



## 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

9 dB/K to 11.5 dB/K

### G/T @ 35° ELEVATION, TYPICAL LAND MOBILE

6 dB/K to 9 dB/K

### RX INSTANTANEOUS BANDWIDTH

250 MHz

## TX

### TX FREQUENCY RANGE

13.75 GHz to 14.5 GHz

### TX GAIN BROADSIDE

33.5 dBi to 34.5 dBi  
(14.0 GHz to 14.5 GHz)

### TX GAIN @ 35° ELEVATION, TYPICAL LAND MOBILE

31 dBi to 32.5 dBi  
(14.0 GHz to 14.5 GHz)

### 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 36 VDC max

### POWER CONSUMPTION (NO MODEM, RF CHAIN)

35 W (typical), 450 W (peak)\*\*

## MECHANICAL

### DIMENSIONS

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

### WEIGHT

25 kg (55 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

## 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

## 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

\*Specifications as of 30 September 2020. Subject to change.

\*\* Software restriction on peak draw available. May affect antenna performance at low temperature.

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

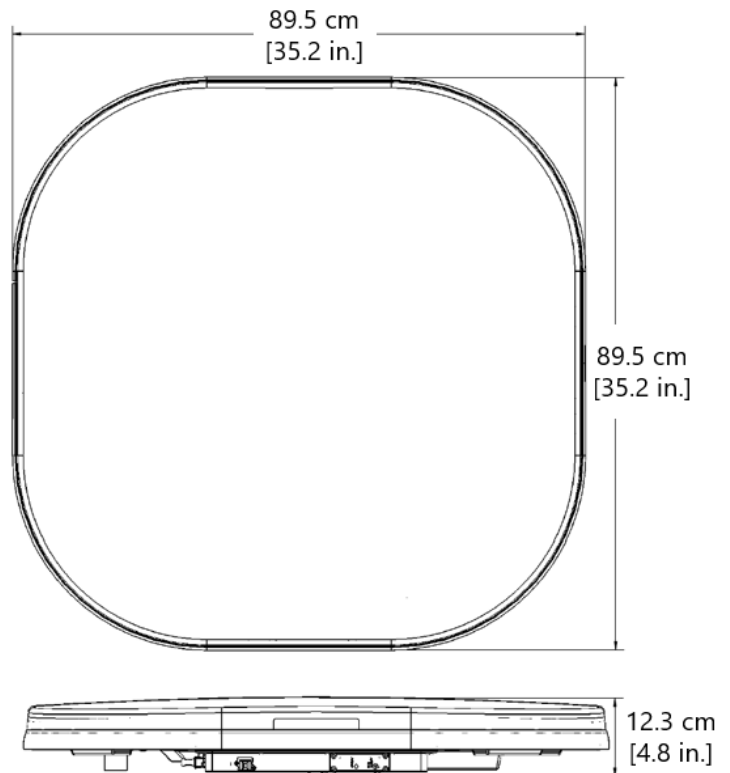
iDirect Evolution and Velocity platform with X7, 950mp, and iQ 200 routers

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



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

12277 134th Ct. NE, Redmond, WA 98052 | Phone: 425.896.3700 | [www.kymetacorp.com](http://www.kymetacorp.com)

**KYMETA™**