



# SuperFlex MX2001 series IP/DVB Encapsulator

*data sheet and technical specifications*

introducing our  
newest encapsulators!

**Fully DVB Compliant**

**Linux Based O/S**

**Remotely configurable and  
upgradeable using  
password protected web interface  
or Secure Shell Client (ssh)**

**Ideal for partial or full transponder  
with speeds as low as 256 kb/s  
up to 110 Mb/s**

**PSI/SI table implementation  
according to MPEG-2  
and DVB standards**

**10/100Base-T Ethernet input &  
asynchronous RS-232 input**

**Multilingual interface  
(English, Spanish, French,  
Chinese...and more)**

**High reliability at a lower cost**



**The MX2001 series is a family of ultra high-speed MPEG-2 and DVB standard-compliant IP/DVB encapsulators used to overlay terrestrial intranets and global Internet connections.**

MX2001 IP/DVB encapsulator solution runs from from 256 kb/s to 110 Mb/s—providing full transponder capabilities and allowing networks the ability to seamlessly integrate IP over DVB technology in existing DVB and ATSC compliant distribution systems. The unit also fully implements European DVB standard EN 301 192 multiprotocol encapsulation (MPE).

#### **MX2001 hardware and software solution**

The MX2001 series is based on the Intel® PentiumIII™ hardware platform and Linux® operating system (OS) software platform for an extremely stable yet simple system design. The IP/DVB network driver is fully implemented in the OS kernel, thus improving performance.

#### **MX2001 routing capabilities**

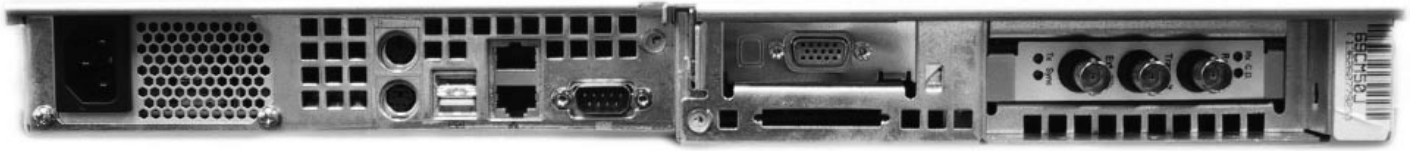
The MX2001 uses IETF standard routing policies. Static routes are configured for IP-unicast packets (e.g. TCP and UDP user traffic) and for IP-multicast (UDP) traffic. The IP/DVB encapsulator completes the routing information with the MPEG-2 transport stream packet identifier (PID) and receiver's Ethernet MAC address information. The IP/DVB encapsulator accepts incoming packets, according to its switching table, and forwards packets after adding appropriate section information (header and trailer) and MPEG-2 transport headers, to a connected DVB compliant modulator or multiplexer via a DVB compliant ASI interface.

#### **Available in a variety of configurations**

The IPE is available in two speeds, 8 Mb/s and 110 Mb/s in a standard 19" rackmount chassis with two Fast Ethernet input ports, one RS-232 asynchronous input port, and one DVB/ASI output port.

Optionally, an integrated QoS feature is available to provision extensive management functions for traffic shaping and optimization of IP streams.





**MX2001 IP/DVB Encapsulator: rear view.**

### **MX2001 SERVICE INFORMATION**

- The MX2001 fully implements MPEG-2 program specific (PSI/SI) information (PAT/PMTs) and DVB service information (NIT/SDT/BAT/TDT) according to DVB standards
- The MX2001 can run in ATSC compliant environments
- The MX2001 complies with ETR 290
- It is fully tested to be compliant using WWG's DTS-A ATSC/DVB protocol analyzer

### **STANDARD FEATURES**

- Easy to use remote monitoring and control via secure shell access or password-driven web interface
- PSI/SI table implementation according to MPEG-2 and DVB standards
- Aggregate packet throughput from 256 kbps to full transponder range (110 Mb/s)
- User level access is controlled by password security
- Fully implements DVB standard EN 301 192 (MPE), prepared for MHP

### **ADVANTAGES**

- Provides full control of configuration parameters
- Allows a smooth system upgrade to IP protocol-based multimedia services through its full compliance with DVB standards
- Can run in DVB and ATSC-compliant environments
- Linux kernel provides exceptional stability

### **MX2001 SERIES TOOLKIT**

The MX2001 offers a rich set of add-ons to

- Create, modify and send PSI/SI tables
- Convert TCP to UDP and distribute the session content to many listeners
- Monitor data throughput at PID level in real time
- VPN server authentication add-on

### **FORM FACTOR**

- The MX2001 is packaged in a 1U high chassis
- High-quality industrial rackmount server

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