12-EI, and the mounting bracket, all which come standard in the bundle. The modem provides the high power, and the EI connects to the onboard Cradlepoint Wi-Fi. This bundle is coupled with a roof mounted high performance Parsec Belgian Shepherd antenna. This combination provides the best available FirstNet range, coverage, and RF penetration delivering better connections, throughput, and performance.

AW12 MegaMobile

- AW12 High Powered Modem
- AW12-EI Ethernet Injector
- Ruggedized Mounting Bracket
- Connects to Parsec Belgian Shepherd Antenna
- Connects to Cradlepoint IBR 1900 Router
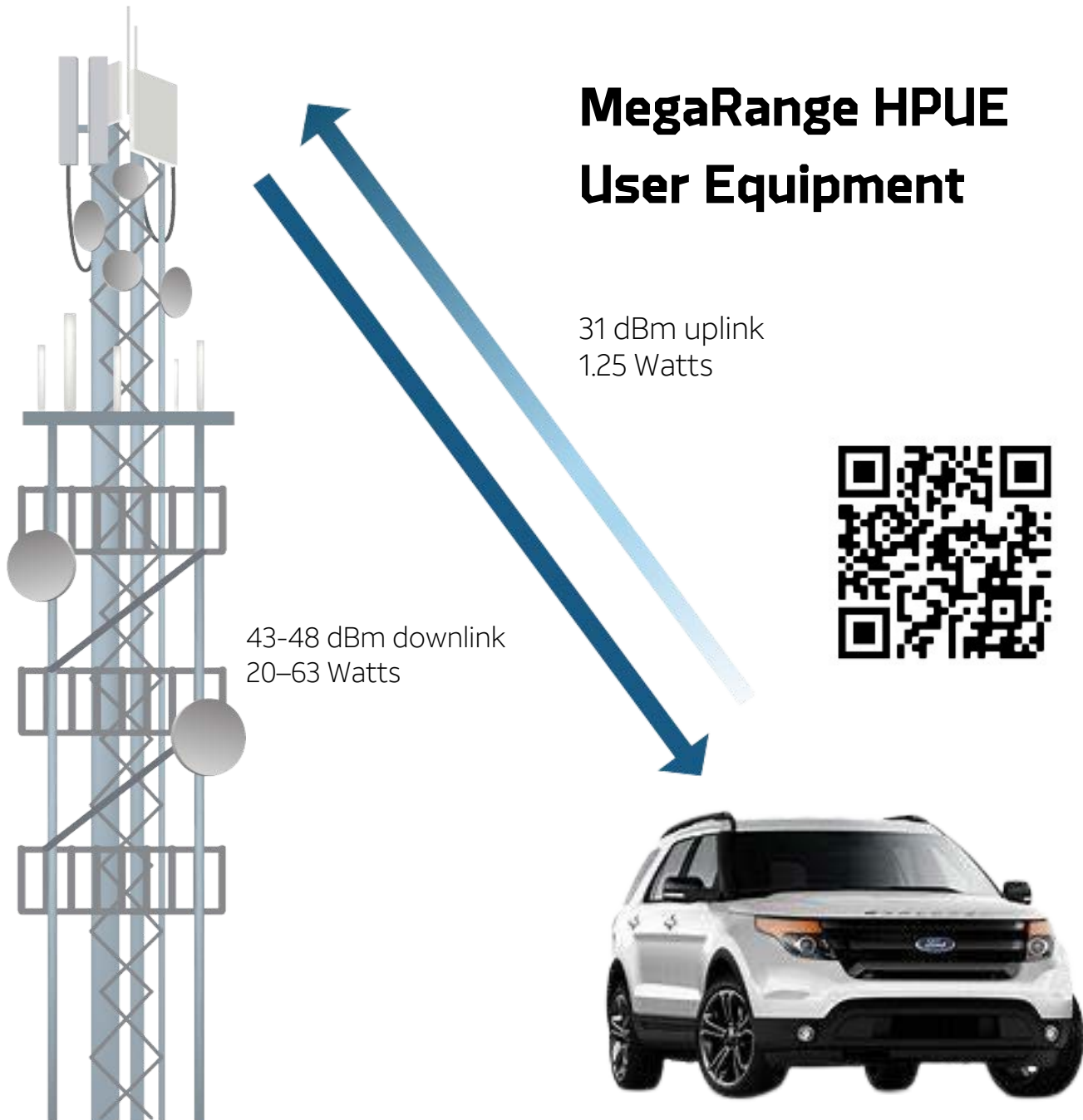
Assured Wireless MegaRange Portfolio

