



ProNexus

Mobile Antenna

for Mobile Network Convergence





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Vehicles need increasingly amounts of data

Undeniably data, more than voice, is the future in mobile vehicle applications. Vehicle-to-everything (V2X) communications, semi-autonomous, and autonomous vehicles are key drivers and 4G and 5G will play a significant role in that data stream.

However, automobiles will still need to integrate technologies like GNSS & Wi-Fi. Coupled with the need for MIMO to increase the capacity of the radio link and therefore increase data speeds.

One mobile antenna to serve all your needs

The ground independent [ProNexus](#) antenna is the solution, combining all technologies in one low profile unit that offers connectivity for LTE, 5G, and Wi-Fi 2.4 and 5.8 GHz, while not forgetting the new standards of Wi-Fi 6/6E.

The legacy of current and future markets would all be served with the state-of-the art ProNexus, which includes several key features:

- 4x4 MiMo antennas covering 617-960/1710-3800MHz. 2x GNSS and 4x4 or 6x6 dual Wi-Fi at 2.4/5.0/7.2GHz.
- IP69k offers protection against high powered water spray.
- Sleek industrial design to minimise its appearance on mobile applications like cars, buses, trucks, etc.
- Fixed with a single through hole mount.
- Cables are UN ECE R 118 compliant feeds.



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Meeting the demands for the new Wi-Fi standards

A key feature of the [ProNexus](#) is its ability to connect not only to all legacy Wi-Fi bands, but now Wi-Fi 6 and Wi-Fi 6E. These new Wi-Fi generations offer some significant improvements:

- Wi-Fi 6 delivers a mix speed of 3.56Gbps (compared to 1.1 in the previous release).
- Wi-Fi 6E works in the 6 Ghz band with speeds of 9.6 Gbps and provides lower latency than ever before.

Made for Mission Critical Vehicles (MCV's)

MCV's are now essentially mini command centres. They work across many different protocols, LTE 4G, 5G, WiFi and GNSS to name but a few. MCV's are setup so the occupants can access wireless networks inside and outside of the vehicle with devices like mobiles, laptops, licence plate readers, surveillance cameras along with electronic ticketing systems. Not forgetting location based and telematic services.

Ready for Autonomous Vehicles

As global trials of Autonomous Vehicles (AV) continue, the need for fast, efficient, and reliable communication is a prerequisite for the AV to be connected and communicate with infrastructure, other road users, and other vehicles.

AVs exchange location, speed, and direction data every second with other vehicles and with roadside infrastructure.

This data-heavy application requires the best-in-class antenna, ProNexus, to give access to the fast, reliable, and low latency networks, like 5G.



Key ProNexus Specifications

See full specification on Amphenol Procom [website](#)

Electrical

Model	Pro-Nexus
Frequency	4G/5G 4x4 MiMo: 617 - 960 MHz, 1710 - 3800 MHz WIFI 4x4 or 6x6 MiMo: 2400 - 2500 MHz, 4900-7200 MHz
Antenna Type	Mobile Disk Style Antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
Gain (peak)	4G/5G 3dBi (617 - 960 MHz) 4G/5G 7dBi (1710 - 3800 MHz) WiFi 7 dBi (2.4/5.8/7.2 GHz)

Mechanical

Connection(s)	SMA(m) (all antennas)
Materials	Reinforced PA, Zamak 5
Installation Torque	4 +/- 0.5 Nm
Colour	Black (RAL 9005) / Traffic White (RAL 9016)
Dimensions	208 mm x 166 mm x 69 mm/ 8.19 in. x 6.5 in. x 2.7 in. (Approx)
Max. Roof Thickness	3 mm / 0.12 in.
Weight	0.49kg / 1.08 lb
Mounting	18.5 mm / 0.8 in dia. hole

Environmental

Operating Temperature Range	-50°C to +75° C
Ingress Protection	IP69K

*Amphenol Procom reserves the right to amend specifications without prior notice.

About Amphenol Procom

At Amphenol Procom, we are committed to providing solutions that can be trusted no matter how extreme the environment, or how complex the complete networks solution might be. Our mission is simply to: "deliver the world's most trusted and flexible solutions for professional wireless communication where connectivity and dependability are critical"

Your network relies on the quality of its components; if one goes down, it can take the rest with it. That's why our products are built for quality and tested to the extreme - so that performance is not compromised under any circumstances. With manufacturing in Denmark, UK, and the US, Amphenol Procom serve a wide range of market segments such as Public Safety, Aviation, Telecom, Hazardous Environments, IOT, Transportation and Industry.

We have more than 7,000 products in our portfolio, mainly covering base station antennas, portable & mobile antennas, combiners, filters and DAS solutions.

Amphenol Procom is a division of the Amphenol Corporation, a \$8 billion-dollar organization that is one of the largest manufacturers of interconnect products in the world. The company designs, manufactures and markets electrical, electronic and fiber optic connectors, coaxial and flat-rib-bon cable, and interconnect systems.



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