Data Sheet

Satraka™
CONNECT THE UNCONNECTED

KU/KA BAND

SATCOM TRACKING-ANTENNA

OVERVIEW

Harnessing innovative, cutting-edge and patent-pending technologies, Satraka's Mercury line of flat-panel antennas is engineered for efficiency, cost-effectiveness, and low SWaP (Size, Weight, and Power). These advanced antennas are ideal for mobility platforms, including trains, coaches, buses, HGVs, boats, UAVs and USVs, enabling broadband internet connectivity through non-terrestrial networks such as LEO, MEO and GEO satellites. Satraka Mercury antennas can function as standalone units or in combination with Satraka's Terra range antennas, providing seamless and reliable internet connections by integrating terrestrial 4G/5G networks (TN) with non-terrestrial satellite-based networks (NTN).

With a flat panel form factor, Mercury antenna can operate efficiently on vehicle's battery.

KEY FEATURES

- Innovative, patent pending technology
- Flat panel design
- Low SWaP (size, weight and power)
- High gain and efficiency
- Wide bandwidth, Tx & Rx in one structure
- Cost effective
- Rugged design

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PRODUCT IMAGES

SPECIFICATIONS

Parameters	Ku band	Ka band
Frequency (GHz)	Rx: 10.7 - 12.75 Tx: 13.75 - 14.0	Rx: 17.7 – 20.2 Tx: 27.5 – 30.0
Polarization	LHCP/RHCP	
Gain (dBi)	24.0 @ 12.7 GHz 25.0 @ 14.5 GHz	27.9 @ 20.0 GHz 31.4 @ 30.0 GHz
Efficiency (%)	35%	
G/T[1] (dB/k)	3.0	7.0
EIRP[2] (dBW)	32.0	38.4
Beam steering range (°)	Azimuth: 360 Orbit: +/-40	
Operating temperature (°C)	-40 to +70	
Weight (Kg)	4	
Dimension (mm)	280 x 240 x 128	
Power[3] (Watt)	< 30	

[1] LNB NF, 1.0 dB

[2] BUC transmit power, 5W

[3] Operational power for Steering system

TN & NTN Tracking Antennas - Connect the Unconnected & Serve the Unserved