MegaMobile – This is the bundle installed in this vehicle.

MegaFixed – The bundle includes an AC Power Adapter in lieu of the mobile DC power cable.

MegaGo – A Wi-Fi "Hot Spot," incorporating our MegaRange equipment to provide portable extended LTE range, coverage, and uplink capabilities. Includes a high efficiency antenna system, Wi-Fi Router, and 12 Hour Rechargeable Battery Pack, all contained in a ruggedized case. Available in Black or Orange.

WHY MegaRange

LTE Systems are inherently unbalanced. By design, downlink power from the cell site is much greater than up link power from the user. This results in a system imbalance so that range is generally limited by up-link power of the user device. That's where MegaRange comes in!

MegaRange HPUE
User Equipment

31 dBm uplink
1.25 Watts

43-48 dBm downlink
20–63 Watts

assured-wireless.com
AW12BroncoV3

**VEHICLE
READY
ROUTERS**

R1900 Series 5G Ruggedized Router

Cradlepoint enables the freedom to connect people, places, and things that drive more experiences, more ways to work, and better business results — anywhere. The company is a pioneer in Wireless WAN, offering advanced 4G and 5G routers and adapters — controlled through Cradlepoint NetCloud™. Public sector agencies rely on Cradlepoint and its Cellular Intelligence to build a reliable, secure network wherever duty calls.

Headquartered in Boise, Idaho, Cradlepoint is a subsidiary of Ericsson's Business Area Technologies and New Businesses division.

Optimized for FirstNet

Cradlepoint R1900 Series 5G Ruggedized Router, which is now FirstNet Ready®, provides industry-leading 5G and Gigabit-Class LTE connectivity as well as Ethernet and Wi-Fi. Out of the box, Cradlepoint includes FirstNet provisioning features for a seamless user experience:

— Detect FirstNet SIMs

— Auto carrier switching

— Auto populate FirstNet APNs

Cradlepoint routers are built with relentless focus on standards for system interoperability and integration with best-in-class location services, such as GPS/CNSS and dead reckoning. Additionally, they are ruggedized for extreme conditions to MIL-STD-810 specifications and IP64 standards

cradlepoint.com/r1900

Scan this QR code to learn more about the Cradlepoint R1900 Series 5G Ruggedized Router
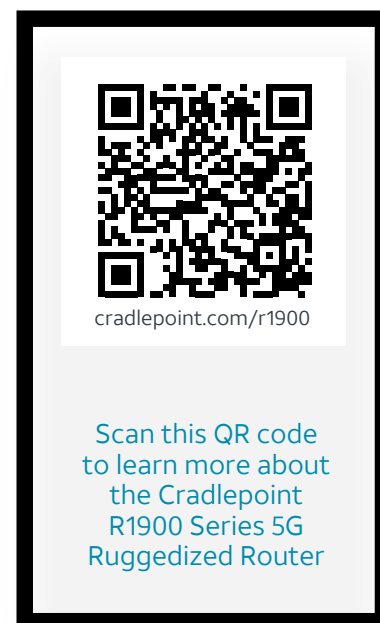
Purpose-built for mission-critical connectivity

