



### OVERVIEW AND APPLICATIONS

The SpectraCast® DTMX5000 is a DVB-compliant MPEG-2 IP gateway. It encodes digital satellite data transmissions for broadcasting of IP-based Ethernet traffic, supporting high-speed data communication for fast, secure, and reliable TCP and UDP over IP applications.

The DTMX5000 manages data traffic between the Internet or other information sources and satellite downlinks at variable rates of up to full transponder. While supporting multiple QoS levels, the DTMX5000 controls both bandwidth allocation and the number of simultaneous subscribers.

The IP packets are received via the Fast Ethernet connection and the gateway maps them onto an MPEG-2 transport stream according to any of the DVB defined methods. The transport stream is output on an LVDS or serial ASI interface compliant with any standard DVB multiplexer or modulator.

High-speed Internet access for ISPs and proxy servers, data routing/repeating, WAN backbones, intra-corporate communications, and many other data services will benefit from this flexible device.

### FEATURES

- Supports both MCPC and SCPC modes of operation as well as multicasting and broadcasting applications.
- Multiple QoS levels can be accommodated for different customer profiles.
- A range of data rates matches bandwidth usage with demand.
- Support of industry standard protocols and interfaces allows utilization with existing equipment and digital video services.
- Equipped with a standard SNMP MIB2 based agent, the DTMX5000 can be monitored, provisioned, and proactively managed from a local or remote standard management station.
- Software upgrades via the LAN connection.
- LVDS and serial ASI output ports (concurrent output).
- Packet encryption for subscriber privacy.
- Multicast broadcasting enables the same data to be sent to many subscribers simultaneously.
- Data mapping mode for IP datagrams: piping, streaming, or multi-protocol encapsulation.
- Datagram flushing to maintain TCP/IP performance through DVB multiplexers with internal buffers.



[www.satcom-services.com](http://www.satcom-services.com)

Mike Termond

[mike@satcom-services.com](mailto:mike@satcom-services.com)

Phone: 1.805.649.1384

Fax: 1.805.649.1174

## SPECIFICATIONS

Dimensions: 19" rack mountable, 4U height

Cooling: Fan

Weight: Approximately 30 pounds (13.6 kg)

## FRONT CONTROLS:

- Power switch
- Reset button

## REAR PANEL CONNECTORS (IN BASIC CONFIGURATION):

- Input power socket
- VGA monitor port (monitor not included)
- COM1 port
- Keyboard port
- 10/100BaseT Ethernet input port (Traffic)
- Optional 10/100BaseT Ethernet port (Control & Management)
- LVDS output port
- DVB ASI output port
- Auxiliary ASI input port

Input Power Requirements: 65 to 250 VAC, 50 to 60 Hz, 100 W

## SOFTWARE SUPPORT

Optional software modules that support the DTMX5000 include:

### CENTRAL CONFIGURATION UNIT (CCU)

A DTMX5000 is controlled by one or more CCUs. The CCU is an application running on a Windows NT station at the satellite hub. This application monitors subscribers' activities, selects the proxy server for each session, maintains the routing table on the proxy servers, and interacts with external billing and authentication systems (via RADIUS protocol).

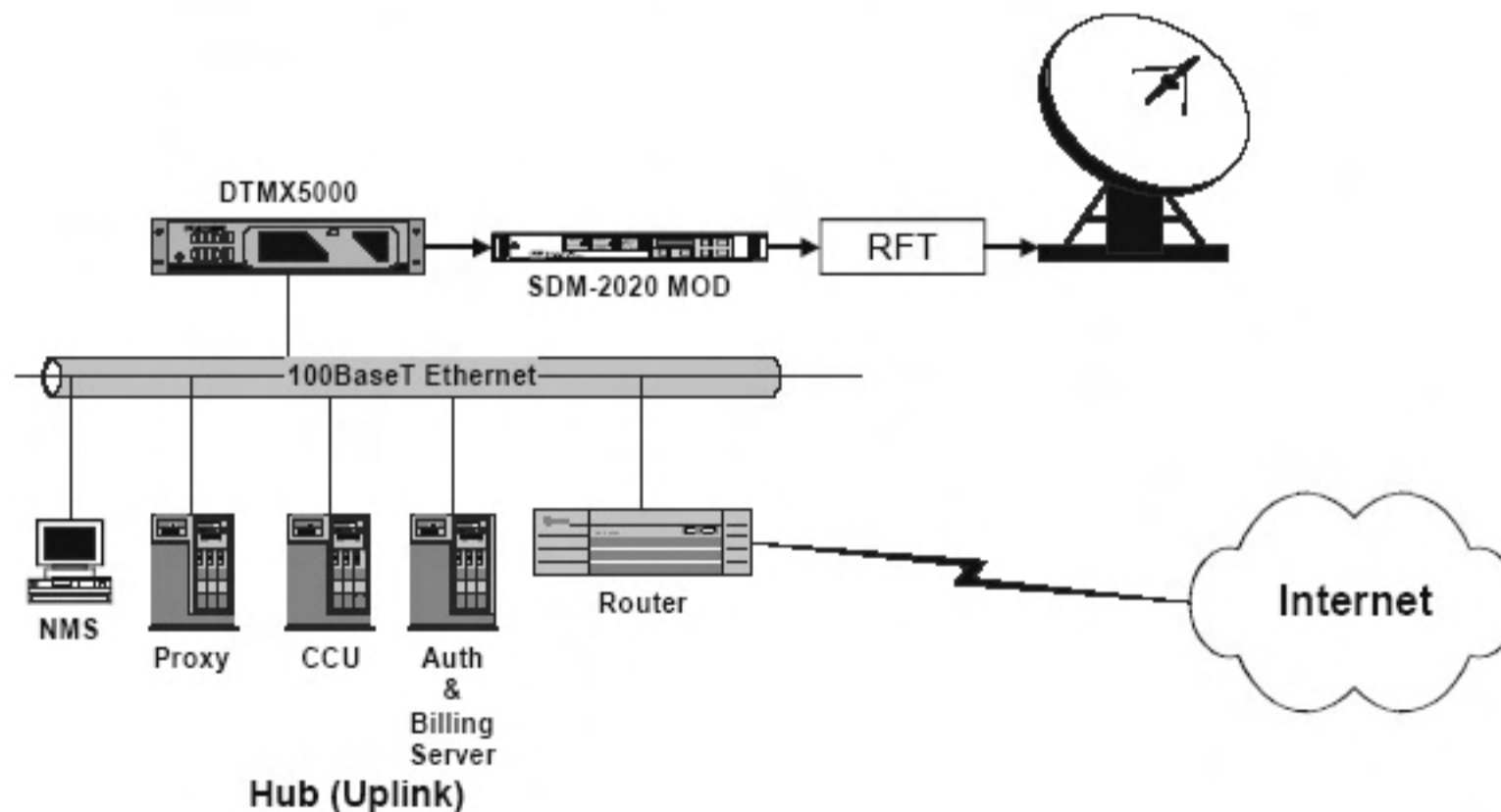
### NETWORK MANAGEMENT SYSTEM (NMS)

The NMS uses the Simple Network Management Protocol (SNMP) to monitor and control the DTMX5000 from anywhere in the world. Password-controlled access allows a service provider to view and edit the DTMX5000's configuration, statistics, and diagnostic information.



## Sample Applications Featuring the SpectraCast DTMX5000 IP Gateway

- VSAT Overlay
- Faster Internet Access
- Intranet
- Distance Learning
- File Distribution



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Mike Termondt

mike@satcom-services.com

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