u7

MTENNA TECHNOLOGY

MTENNA U7 ASM

(ANTENNA SUBSYSTEM MODULE)

REVOLUTIONARY, GLOBAL, MOBILE CONNECTIVITY

Kymeta's innovative use of metamaterials has solved some of the satellite industry's longest standing technical challenges: the need for lightweight, slim, on-the-move communication systems and services that are easy to buy and understand.

Expand your markets with Kymeta™ mTenna U7 antenna subsystem modules (ASMs). Kymeta mTenna™ technology provides integration and installation options and flexibility for a variety of applications. There are infinite applications for land, sea, and air – from connected vehicles and trains to ships and construction vehicles, the possibilities are endless.

Flat panel for invisible, seamless, low-profile installation options

No moving parts for low maintenance and reliable connectivity

Access to Kymeta Partner Portal

Remote updates, delivering enhanced performance improvements and new features
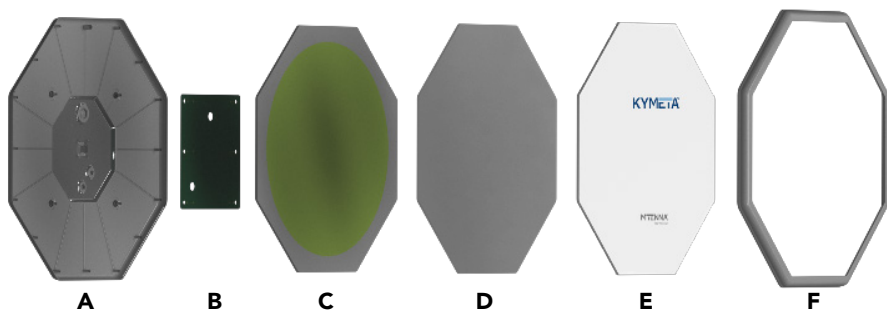
Tx/Rx on a single panel

KYMETA™

MTENNA^{U7} ASM SPECIFICATIONS

PARAMETER	SPECIFICATION*
Rx frequency range	11.4 - 12.4 GHz
Rx gain	33.0 dB
Rx G/T	9.5 dB/K
Rx scan roll-off @ 60° (H-pol)	1.2
Rx scan roll-off @ 60° (V-pol)	1.1
Rx instantaneous bandwidth	>100 MHz
Tx frequency range	14.0 - 14.5 GHz
Tx gain	32.5 dB
Tx instantaneous bandwidth	>100 MHz
Tx scan roll-off @ 60° (H-pol)	1.4
Tx scan roll-off @ 60° (V-pol)	1.2
Tracking rate	>20°/second
Mobile tracking accuracy	FCC compliant for 25.222 and 25.226
Supported BUC	Pre-engineered for 8 W and 16 W BUC
Temperature range	−25°C to +55°C (operational) −40°C to +75°C (storage)
ASM dimensions	L 82.3 cm x W 82.3 cm x D 7.1 cm ∣ L 32.4 in. x W 32.4 in. x D 2.8 in.
mTenna I/O dimensions	W 42.42 cm x D 20.57 cm x H 4.37 cm ∣ W 16.7 in. x D 8.1 in. x H 1.72 in.
ASM weight	15.88 kg / 35 lb.
Input power (ASM only) (ASM + mTenna I/O)	100/240 VAC 50/60 Hz ∣ 175 W, 15 W typical (system values dependent on BUC) 225 W peak, 20 W typical
Ingress protection	Outdoor unit (ODU): IP66 to protect against weather and environmental conditions expected during operation and storage Indoor unit (IDU**): Rated for use indoors
ASM mounting interface	5/16" x 18 threaded holes, 95 cm (.375 in.) deep on 34.1 cm (13.435 in.) centers. Custom mounting configurations available upon request.

*Specifications are subject to change. ** IDU consists of the mTenna I/O, modem, and customer-supplied equipment.*

A **B** **C** **D** **E** **F**

MTENNA^{U7} ANTENNA STACK

A. Backshell (enclosure)

B. Control Electronics

C. Feed Assembly

D. TFT Aperture

E. Radome Assembly

F. Bezel

040718