

Powerful Internet-access satellite modem/router capabilities packed into a compact desktop appliance.



## Applications and uses

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

## Features and benefits

- Miniature desktop design.
- Operation with most COTS RF BUC/LNB or transceivers.
- Noiseless fan.
- Wideband DVB-S2X forward link, superior spectral efficiency with highly granular MODCODs and Adaptive Coding and Modulation (ACM).
- Internet-traffic optimization and QoS, enhancing user experience and conserving satellite bandwidth.
- VoIP and multimedia support.
- Over-the-air traffic encryption (ordering option).
- Optional iTool self / assisted-installation capabilities for mass network deployment.

# Specifications

## Forward Link / RX

Waveform technology	DVB-S2/S2X ACM, MPE/GSE encapsulation, QPSK up to 256APSK LDPC/BCH TDM Forward Link.
Channel rate	Up to 120Msps.
Channel spacing	Down to 5% (roll-off factor).
Link variation mitigation	Adaptive Coding and Modulation (ACM) support.
RX power	Max allowed: -5 dBm over entire L-band, -65dBm to -20dBm over 36MHz transponder.

Terminal IFL Input F-type 75 ohm, 950-2150MHz satellite / band independent, off/13/18/21V DC and off/22KHz selectable matching any COTS ODU.

## Return Link / TX

Waveform technology, channel rate and spacing	MF-TDMA (combined free and demand-assigned multiple access), QPSK, 8PSK and 16QAM (option).
MF-TDMA symbol-rate	128 up to 6680Ksps.
Channel spacing	Down to 10% (roll-off factor).
Link variation mitigation	Terminal built-in Uplink Power Control (ULPC) with ACM supporting Ka, Ku and C-band.
TX power	-30dBm to 5dBm.

Terminal IFL Output F-type 75 ohm, 950-2400MHz satellite / band independent, off/24V DC, 10 / 50MHz reference selectable matching any COTS ODU.

## User-traffic, PEP and QoS

Traffic interface	1x GbE 1000Base-T.
Download	100Mbps.
Upload	5Mbps; Up to 10Mbps with additional license.
Packet processing	15K PPS.

## User-traffic, PEP and QoS (cont')

Network services	Layer-3 NAT, DHCP server / relay, Multicast support.
Application optimization	<ul style="list-style-type: none"><li>TCP/IP and HTTP acceleration.</li><li>Traffic compression option.</li></ul>
QoS	Up to 8 flows, based on TOS/DSCP, IP addresses, protocol and ports.
Real-time applications	SIP snooping VoIP, video-over-IP / video-conferencing support.
Security	Ordering option: User-traffic protection up to AES256 encryption (subject to export control).

## Management

Management interfaces	<ul style="list-style-type: none"><li>Web GUI through out-of-band Ethernet.</li><li>Managed by ASAT System NMS.</li></ul>
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## Mechanical and environmental

Form Factor	Indoor, miniature desktop.
Dimensions	2 x 7.25 x 5 inch W x H x D (51 x 185 x 127 mm).
Weight	0.85 pounds (lb) (0.39Kg).
Power	<ul style="list-style-type: none"><li>External universal power supply, 100-240V AC 50-60Hz C6 inlet (appropriate power cord provided according to region per order).</li><li>Consumption: 15W (not including RF equipment / BUC power).</li><li>45W available for installation and RF equipment.</li></ul>
Operating conditions	32°F~122°F (0°C~50°C), 10%-90% relative humidity non-condensing.
Certification	CE, FCC, ROHS.

# Ordering information

## Unit build configurations

16A+007700-100	C7700 satellite modem.
16V+007700-100	C7700V satellite modem with AES256 traffic encryption (subject to export control).