

The image shows the top of a vehicle with a large, octagonal Kymeta antenna mounted on the roof. The antenna has four circular components at the corners and the word 'KYMETA' is printed in the center. The entire image has a blue tint and a faint background graphic of an open book with radiating lines.

KYMETA™

THE GUIDE:

GLOBAL MOBILE COMMUNICATIONS FOR VEHICLES

Discover how a hybrid approach to connectivity can enable broadband communications on the move for anything, anywhere.

KYMETA™

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COMING TOGETHER FOR YOU

Kymeta is delivering solutions for the next generation of land mobile connectivity to meet the increasing needs of on and off-road vehicle applications such as cars, trucks, buses, military, first responder and heavy equipment to stay connected.

Since 2015, Kymeta has demonstrated over 70,000 kilometers of connected driving across North America, Europe, Asia, and Africa including connectivity relief services in Puerto Rico after Hurricane Maria. Kymeta solutions enabled Skype video conferencing, Netflix streaming video, cloud-based applications and cloud-based office productivity tools, voice recognition search and internet access on the move, regardless of location.



For decades, satellite capacity has been used for broadcast services and fixed application internet at scale. However, delivery of mobile broadband has been limited to only a narrow sector of high-end market applications. Kymeta is removing the barriers to entry for land mobile satellite broadband services using its cutting-edge antenna and terminal technologies.

Kymeta solutions leverage the best of cellular and satellite networks to provide a secure, scalable, and future-proof system to deliver reliable, fast, next-generation connectivity. Discover more about Kymeta technology and KĀLO™ services that offer reliable, lightweight, low profile and seamless implementations for connection to the Internet from practically anywhere.

COMPLETING THE CONNECTIVITY FABRIC

The hybrid approach

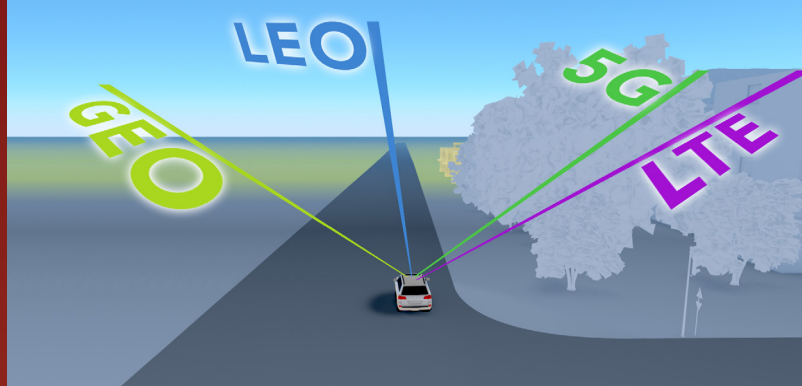
The hybrid connectivity solution provided by Kymeta blends backhaul connectivity over satellite and cellular networks to ensure optimal connectivity anywhere at any time.

The simplicity of use and intelligence of the software-defined network reduces the configuration and communications planning effort required by end users.

A new kind of network

Kymeta's antenna technology enables satellite connectivity on mobile platforms, providing reliable broadband Internet access from almost anywhere on the planet.

Commercial cellular networks have been deployed across a majority of the developed and developing world and cover a significant portion of the world's populated areas. Kymeta combines the benefits of the low-cost and high-performance cellular network with the reliability and resilience of the satellite network.



Kymeta has partnered with industry leaders to implement a software-defined wide area network (SD-WAN) that allows for dynamic traffic shaping and flow given rulesets that not only incorporate the destination of the traffic, but also the nature of the traffic itself.

A seamless solution

Devices such as smartphones, IP radios, and other IP-based systems can be easily integrated into the hybrid network, so users can continue using their tools and communication devices without having to learn a new system. This allows users to effectively operate anywhere, without having to consider existing network coverage.

With the Kymeta hybrid connectivity solution, users will always have established and reliable communications in any scenario.



THE TECHNOLOGY

The new space race is here with companies planning to launch thousands of new satellites within the next few years, making satellite more accessible than ever before.

To unlock this potential, Kymeta is addressing the major chokepoint of mobile satellite networks and consumer-accessible satellite solutions – the antenna.

How it works in a nutshell

Kymeta has created the world's first low-profile, lightweight, software-controlled and electronically steered antenna with no moving parts. The Kymeta terminal will auto-commission and auto-provision, allowing for rapid setup and installation.

Manufacturing

Kymeta antenna technology is manufactured using thin-film transistor (TFT) technology, which is also used for liquid-crystal displays (LCDs). That means Kymeta antennas can be produced on existing TV manufacturing lines.

All of this comes together to drive our vision: to enable highly reliable and easy-to-use satellite solutions that far exceed anything available to mobile platforms today.

Global connectivity for everyone

Kymeta technology allows for better design options and increased functionality.

