



# SkyEdge II WebEnhance

High Performance CacheMode VSAT



## Market Leading Technology

Gilat's SkyEdge II WebEnhance is the industry's first VSAT with embedded high capacity, multi Gbyte microSD memory. The unique CacheMode technology provides enhanced user experience and satellite bandwidth savings by storing large amounts of content closer to the multiple end-users sharing the same VSAT. The VSAT locally stores HTTP content which is delivered to one of the end-users, and this content is then made available at LAN speeds to any other end-user looking to access the same content. The result is ultra-fast web experience to end-users and reduced OPEX to operators as a result of the reduction in satellite bandwidth resources.

The WebEnhance is optimized for high throughput broadband networks, including large e-Education and e-Government projects with multi-Computer environment, and other Internet-based VSAT network implementations.

## Dual LAN Port Broadband VSAT Router

The SkyEdge II WebEnhance is a compact VSAT uniquely designed to enable high throughput broadband IP services. WebEnhance VSAT is ideal for supporting multi-Computer services that provide access to Internet, VoIP and multimedia applications. With dual LAN ports and support of eight VLANs, the WebEnhance provides additional flexibility to provision multiple services over a single VSAT. The WebEnhance is a powerful member of Gilat's SkyEdge II family of VSATs, supporting DVB-S2 ACM, DVB-RCS, and a rich feature set including TCP and HTTP acceleration, DNS caching, compression, QoS, VLANs/VRFs, BGP, DHCP, VoIP and RTP header compression.



## Benefits

- High performance service rates up to 30/4 Mbps, 6000/4500 PPS
- Dual-LAN Ports, Eight-VLANs support
- Innovative CacheMode technology with multi-Gbyte microSD memory - accelerates delivery of web content to end users
- Feature-rich functionality - optimizing performance of multiple layers with TCP and HTTP acceleration, QoS, VoIP and compression
- High availability and efficiency - utilizing DVB-S2 ACM and ICM adaptive inbound



## Maximum Efficiency and Availability

Compliant with DVB-S2 ACM (Adaptive Coding and Modulation) in the outbound direction, the WebEnhance achieves excellent bandwidth efficiency and high availability through the use of LDPC coding and higher modulations of up to 32APSK. Inbound transmission is implemented using four adaptive dimensions: Uplink power control, coding, modulation and Gilat's patent pending Fast Dynamic Channels.

## Technical Specifications

### Outbound Carrier

- **Standard:** DVB-S2 Adaptive Coding and Modulation (ACM)
- **Carrier Rate:** 256Ksps - 45Msps (in 1Ksps steps)
- **Carrier Data Rate:** Up to 135 Mbps
- **VSAT Data Throughput:** 60 Mbps Multicast, 30Mbps Unicast
- **Modulation:** QPSK, 8PSK, 16APSK, 32ASPK
- **Coding:** LDPC and BCH (DVB-S2)
- **FEC Rate (DVB-S2):** 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10

### Inbound Carrier

- **Access Scheme:** MF-TDMA – DVB-RCS
- **Channel Rates:** 128Ksps-2.56Msps
- **VSAT Data Throughput:** Up to 4.7 Mbps UDP/TCP
- **Modulation:** QPSK, 8PSK
- **Coding:** Turbo coding FEC 1/2; 2/3; 3/4; 4/5; 6/7

### Interfaces and Power

- **RF Input / Output:** Two F connectors, 75  $\Omega$  female
- **Data Interfaces:** 2 x LAN 10/100BaseT, RJ-45,
- **Power Supply Options:** Autorange 100-240V AC or Autorange 10-59V DC
- **Power Consumption:** 13W for IDU

### Enhanced Features

- **Enhanced IP features:** Multi VRF and VLAN, IPv6 ready, RIP, VRRP, DHCP, NAT/PAT, IGMP, IP prioritization, ACL, DiffServ
- **Other Features:** Bandwidth on Demand, TCP and HTTP acceleration, Multi-Level QoS and MPN
- **Security:** AES 256 Encryption

Dynamic Channels technology automatically configures the inbound carrier plan based on the instantaneous network throughput demand and link fade condition. This advance space segment management technology maximizes inbound carrier fill factor, improves the overall network availability, and guarantees that the total usable inbound network throughput is not impacted by changes in the link fade condition. The combination of these inbound adaptive mechanisms ensures a high dynamic range of up to 23dB.

### Caching Option

- **Cache Methods:** Local Cache
- **Cache Memory:** 4Gbytes
- **Cacheable Data:** HTTP Internet Browsing

### Mechanical / Environmental Conditions

- **Size (WxHxD):** 483x45x348 mm
- **Weight:** 2.17 Kg
- **Operating Temperature:** 0° to +50° C
- **Storage Temperature:** -40° to +70° C
- **Relative Humidity:** Up to 95%

### Outdoor Unit

- **Frequency:** Ka, Ku, Ext Ku, C
- **Operating Temperature:** -40° to +60° C
- **Humidity:** Up to 100%
- **Linear BUC Interface:** Internal 24V up to 4W BUC; External DC for 6W BUC and higher; Ka, Ku, Ext Ku, C
- **LNB:** Standard TVRO type or PLL



[www.gilat.com](http://www.gilat.com) | [info@gilat.com](mailto:info@gilat.com) | Gilat Satellite Networks

