

HyBox Gigastream-S2

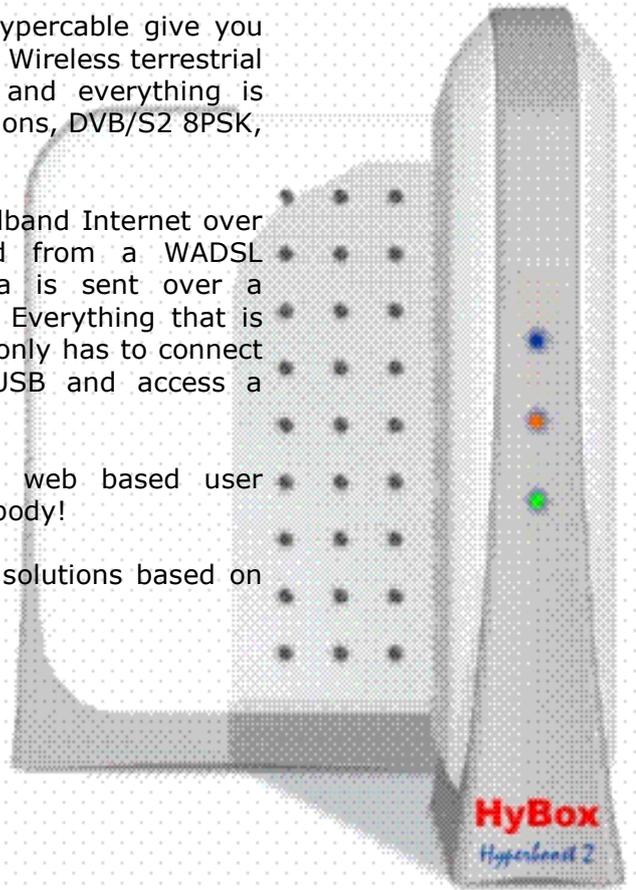
Digital IP TV & TCPIP Full Wireless Duplex – MVDDS - GPRS EDGE Modem.

The **HyBox** series of WADSL modems from MMD S Hypercable give you the easiest possible way to get high-speed Internet via Wireless terrestrial Hypercable MVDDS. Connect the necessary cables and everything is ready. The HyBox S-2, support the standard transmissions, DVB/S2 8PSK, giving about 30% increased transmitter efficiency.

The **HyBox** modem is an integrated solution for broadband Internet over Hypercable MVDDS. Downstream data is received from a WADSL Hypercable MVDDS transmitter and upstream data is sent over a GPRS/EDGE connection or WiMax,WiFi, ADSL, PSTN. Everything that is needed is integrated in the **HyBox** modem. The user only has to connect his computer with an Ethernet cable, WLAN, or USB and access a webpage in the modem to get connected.

The easy product installation and the customized web based user interface make broadband Internet accessible to everybody!

We can offer the "enterprise" customer a number of solutions based on the **HyBox**.



Key features

- ◆ Based on DVB-S2
- ◆ Easy to install
- ◆ Works with Windows, MacOS, Unix/Linux
- ◆ Web based GUI (Graphical User Interface)
- ◆ GPRS-EDGE return channel.
- ◆ PSTN return channel (Option)
- ◆ More wireless solutions planned WiFi Wimax UMTS
- ◆ xDSL return channel.
- ◆ Proxy or VPN solutions
- ◆ Built-in DHCP server
- ◆ 10/100 BaseT Ethernet connection
- ◆ USB functionality
- ◆ Connect to PC with USB cable
- ◆ Connect USB storage devices for network storage.
- ◆ File sharing working in both Windows and Linux (smb)
- ◆ WLAN functionality (USB WLAN card needed)
- ◆ Can act as WLAN Access Point
- ◆ Secure connection with WEP and WPA
- ◆ Works with USB WLAN cards based on Zydas chipset
- ◆ Automatic software update online

Hypercable the Wireless Cable

Product Specifications

H-2 USB Extensions

The HyBox allow for simple extensions using the inbuilt USB ports.

- ◆ **USB connectivity:** As an alternative to Ethernet, it is possible to connect the HyBox to a computer using an USB cable. When connected, the HyBox modem is automatically recognized as a mass storage device, containing the needed driver (in Windows XP).
- ◆ **WLAN connectivity:** If a USB WLAN card is connected to the HyBox it will give the user the option to access the satellite modem over WLAN. The HyBox can work as a WLAN access point, thus allowing several computers to connect without an external access point. The HyBox can also connect to access points as a WLAN client. Note: The H-2 only support USB WLAN cards based on the ZyDAS ZD1211 chipset.
- ◆ **Network Attached Storage:** With connected USB mass-storage devices, the H-2 can act as a Network Attached Storage device. Storage devices that are connected can be accessed using Windows file sharing (smb/cifs). Both hard disks and memory sticks are supported.



Multicast

Hybox modem can be used to receive multicast ip data. The while satellite transmissions are true multicast, the public Internet can only manage unicast transmission. This makes multicast Wireless MVDDS Broadcasted transmissions superior where the same data shall be transmitted to a large number of receivers.

VPN

For the VPN solution a Virtual Private Network is set up between the Hybox WADSL modem and the W-ISP (WADSL Internet Service Provider) on connection. This way the HyBox modem will be connected to the LAN of the W-ISP. The VPN connection is automatically established when the HyBox modem goes online.

Proxy

For the proxy solution the HyBox modem is connected to a regular ISP with access to the Open Internet. A proxy server set up by the Hypercable WADSL operator is used to separate incoming and outgoing data so that incoming data is sent over Wireless MVDDS. Different proxy softwares can be used. The most commonly used on the satellite modems is Hyperboost from Hypercable, which is a performance enhancing proxy giving lower latency over assymetrical links. With the proxy solution it is possible to define that some traffic shall bypass the proxy instead use the second terrestrial link for two-way traffic. This is a way to achieve lower latency for some services or to ensure VOIP TOIP use.

DSL Acceleration

Lousy capacity on your xDSL connection? We can offer a specialized version of the HyBox, intended to accelerate download speed for xDSL customers. This version of the HyBox uses the xDSL connection as return channel, while all downstream data is sent by a WADSL MVDDS link. This solution will give the benefit of an *always-on* connection achieved from the xDSL, coupled with the bandwidth from a MVDDS Hypercable connection. It is possible to define that some services shall use the xDSL connection for downstream data to get better latency for e.g. online games. The only thing needed is to connect the xDSL modem to one Ethernet port on the HyBox modem, the computer to another, and the Hypercable antenna cable to the RF interface of the HyBox modem.