Your content, worldwide

Kymeta technology and KĀLO services deliver your content, applications, firmware over-the-air (FOTA), software over-the-air (SOTA), telematics information, and infotainment globally – not to mention, internet practically anywhere.

Future-proofing your satellite connectivity

Kymeta is developing a family of products that will enable several new possibilities with existing and future multi-orbit satellite systems. Kymeta terminals perform reliably across a number of different use cases and are certified to work on the majority of satellite platforms in key countries around the world.

VEHICLES WE SUPPORT

- Fleets
- SUVs
- Trucks
- Buses
- RVs
- VIPs
- Off-road vehicles and construction machinery



MORE CHOICE, MORE FREEDOM, GREATER CONTROL AND SAFETY

The Kymeta system is thin: Kymeta satellite terminals can be embedded between the roof and headliner of most vehicles or surface-mounted for an instant mobile connectivity solution.

The Kymeta system is invisible: The low-profile solution for satellite communications is ideal for applications where it is important not to draw attention to your communications capabilities.



The Kymeta system is secure: Satellites provide a secure global communication platform, integrating the four elements of risk reduction: authentication, system integrity, application security, and attack surface reduction. The most secure networks in the world are satellite networks.

The Kymeta system is lightweight: The system is compatible with most inline manufactured roof specifications.

WHAT IS DIFFERENT?

Kymeta understands the importance of communications in vehicles of all types and developed solutions to create a new world of mobile freedom.

High agility

Kymeta terminals have been tested to provide the highest agility tracking performance available on the market today.

Plug and play

Kymeta greatly reduces installation time and costs. Simply connect power and a couple of cables and experience high-throughput SATCOM connection within minutes of cold start.

Virtually maintenance free

Now, firmware over-the-air (FOTA) and software over-the-air (SOTA) updates can be made virtually, eliminating the need for continuous manual updates.

Transmit and receive from a single aperture

The same aperture does both transmit and receive. This means less vehicle real estate is dedicated to communications.

Wide scan angles

Kymeta antennas have electronically wide scanning angles past 60° with no impedance change and good beam performance. This means that vehicles in northern latitudes have access to the Internet while moving, and vehicles in extreme northern latitudes have access while parked. As more low-earth orbit (LEO) satellites are launched, capacity becomes accessible regardless of how far north or south a vehicle owner may roam.

Electronically controllable polarization and software-defined beam steering

Vehicles with Kymeta u7 antenna technology can perform 360° turns in roundabouts while maintaining a Skype connection without a service interruption. Plus, new satellite configurations or new kinds of space assets like LEOs are a software update away. For instance, some fleets can listen and talk to a standard set of satellites under normal conditions and switch to unique satellites under emergency conditions.



The flat form factor allows the technology to become invisible in embedded solutions.

WHAT CAN I DO NOW THAT I COULD NOT DO BEFORE?

Consumers want a safe, secure and entertaining transportation experience. Now, OEMs and vehicle modifiers have access to worldwide satellite connectivity that can provide telematics, software and firmware updates, mapping, infotainment, and access to the internet globally.

Over-the-road freedom

Now, watching major sporting events that are being streamed into the vehicle while the vehicle is moving at 140 kmh or reading news, sports and weather from the internet is a reality. Passengers have the freedom to access and send content from even the most remote locations.

A safer fleet

Vehicle software and firmware updates can be performed remotely. Emergency calls can be made from anywhere. Plus, data about the vehicle's condition will be available. This means everything from low tire pressure to indications of a serious collision can be captured and communicated immediately. Assistance will arrive sooner making the networked vehicle the safest vehicle on the road.

Autonomous vehicles

Autonomous vehicles need up-to-date, high-density mapping and sensing systems. There is now a pipeline large enough to keep the vehicle updated, while on the move. As cars become more autonomous, a big pipe for large amounts of data in and out of the car becomes a requirement.

CHANGING HOW ^{THE} VEHICLES LOOK

Nothing will change. Any changes to the vehicle design will be in the designer's power. With Kymeta satellite terminals there are no domes, no bulges, no bumps, no targets, and nothing to give away the connectivity capabilities.

Kymeta terminals give designers freedom to incorporate our products into existing or new platforms with more flexibility than ever before. Kymeta terminals can be integrated inside for maximum discretion, or bolted on externally for maximum flexibility and portability between vehicles.



KYMETA CORP

The world's demand for ubiquitous mobile connectivity is irrefutable. A global, mobile network is the answer to connecting people and places that have never been connected before.

Kymeta is making seamless, always-connected mobile communications possible across satellite and cellular networks to deliver a single, global, mobile network. Backed by U.S. and international patents and licenses, Kymeta u7 satellite terminals make high-throughput, mobile communications possible in cars, trains, buses, trucks, boats, and much more.

Kymeta is completing the connectivity fabric for everything everywhere.

For more information, visit www.kymetacorp.com.



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