



## u8 | ANTENNA

### MAKING MOBILE GLOBAL

The 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 Kymeta's 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.



# 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**  
9.5 dB/K to 12 dB/K

**G/T @ 35° ELEVATION, TYPICAL LAND MOBILE**  
6.5 dB/K to 9.5 dB/K

**RX INSTANTANEOUS BANDWIDTH**  
250 MHz

## TX

**TX FREQUENCY RANGE**  
13.75 GHz to 14.5 GHz

**TX GAIN BROADSIDE**  
34 dBi to 34.5 dBi

**TX GAIN @ 35° ELEVATION, TYPICAL LAND MOBILE**  
32 dBi to 32.5 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

Note: Compliance with the 700-00107-000 Kymeta u8 products integrator guide and 700-00121-000 Kymeta u8 products installation and user manual is required to maintain warranty.

## MODEMS

iDirect Evolution and Velocity platform with X7, 950mp, and iQ 200 routers  
Viasat ArcLight platform with CBM-400 modem  
Comtech SLM-5650B and UHP-200 routers

Automatic acquisition possible with systems supporting OpenAMIP v.1.12:  
• Newtec Dialog platform with MDM3310 and MDM2510 modems  
• Gilat SkyEdge II-c platform with Capricorn-4 modem  
• Comtech UHP-100 router

## POWER

**DC INPUT POWER**  
12 VDC to 36 VDC max

**POWER CONSUMPTION (NO MODEM, RF CHAIN)**  
35 W (typical), 250 W (peak)\*\*

## MECHANICAL

**DIMENSIONS ANTENNA:**

L 89.5 cm × W 89.5 cm x H 12.3 cm  
L 35.2 in. × W 35.2 in. x H 4.8 in.

**ODU:**  
L 89.5 cm × W 89.5 cm x H 14 cm  
L 35.2 in. × W 35.2 in. x H 5.5 in.

**WEIGHT**  
ANTENNA: 25 kg (55 lb.)  
ODU: 31 kg (69 lb.)

**OPERATIONAL TEMPERATURE\*\***  
-40 °C to +55 °C (ambient)  
-40 °C to +70 °C (with solar load)

**STORAGE TEMPERATURE**  
-40 °C to +85 °C

**INGRESS PROTECTION**  
IP66

## INTERFACES

**NETWORK INTERFACE**  
Ethernet

**RF CONNECTORS**  
N-type

**WAVEGUIDE PORT**  
WR-75

## COMPLIANCE

**CERTIFICATIONS**  
CE, FCC, Nemko, WEEE, RoHS

\*Specifications as of 26 August 2021. Subject to change.

\*\*Software-controlled peak power draw. User-configurable to a higher threshold for very low-temperature operation.

## 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 low-profile BUC
- Shroud with integrated air circulation solution

### u8 GO OUTDOOR UNIT (ODU)

- u8 ODU
- AC-to-DC universal power kit
- External hardshell case
- Vehicle mount

## AVAILABLE COMPONENTS

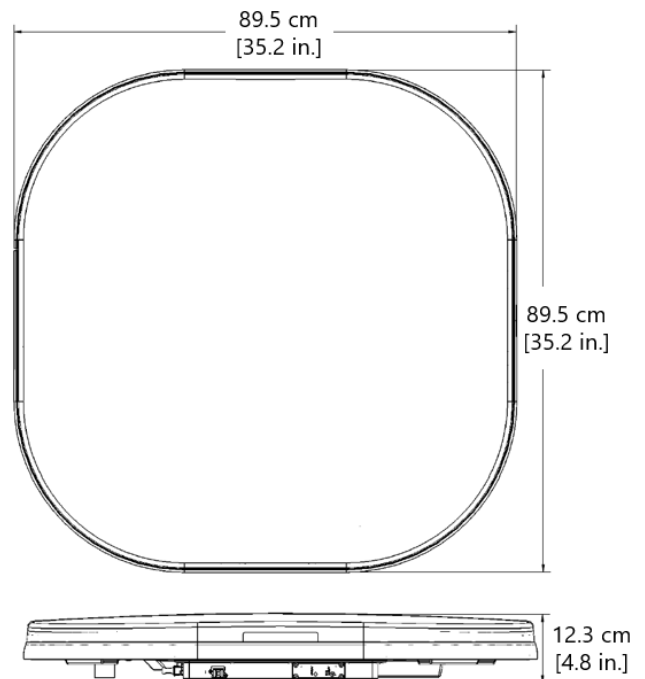
- 20 W low-profile BUC (17 W linear power)
- Diplexer
- LNB
- Cables

## 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



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