The R1900 5G Ruggedized Router, which is available for use on FirstNet, creates a secure in-vehicle network that can be used to connect people and things within a vehicle to the Internet, cloud or datacenter. This solution includes:

— A highly reliable and secure in-vehicle network

— Application load balancing which allows user to access bandwidth across two or more WAN connections

— All-in-one solution makes it simple to install without sacrificing functionality

— 5G and Gigabit-Class LTE throughput for higher bandwidth and application performance

— Single cloud management console via NetCloud manager for zero-touch deployment and no need to access vehicle after installation

— Analytic tools to manage and give visibility into vehicle information, usage and applications

Bulletproof connectivity to keep first responders safe

First responders require the best, most up-to-date technology as well as the ability to connect to a wireless network whenever the need arises.

— Continuous GPS tracking monitors the location of vehicles and assets for improved dispatching and operations

— Provides tools to optimize routing to the call location, while improving situational awareness

— Improves crisis management by providing time saving GPS location

Learn more about Cradlepoint and FirstNet Solutions at cradlepoint.com/ATT


cradlepoint.com/att

cradlepoint

NETCLOUD SERVICE

Wireless Edge Solutions with Cloud Control

NetCloud Service, combined with a purpose-built cellular-enabled wireless edge router, is delivered as a subscription aligned to meet your business needs for branch connectivity, branch continuity, in-vehicle, SOHO, and IoT networks.

- Management & Orchestration
- LTE/5G Connection Management
- WAN Edge Routing & Security Services
- IoT Services
- Extensibility & Open Integrations Insights
- & Dashboard Analytics

NetCloud Service Includes

— 24x7 enterprise-level support from accredited Cradlepoint network engineers in Boise, Idaho, London, UK, and Melbourne, Australia

— Limited lifetime warranty — On-demand training — Ongoing software updatesand certifications

Integrated Services for the Wireless WAN

Network Services

— Enterprise-Class Routing
— SD-WAN Traffic Control —
VPN Connectivity
— Out-of-Band Management

Security Services

— Next-Gen Firewall
— Secure Internet Access
— Web Filtering
— Threat Detection

IoT Services

— Device-to-Cloud Connectivity
— SD-Perimeter Overlay
— Device-Centric Security
— Edge Computing

Connection Management
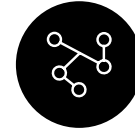
Solutions Built for Wireless

Zero-Touch Deployment

Just plug in and go with zero-touch deployment features that automatically connect, license, configure, and select the best carrier — enabling instant setup of Wireless WAN edge solutions.

Policy-Based Control

Easy to configure networks to route traffic based on bandwidth usage, application content, cellular data usage, or preferred link to maximize availability and uptime.

SD-WAN for Wireless

Ensure optimal application quality and availability with integrated SD-WAN that's deployed at scale with minimal disruption. Cradlepoint SD-WAN is built for a wireless, cloud-first world.

Full-Stack Analytics

Gain insight into applications, network health, and security data through intuitive dashboards and actionable alerts. Receive a full picture of their Wireless WAN, applications, and network usage.

Mobile Application

Access a range of NetCloud management features from a phone or tablet. An intuitive interface provides access to critical troubleshooting, security events, alerts, and reports — anywhere, any time.

Full Lifecycle Management

NetCloud simplifies network management by making it easy to understand and apply licenses, identify and push out software updates, upgrade software feature sets, amass education tools, and connect with other customers.

Extend NetCloud

NetCloud Service and Cradlepoint endpoints can access network data that third-party applications need to provide higher levels of insights and control. NetCloud's extensibility makes this rich data available in a variety of ways to meet user requirements. Whether a turn-key solution, a differentiated general connection/ application, or a custom connection is required, NetCloud offers flexibility in making the connections.

— NetCloud-Delivered Integrations

— NetCloud Developer Tools

— Partner Technology Solutions

— Container NetCloud Orchestrator

To learn more about NetCloud Service features, go to cradlepoint.com/products/details.

