

C8000 is a broadband Internet complete Very Small Aperture satellite terminal (VSAT). C8000 is an all-outdoor terminal providing the functionality of BUC, LNB and modem within a single integrated unit.

The unit packs rich feature set and powerful performance capabilities into a compact outdoor design. The terminal is optimized for next-generation High-Throughput-Satellite (HTS) systems, providing high download and upload speeds, TCP/IP and HTTP acceleration, user traffic compression and QoS capabilities, delivering true broadband Internet experience. The C8000 is designed around a System on Chip (SoC) architecture providing the power of Software Defined Radio (SDR) and allowing flexibility of future waveform adaptation and customization.



Features and Benefits

- All-outdoor fully-integrated terminal, reflector, feed system, transmitter, receiver and satellite “modem”.
- Simple Do It Yourself (DIY) installation.
- Single cable installation, simplifies and reduces installation costs.
- Wideband DVB-S2X Forward Link support provides great spectral efficiency gains. Highly granular MODCODs and Adaptive Coding and Modulation (ACM) allow for mass markets such as broadband satellite Internet services.
- Layer-3 / Layer-2 support.
- Built-in PEP (Performance Enhancing Proxy) enhancing user experience and conserving satellite bandwidth usage.

Typical Applications and Uses

- Mass market consumer broadband Internet.
- Rural Internet access.
- High throughput M2M / IIoT links or IoT aggregation links

Specification

Unit Characteristics	
Form Factor	All outdoor complete terminal.
Installation	<ul style="list-style-type: none"> ▪ Single CAT6 cable to indoor power-injector and Eth port. ▪ DIY installation option.
Typical Applications	Consumer broadband Internet.
Forward Link / RX	
Technology	DVB TDM Forward Link.
Channel Rate	Up to 500MHz.
Waveform	DVB-S2/S2X ACM, GSE encapsulation, QPSK up to 256APSK LDPC/BCH.
Channel Spacing	5%, 10%, 20%, 25% or 35% channel spacing (roll-off factor).

Return Link / TX

Technology	<ul style="list-style-type: none"> MF-TDMA CF-DAMA (Combined Free and Demand Assigned Multiple Access). Terminal built-in Uplink Power Control (ULPC) and network-wide PowerACM™ link variability mitigation providing support for Ka, Ku and C-band.
MF-TDMA Channel Rate	64Ksps up to 8192Ksps.
MF-TDMA Waveform	BPSK, QPSK, 8PSK, 16QAM.
MF-TDMA Channel Spacing	25%, 20%, 15% and 10% channel spacing (roll-off factor).

IP Services, PEP and QoS

Interfaces	1x 10/100/1000 Mbps Eth RJ-45 provided at indoor power-injector.
Download Speed	Up to 100Mbps.
Upload Speed	Up to 10Mbps.
Connectivity	<ul style="list-style-type: none"> Wireline transparent Layer-2 connectivity. Layer-3 with built-in NAT and DHCP server.
Application Optimization	TCP/IP and HTTP acceleration.
QoS	Built in embedded QoS support integrated with Forward and Return Link ACM.
Multimedia Support	<ul style="list-style-type: none"> VoIP, video-over-IP / video-conferencing Virtual Telephony™ support. Multimedia QoS support, bandwidth assurance for clear VoIP QoE.

Environmental and Mechanical

Weight	Complete outdoor terminal weight less than 10Kg.
Power	<ul style="list-style-type: none"> Universal 100-240V AC 50/60Hz indoor power supply/power injector provided. Up to 75W including installation and integrated outdoor unit.
Operating Temperature	-10 to +60°C.
Certification	CE, FCC, RoHS, IP67.

Available Configurations

- 75cm reflector, 1.5W Ka-band circular polarization, Tx:29.00-30.00GHz Rx:18.20-20.20GHz.
- 75cm reflector, 3W Ka-band circular polarization, Tx:29.00-30.00GHz Rx:18.20-20.20GHz.
- 75cm reflector, 2W Ku-band linear polarization, Tx:13.75-14.50GHz Rx:10.70-12.75GHz.
- 75cm reflector, 4W Ku-band linear polarization, Tx:13.75-14.50GHz Rx:10.70-12.75GHz.