



u8 | ANTENNA

MAKING MOBILE GLOBAL

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.

Leveraging our 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 OPENAMP 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.



u8 Antenna Specifications*

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

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

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 90 cm × W 90 cm x H 12.1 cm
L 35.5 in. × W 35.5 in. x H 4.8 in.

WEIGHT
~23.5 kg (~51.5 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 PORT
WR-75

COMPLIANCE

CERTIFICATIONS IN PROGRESS
CE, UL, RoHS, FCC

AVAILABLE CONFIGURATIONS

u8 ANTENNA **

- Flat-panel, full-duplex antenna
- Integrated radome
- Integrated antenna control unit (ACU)
- Integrated antenna power supply
- Satellite auto-acquisition and tracking capability
- All outdoor, robust IP66 rated enclosure

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 positioning (GPS denied) mode
- Full privacy mode
- External GPS support

*Specifications as of 1 July 2020. Subject to change.

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

Note: Compliance with the 700-00107-000 Kymeta u8 products integrator guide is required to maintain warranty on the antenna. The integrator guide provides guidance on RF chain integration, modem integration, and proper thermal management.

MODEM COMPATIBILITY

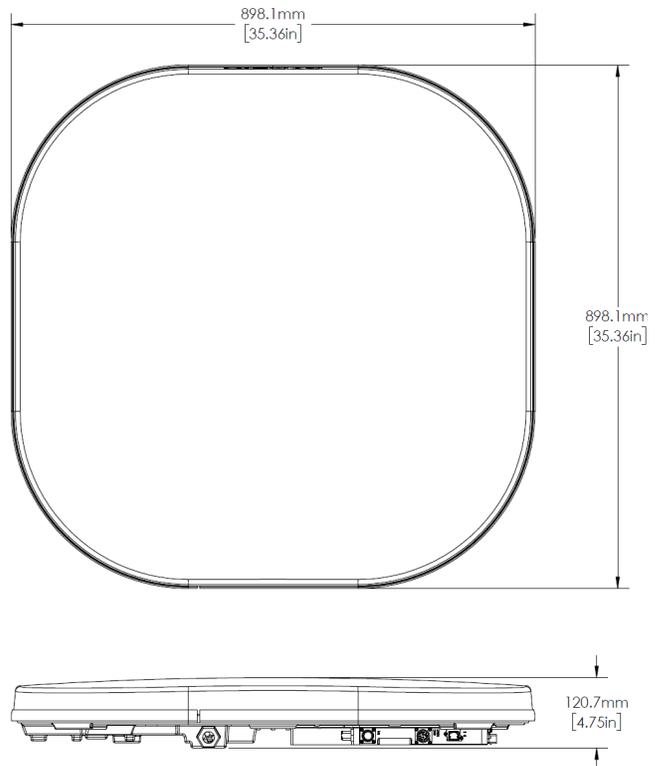
iDirect Evolution and Velocity compatible with X7, 950mp, and iQ 200 routers

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



For more information, contact Kymeta at sales@kymetacorp.com.

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