For more information about how Cradlepoint NetCloud Service and cellular-enabled endpoints offer wireless edge solutions, contact us at cradlepoint.com/contact-us.

NetCloud Service for Mobile

Cradlepoint NetCloud Service for Mobile provides the enterprise capabilities that organizations need to manage their in-vehicle network. Delivered through purpose built ruggedized routers, NetCloud provides enterprise-class reliability, manageability, and security and allows cohesive management, at scale, at the converged LTE and 5G edge.

ESSENTIALS		ADVANCED (INCLUDES ESSENTIALS)
✓ Secure Remote Management & Orchestration	✓ Dynamic Routing Protocols, Traffic Steering & QoS	✓ Cellular Coverage Map & Location Tracking
✓ Zone-Based Firewall & VPN	✓ In-Band & Out-of-Band Management	✓ Application-Aware Traffic Steering, QoS, Networking & Firewall
✓ Real-Time Troubleshooting Tools & Diagnostics	✓ Insights, Alerts & Dashboard Analytics	✓ Web Filtering & Threat Management
✓ Modem-Data-Usage Dashboard & Predictive Alerting	✓ Location Services	✓ Cellular Health, Traffic & Security Dashboards
✓ Extensibility (SDK, API, third-party integrations)		✓ IoT Ecosystem Integration (Microsoft, AWS)
		✓ Docker Container Support

