

Kymeta™ u8 Antenna

The new Kymeta™ u8 antenna is ready for integrators to create custom mobile satellite terminals to meet their customers' unique needs for connectivity while in motion.

Making Mobile Global

Leveraging revolutionary software-defined, electronic beam steering technology, the u8 antenna has been re-engineered for full coverage of the Ku band, increased antenna performance, and extended environmental coverage. All this while maintaining low power operation for seamless integration into mobile platforms.

Electronically Steered Antenna

Software-defined, reconfigurable, and updatable, the U8 satellite antenna operates over the complete ku band.

Designed for Mobility

Low profile and aerodynamic, the u8 antenna can be easily Integrated into terminals designed for mobile platforms.

Low Power

With native dc operation, the u8 antenna requires very low Power to point and track while on the move.

Flexible and Modular

With support for multi-waveform openamip compatible modems, The u8 antenna can be integrated into many unique system Configurations.

Leo Ready

The u8 antenna anticipates the arrival of ku-band leo Constellations. The u8 antenna can be updated to support leo Operation when available.



Kymeta™ u8 Antenna

KYMETA™

Antenna

Band	Ku
Antenna type	Electronically scanned array
Aperture	RX and TX combined 82 cm active diameter
Polarization	Linear, software-defined (circular with software upgrade)
RX frequency range	10.7 GHz to 12.75 GHz
G/T (broadside)	Up to 11.25 dB/K
G/T @ 45° Elevation, Typical Land Mobile	Up to 9.0 dB/K
RX Instantaneous Bandwidth	250 MHz
TX frequency range	13.75 GHz to 14.50 GHz
TX Gain Broadside	Up to 34.0 dBi
TX Gain @ 45° Elevation, Typical Land Mobile	Up to 32.0 dBi
Cross-Polarization Isolation	≥25 dB
TX Instantaneous Bandwidth	~62 MHz

Tracking

Scan Angles	Az 360°, EL +15° to +90°
Tracking Receiver Type	Integrated tracking system DVB-S2, DVB-S2X

Power

DC Input Power	12 VDC to 24 VDC
Power Consumption (No Modem, Rf Chain)	35 W (typical), 450 W (peak)

Mechanical

Dimensions	L 90cm x W 90cm x H 11cm L 35.5 in. x W 35.5 in. x H 4.3 in.
Weight	~25 kg (~55 lb.)
Operational Temperature	-40° C to +70°C (equivalent to +55°C + solar loading) with an integrator air circulation solution

Storage Temperature	-40°C to +85°C
Ingress Protection	IP66

Interfaces

Network Interface	Ethernet
RF Connectors	N-type
Waveguide	WR-75

Compliance

Certifications In Progress	CE, UL, RoHS, FCC
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Available Configurations

u8 ANTENNA**

- Integrated antenna control unit (ACU)
- Integrated power supply

u8 OUTDOOR UNIT (ODU)**

- u8 antenna
- RF chain with 20 W low-profile BUC
- Shroud with integrated air circulation solution

Available Components

- Diplexer
- LNB
- 20 W low-profile BUC
- Cables

Available Accessories

- Shroud
- Vehicle mount kit
- Vehicle power kit
- AC to DC power kit

Available Software-Enabled Features

- Manual position (GPS denied) mode
- Full privacy mode
- External GPS support

*Specifications as of 20 February 2020. Subject to change.

**For u7-to-u8 upgrades, contact sales@kymetacorp.com.

Note: Compliance with the integrator guide is required to maintain warranty on the antenna. Integrator guide provides guidance on RF chain integration, modem integration, and proper thermal management.

Modem Compatibility

iDirect Evolution and Velocity compatible with X7, 950mp, and iQ 200 routers

Newtec Dialog compatible with MDM3310 and MDM2510 modems

Viasat ArcLight compatible with CBM-400 modem

Gilat SkyEdge II-c compatible with Capricorn-4 modem

Automatic acquisition possible with systems supporting OpenAMIP version 1.12