

C7700 is a broadband Internet satellite modem. The unit packs a rich feature set and powerful performance capabilities into a compact desktop satellite modem appliance. The modem 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 C7700 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

- Miniature desktop design, providing the flexibility of using standard outdoor RF equipment, any satellite / band.
- 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.
- Simple Do It Yourself (DIY) installation option available.
- Layer-2 or Layer-3 support.
- Built-in PEP (Performance Enhancing Proxy) enhancing user experience and conserving satellite bandwidth usage.



Typical Applications and Uses

- Mass market consumer broadband Internet.
- Small Office Home Office (SOHO) / SMB (Small Medium Business).
- Rural Internet access.

Specification

Unit Characteristics	
Form Factor	Indoor, miniature desktop.
Installation	<ul style="list-style-type: none"> ▪ Matching variety of standard outdoor RF options: C-band, X-band, Ku-band and Ka-band.
Typical Applications	Consumer, SOHO / SMB 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).
Terminal IFL Input	F-type 75 ohm, 950 - 2150MHz satellite / band independent.

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	10%, 15%, 25% or 25% channel spacing (roll-off factor).
Terminal IFL Output	F-type 75 ohm, 950 – 2400MHz satellite / band independent.

IP Services, PEP and QoS

Interfaces	<ul style="list-style-type: none"> 10/100/1000 Mbps Eth RJ-45. 1x out-of-band satellite modem management.
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

Dimensions	185 x 116 x 50mm (H x D x W).
Weight	350g.
Power	<ul style="list-style-type: none"> 15W (not including BUC power), universal 100-240V AC 50/60Hz power supply. 24V DC provided to BUC. 50W available for installation and RF equipment.
Operating Temperature	0 – 50°C, 5% to 90% humidity non-condensing.