## Mobile Routers

R1900 Series 5G Ruggedized Router

IBR1700 Series Ruggedized Router

IBR900 Series Ruggedized Router

Endpoint	Typical Client Count	Firewall Throughput	Ethernet Ports	PoE	Wireless WAN Modem Options	5G Status	Wi-Fi	Dual-Modem Support
R1900 Series	100	940 Mbps	4 x GbE	Yes, with RX30-PoE	5G Low / Mid-Band & Cat 20 LTE	5G Embedded	Dual-band, dual-concurrent; 802.11ax (Wi-Fi 6)	Yes, with RX30-MC
IBR1700 Series	100	940 Mbps	5 x GbE	No	LTE Cat 11 or Cat 18 Modem	5G Ready	Dual-band, tri-radio; 802.11ac Wave 2 (Wi-Fi 5)	Yes
IBR900 Series	10	940 Mbps	2 x GbE	No	LTE Cat 11 or Cat 18 Modem	4G Only	Dual-band, dual-concurrent; 802.11ac Wave 2 (Wi-Fi 5)	Yes, with COR Extensibility Dock
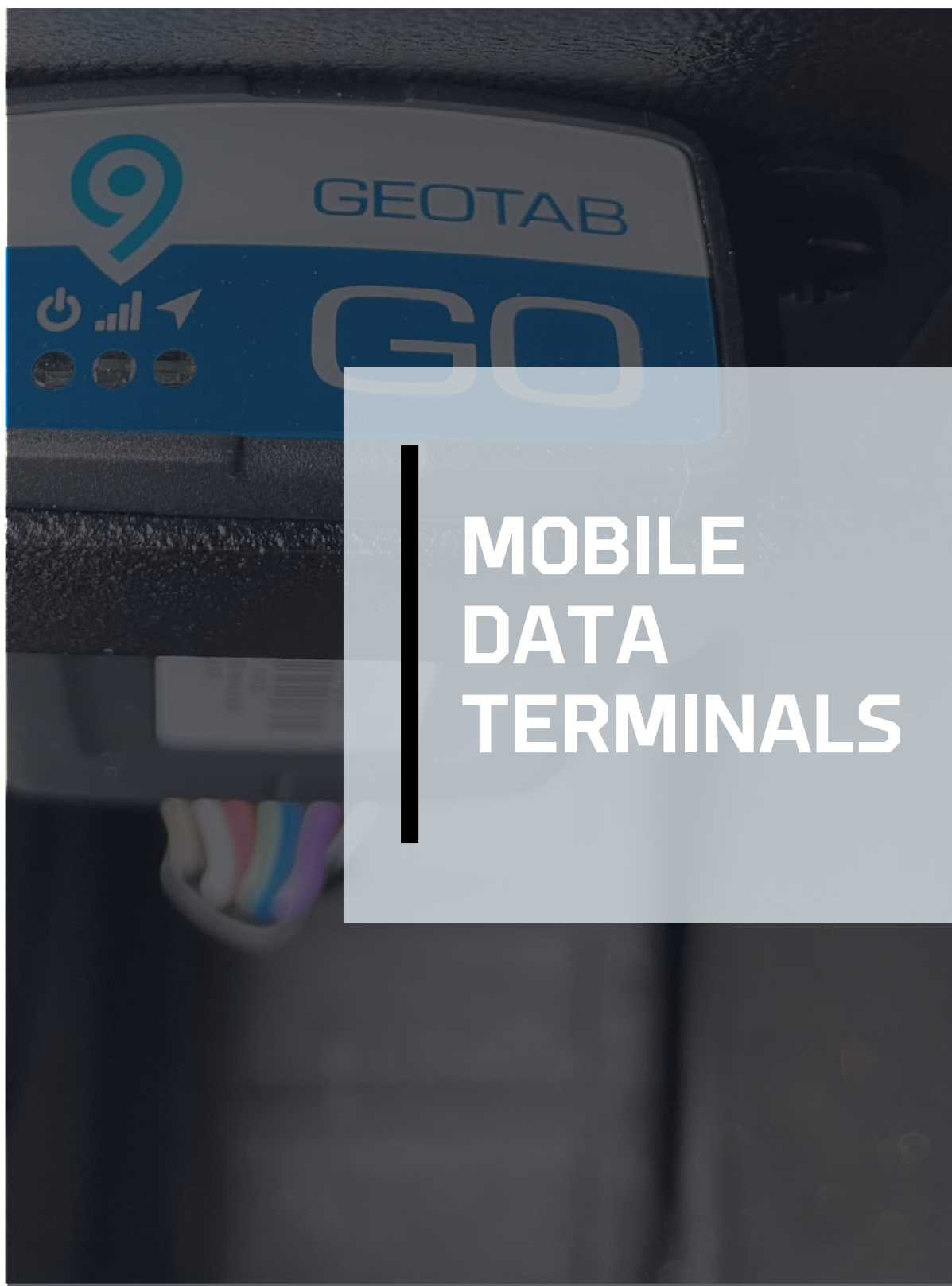
MOBILE
DATA
TERMINALS

RUGGED FIRSTNET-READY® DEVICES

Since 1989, Getac has specialized in making rugged computers for some of the most demanding users in the harshest environments. From cutting-edge connectivity, best screen visibility, and hot-swappable batteries to surviving mobility demands and constant exposure to extreme elements. Getac products are engineered to keep pace with what your job demands, each shift and every day. Rugged computing is all we do, and our unparalleled service and support are what sets us apart.

BRINGING YOU THE BENEFITS OF FIRSTNET®

Getac and FirstNet have partnered to provide rugged mobile communication solutions for Command and Control, which include but are not limited to Police, Fire, EMS, Utilities, Fleet + School Transportation, and Healthcare.

FirstNet is the only nationwide, highspeed broadband communications platform built with and for America's first responders and the extended public safety community to ensure priority and, for first responders, preemption capabilities, and near real-time communication during catastrophic events, large-scale public emergency, or natural disaster.

