

Ka-band Transmitter and Phased Array Antenna



12 Gbps
High-Speed
Data Rate



Modular
Optimized
Integration



LHCP × RHCP
Simultaneous
Operation



< 15 kg
Lightweight



< 400 W
Low Power
Consumption

This Ka-band antenna and data transmission device incorporates electronic beam steering antenna technology and software-defined radio technology as part of the Ka-band downlink system for satellites. It serves as a key component of data downlink systems within the satellite payload, supporting high-speed data transmission. The device enables system optimization through miniaturization, lightweight design, and single-unit modularization.



Ka-band
**Phased
Array Antenna**

Ka-band
Transmitter

Item	Key Performance
Frequency	25.5 - 27 GHz
Modulation	QPSK, 8PSK, 16-ASK, 32-ASK, 64-ASK
Data Input Rate	2 x 10 Gbps
Data Transmission Rate	2 x 6 Gbps (Simultaneous operation on 2 channels)
Antenna Beam Steering	Range : -60° to +60°, Elevation : -60° to +60°
Antenna Beam Operation	TPF Operation
EIRP	66.6 dBm
Polarization	LHCP, RHCP
Power Consumption	< 400 W
Mass	< 15 kg

