

MediaStar IP Re-Caster Gateway for Multicast / Unicast Stream Transport and Conversion (799)

The MediaStar IP Re-Caster provides an efficient and robust way to distribute multiple live IP video streams between multiple remote sites. It can operate over a WAN, VPN, or the Internet using SRT protocol.



Key Features

- Enables full duplex IPTV connectivity between multiple sites
- Conversion of streams between Unicast & Multicast delivery methods
- Optional AES encryption
- SRT streaming compatibility
- Rack mount or stand alone appliance options
- IP streams DSCP tagged for QoS network control
- Local monitoring of unit operational status
- Compact size with low power consumption
- Hot swappable blade with retained settings configuration

Models

- 799



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The unit is a 'hot swappable' blade based processor module for use in a MediaStar multi-slot powered rack chassis (Model 770) or single slot appliance case (Model 769).

It will accept unicast or multicast IPTV streams, convert them to unicast streams and transfer them across a network to an additional site. A second 799 receives the streams and re converts them back to multicast or unicast as desired. Thus a MediaStar IPTV system can be expanded across multiple sites using a single headend.

When there are access, quality or capacity issues on the links between sites, the Re-Caster uses a conventional internet connection and adopts a more robust, encrypted SRT transport mechanism to pass IPTV streams across the internet and then deliver them back as multicast or unicast streams at the remote receiving sites.

The transmission and error correction process that SRT (Secure, Reliable Transport) provides increases the stream latency by around one second, but the advantages of not requiring a quality assured 'nailed-up' VPN are considerable.

The SRT protocol also allows simple access to Wowza servers to support broadcast redistribution of content to multiple devices and end

points.

An alternative application allows IPTV systems to be deployed on networks where multicast is not supported. Retrospective implementation of multicast can be a significant cost and a 799 Re-Caster can be used to implement a switched, unicast IPTV system..

Initial configuration and stream setup using a laptop or tablet can be via the built-in web server or by simply using the front panel buttons and LCD status display. Alternatively, multiple units within a wider system can be networked under the control of the MediaStar Media Manager software (Model 462).

Front panel RS-232 and USB Comms connectors allow local connectivity and can also be utilised to pass IP and SIPI command signals generated by remotely located Touch Screens and management systems for control of headend located RS-232 devices. For local unit status monitoring a screen may be attached to the rear panel HDMI connector.

This coupled with maintenance free operation, small physical size and low power consumption make the 799 ideally suited for both large scale distributed applications or simple single site deployments.

Specifications

Whats in the box	<ul style="list-style-type: none"> • 799 Re-Caster Gateway blade • RJ45 patch lead (2m)
SYSTEM INPUTS AND OUTPUTS	<p>Inputs:</p> <ul style="list-style-type: none"> • Unicast or multicast UDP MPEG2 transport streams. Encrypted or unencrypted SRT streamss • Data input rate up to 600 Mbps <p>Outputs:</p> <ul style="list-style-type: none"> • Unicast or multicast UDP MPEG2 transport streams (with IP Address translation). Encrypted or unencrypted SRT streams • Data output rate up to 600 Mbps
NETWORK & INTERFACES	<p>LAN and Network Protocols:</p> <ul style="list-style-type: none"> • RJ45 802.3 100/1000 Base-T Auto MDIX. Static or DHCP IP Address. DSCP stream tagging for QOS • Protocols: UDP, PIM-SSM, TCP, ARP, DHCP, ICMP, IGMP V2/V3, NTP, HTTP, HTTPS, Telnet, SNMP, SMTP, DSCP, RTSP & SRT <p>USB Port:</p> <ul style="list-style-type: none"> • USB 3.0 host port for keyboard and mouse. Software upgrade via memory stick with ONLY protected Cabletime software. <p>RS-232 Port for 3rd Party Control Interface:</p> <ul style="list-style-type: none"> • Rx, Tx, CTS, RTS up to 11,5200 Baud. SIPI external configuration/control OR IP to RS-232 bidirectional pass through for external device control
CONFIGURATION & MONITORING	<p>Configuration:</p> <ul style="list-style-type: none"> • Fully integrated with Media Manager software • Local status monitoring and IP setup from front panel buttons and LCD display • On board web server and web page menus for use with remote computer browser • Rear panel HDMI port for monitoring unit status page. Unit front and rear panel 'locator' LED function to easily identify a single unit within a rack <p>Event Monitoring:</p> <ul style="list-style-type: none"> • Internal operating temperature available remotely via web interface • Key operational warnings reported via SNMP traps sent to third party SNMP manager (MIB available on request) • Automatic e-mail of event log files via external SMTP server
OTHER INFORMATION	<p>Power Dissipation & Environmental:</p> <ul style="list-style-type: none"> • 17 W (from MediaStar rack chassis). • Operating temperature; 0° - 40°C; 32° - 104°F (Housing ambient)

	Weight and Dimensions: <ul style="list-style-type: none">• 0.5Kg; 1.3 Lbs (799 Blade only) W 4.1 H 12.9 D 22.5cm; W 1.6 H 5.0 D 8.6"• occupies 1 slot of a MediaStar rack / appliance housing
	Approvals: <ul style="list-style-type: none">• FCC, CE, UKCA, RCM, TUV, CB and UL approved as part of the MediaStar 770 or 769 rack chassis