CERTIFIED FIRSTNET READY® DEVICES

A broad range of Getac laptops and tablets, which are now FirstNet Ready® and available for use on FirstNet. FirstNet enables public safety agencies (Primary users) and their supporting partners (extended Primary) to get the priority, preemption, security, and coverage with interoperability they need without sacrificing choice in the devices they require to get the job done

A140	K120	F110	UX10	B360	V110	S410	VR-X20
14" Rugged Tablet	12.5" Rugged Tablet	11.6" Rugged Tablet	10.1" Rugged Tablet	13.3" Rugged Laptop	11.6" Rugged Convertible	14" Semi-Rugged Laptop	DVR

For more information, visit getac.com or scan the QR Code
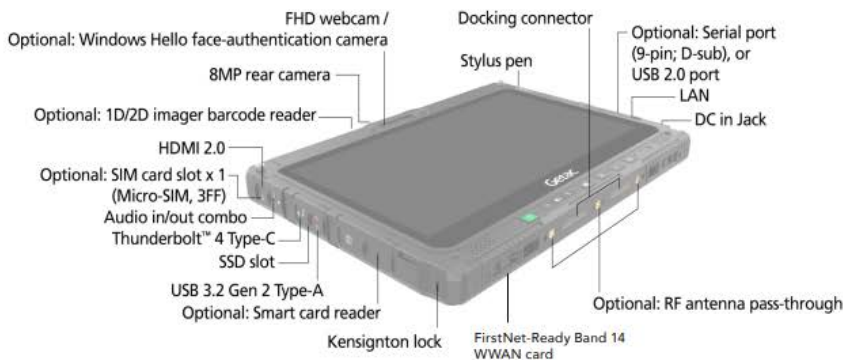
DURING AN EMERGENCY, COMMUNICATION IS CRITICAL

When disasters strike, cellular networks can become congested or destroyed, preventing mission-critical communication and connectivity between first response teams and command and control centers. FirstNet subscribers are given priority over all other cellular traffic, ensuring an open and consistent line of realtime communication through the Band 14 spectrum. With 100+ deployable assets in the FirstNet arsenal, including Flying COWs, FirstNet One, and SatCOLTs, each can be deployed to enable communications for all responding agencies and supporting companies. Getac devices are engineered to access the Band 14 Spectrum for both the fixed FirstNet network and the FirstNet mobile deployable networks.

BENEFITS OF GETAC FIRSTNET READY DEVICES

- Embedded cellular radio with Band 14 and optimized antennas to provide stable and uncompromised communications.
- Getac laptops and tablets provide mobility and adaptability for first responders. They can be mounted in a car and removed quickly, converted into a tablet with a touchscreen in the field, and have a wide variety of screen sizes and ergonomic handle attachments.
- Extreme durability with MIL-STD 810H, MIL-STD 461G, and IP65 certifications for water and dust intrusion, 4' drop ,and vibration testing for those harsh conditions you experience every day.
- Limitless power with dual hot-swappable batteries for the most demanding mobile computing needs
- Highly secure, with Windows 10 security features, TPM 2.0, smart card reader, optional fingerprint reader, RFID reader, and Absolute Persistence.
- Three-year, Bumper-to-Bumper No-Fault Warranty, serviced by FedEx TechConnect.

FEATURED GETAC K120 RUGGED TABLET

- 11th Generation Intel® Core™ i7 / i5 vPro™ Processor
- 12.5" FHD LumiBond® 2.0 display with Getac sunlight readable technology (1,200 nits) and capacitive touchscreen
- Enhanced enterprise security with optional Intel vPro, Windows Hello face-authentication camera, and multi-factor authentication options
- Multi-mode usage streamlined by extensive accessory selections
- LifeSupport™ hot-swappable battery technology
- Thunderbolt™ 4 brings lightning speed and performance

FHD webcam / Optional: Windows Hello face-authentication camera
8MP rear camera
Optional: 1D/2D imager barcode reader
HDMI 2.0
Optional: SIM card slot x 1 (Micro-SIM, 3FF)
Audio in/out combo
Thunderbolt™ 4 Type-C
SSD slot
USB 3.2 Gen 2 Type-A
Optional: Smart card reader
Kensignton lock
Docking connector
Stylus pen
Optional: Serial port (9-pin; D-sub), or USB 2.0 port
LAN
DC in Jack
Optional: RF antenna pass-through
FirstNet-Ready Band 14 WWAN card

