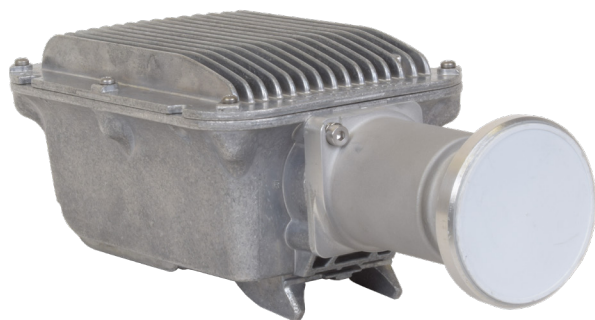# Hughes JUPITER™ HT3200 Outdoor Unit

The state-of-the-art Hughes high-throughput, very small aperture terminal (HT VSAT) JUPITER™ System is powered by the HT3200. The HT3200 assembly includes a BUC, LNB, OMT, feedhorn and a high performance modem. The integrated broadband satellite modem is designed to cost effectively satisfy a wide range of high-speed connectivity requirements for consumer, small office/home office, enterprise, and government markets.

The HT VSAT supports very wide band transmit and receive carriers and a range of advanced digital modulation/demodulation and FEC coding schemes to make the most efficient use of satellite capacity. The JUPITER HT3200 provides bidirectional IP throughput and supports a wide range of features including IPV4/V6 addressing, TCP acceleration, prioritization, compression, and encryption. With feedback from the JUPITER gateway, the HT VSAT DVB-S2X modcodes and TX power along with modulation and FEC rates are dynamically adjusted to ensure high link availability and optimum performance.

Technical Specifications

RF Specifications

TX Frequency	28.35 to 30.0 GHz
RX Frequency	17.3 to 20.2 GHz
ODU Transmit Power	34.5 dBm max.
Operating Mode	Linear
Polarization	Circular Cross Pol, RHCP/LHCP support with electronic switching

Forward Channel

Standard	DVB-S2X with Adaptive Coding and Modulation (ACM)
Frequency	Ka-band
Modulation	QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Encapsulation	GSE
Symbol Rates	1 to 476 Msps

Return Channel

Access Scheme	MF-TDMA
FEC	LDPC with efficient variable block/burst sizes
Modulation	QPSK, 8PSK, 16APSK
Symbol Rates	256 ksps to 24 Msps

Environmental and Mechanical

Operating Temperature	-40° C to +50° C
Input DC Voltage	+20 V to +54 V
DC Power Consumption	57 W max. (TBD)
Indoor Power Supply	90 V to 264 V AC
Certifications	CE, UL, CSA, EN62368, EMC, FCC, ICES-003, RoHS
IFL Cable Length	300 ft (100 m) max.
IFL Cable Type	Single RG-6, 75 ohms, F-type connector

Antenna Size	Typical EIRP (dBW)	Typical G/T (dB/k)
0.74 m	47.0	18.6
0.90 m	48.2	20.0
0.98 m	48.8	20.6
1.20 m	51.2	22.3

Features

- Simple installation with use of single IFL and with audio guidance
- Extended Ka-band frequency range support
- Electronic polarization selection capability
- 500 MHz DVB-S2X carrier size support
- Spectrally efficient
- Audio buzzer support for antenna pointing
- No manual adjustment of power required

The HT3200 is compatible with the following indoor units (IDU).

- **WE3100:** MoCA adapter for ethernet over coax with one GigE LAN port and external power supply.
- **WR3200:** Wi-Fi 6 router with two GigE LAN ports, MoCA adapter for ethernet over coax, and external power supply.

WE3100   WR3200