CERTIFIED MIL-STD 810H | CERTIFIED MIL-STD 461G | INGRESS PROTECTION IP66 | 6' Drop | FIRSTNET. Built with AT&T READY

MOBILE OFFICE SOLUTIONS

HAVIS

HAVIS SOLUTIONS, AS SEEN IN THE 2022 FORD BRONCO SPORT FOR FIRSTNET

HAVIS HAS A BROAD PORTFOLIO OF PRODUCT SOLUTIONS, AND UNMATCHED SALES & SUPPORT TEAMS TO ASSIST IN CREATING YOUR IDEAL MOBILE OFFICE

ENGAGE THE HAVIS SALES TEAM

FRONT CABIN SOLUTIONS

C-VS-0419-BROS	VEHICLE-SPECIFIC CONSOLE
TSD-101	TOUCH SCREEN DISPLAY
DS-DA-311	REMOTE USB CABLE FOR HAVIS DOCK
C-UMM-103	UNIVERSAL MONITOR MOUNT
C-LDM-0003	SIDE MOUNT L BRACKET
C-MMSU-L	MAG MIC CLIP SIDE MOUNT
CUP2-1001	SELF ADJUSTING INTERNAL CUP HOLDER
C-ARM-103	TOP MOUNT FLIP UP ARM REST
C-FP-35-FNET	CUSTOM 3.5" FP FOR GPS LOCKBOX & USB INPUT
C-EB30-APS-1P	3" EB FITS MOTOROLA APX-4500
C-LP1-PS2-USB	LP OUTLET W/ SWITCH & USB CUTOUT
26489	CUSTOM 8" FP FOR CUBIC VOCALITY BOX
26490	GEOTAB U BRACKET
26491	CUSTOM EB FOR VOLUME CONTROL & USB

REAR CARGO SOLUTIONS

SBX-5014	VEHICLE-SPECIFIC STORAGE BOX MOUNT
C-SBX-101	UNIVERSAL STORAGE BOX
26492	CUSTOM MOUNTING PLATE
DS-GTC-1003	HAVIS DOCKING SOLUTION FOR GETAC K120
C-MD-202	TILT SWIVEL MOTION DEVICE
CG-X	CHARGE GUARD AUTO SHUT OFF TIMER

ADDITIONAL SOLUTIONS

KB-106	HAVIS RUGGED KEYBOARD
C-TIR3-1	MOUNTING BRACKETS FOR WHELEN ION SERIES
C-SW-1	20 AMPS, 12 VOLT LIGHT SWITCH
15952	USB AUX PASS THRU

www.havis.com   1-800-524-9900

HAVIS

Havis is an industry leading American manufacturer of Mobile Office Solutions for Public Safety, Government, Utility & Public Works, Transportation, Warehousing and other Mobile Professionals.

Our broad portfolio includes Laptop, Tablet and Phone Docking, Vehicle-Specific Consoles, Equipment Mounting, K9 & Prisoner Transport Inserts and much more. Havis high quality solutions combined with our superior manufacturing capabilities enable us to support standard and custom projects.

For over 80 years, the Havis mission has been to increase mobile worker productivity with industry-leading products that are built to the highest safety and quality standards, designed with comfort in mind.

Havis partners with leading automotive and technology providers to design and offer specific compatible solutions.
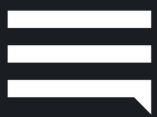

With over 350 dedicated factory team members and 120 independent sales representatives, we strive to exceed our customer needs.

Havis is committed to providing education on total mobility solutions, resolving complicated in-vehicle computing needs, and handling the most demanding jobs.

www.havis.com

FIRSTNET®
Built with AT&T

CONNECTED VEHICLE

Version 2.9.23