INTERNATIONAL DATACASTING

LASER™ Multi Program Splicer

Targeted Content Insertion

A cost effective, high density solution for targeted ad and program insertion, IDC LASER™ Multi Program Splicer (MPS) allows broadcasters to increase their advertising revenues and create regional viewing experiences.

Applications

- Multi Service content insertion in a single platform
- Targeted Ad Insertion
- DTT regionalization
- Regional Program Insertion
- Broadcast file transfer, reception and storage
- Transport Stream playout from internal storage
- Compressed domain splicing
- Deterministic splicing for SFN

Features

- Multi Service SCTE-35 Seamless Splicing
- HEVC/H265, MPEG-4/H264 and MPEG-2 Splicing
- In-band and out of band file distribution
- Production Manager file transfer via satellite or IP
- Up to 4 TB of storage capacity
- MPTS/SPTS Service Grooming
- 2 ASI inputs & 2 ASI outputs
- Dedicated M&C Ethernet port
- BISS Decryption & in-band key management
- Web browser user interface
- Worldwide customer support
- Dual DVB-S/S2 Inputs (Option)
- 2 DVB Common Interface Slots (Option)

Multi Service Content Insertion for Video Distribution

LASER MPS enables broadcasters distributing content via satellite or IP to increase advertising revenues by inserting regional commercials and long form programming at the edge of the network. It enables broadcasters to take on additional advertising clients, as broadcasters are no longer constrained by regional licensing or regulatory issues, and can simply blackout and replace advertising inventory to suit their needs. This also allows the broadcaster to provide regional programming within a single broadcast channel to better serve its viewers.

High Performance, High Density

Designed to meet the needs of the most demanding broadcast environments, the LASER MPS delivers a high density multi service splicing solution with the highest possible throughput for media file distribution to remote broadcast locations. LASER MPS also comes with multiple storage configurations, decryption options, ASI inputs/outputs and an optional dual tuner.

Simple add on to existing Networks

IDC's LASER MPS solution can easily be added to your existing video distribution network. LASER MPS can be placed in-line in an existing ASI connection point and the content management is accomplished with an additional IP input into your existing distribution head end.

DTT Ready

Digital Terrestrial Television platforms are facing increased demand from advertisers, viewers, and legislators for targeted ad insertion and regionalized programming. IDC's LASER MPS solution has been specifically designed to meet the needs of both MFN and SFN topologies, and can be easily deployed inline on the transport stream feeding the network.

A Complete Content Distribution System

The LASER MPS is fully integrated with IDC's Production Manager content management system which provides an end-to-end solution for ingesting, targeting, transmitting and confirming regional content delivery and playback.

Multiple Methods of Content Delivery

The LASER MPS includes IDC's Datacast XD which enables high-speed guaranteed file delivery, via IP and satellite connectivity. Datacast XD includes application FEC and file reconstruction features to provide the most robust delivery solution. FTP and Samba file sharing are available for delivering content files to third-party devices.

Flexible Storage

LASER MPS comes standard with 2 TB of storage and can be upgraded to 4 TB of storage. Its compact 1RU form factor provides high density storage for long form programming content.

Wide Variety of Inputs

Equipped with 2 ASI inputs, 2 ASI output ports and an M&C Ethernet port the LASER MPS provides multiple connectivity options. Dual L-Band (DVB-S or DVB-S2) inputs are available as an option.

Flexible Configurations

The LASER MPS supports seamless content insertion for one or several services, enabling the broadcaster to grow its regional content insertion offering at their own pace without additional hardware being purchased. It can be deployed in either a one-way, two-way or hybrid satellite/terrestrial network. In addition, it can be configured for the delivery of live linear video via satellite transmission, ASI or IP.

TECHNICAL SPECIFICATIONS—LASER Multi Program Splicer

COMPRESSED STREAM SPLICING (LICENSED)

Standard	SCTE-35 Splices
Number of Services	Licensed per Service Supports up to 2 Transport Stream inputs
Content Delivery	In-band via IDC Production Manager Out-of-band via IP connectivity Locally via user interface (Licensed Option) Automatic content delivery reconciliation via Internet or IP network
Accountability	Content delivery confirmation and Affidavit reports

RF INPUT (OPTION)

Number of Inputs	2
Frequency Range	950 to 2150 MHz
Frequency Tuning Steps	Synthesized 1 Hz steps
AFC Range (drift tracking)	+/- 2 MHz maximum
Maximum Input Level	-35 to -65 dBm
Connector	Type-F, female
Impedance	75 ohms, unbalanced
LNB DC Power	+18 VDC maximum (horizontal polarity), or +13 VDC at 500 mA (vertical polarity) center conductor positive, short circuit protected
LNB Requirements	• DRO type for high data rates, stability +/- 2 MHz maximum • PLL type for low data rates, stability +/- 25 kHz maximum

DVB-S (OPTION)

Symbol Rate	500 kBaud to 45 MBaud
Modulation	QPSK
Alpha Factor	0.35

DVB-S2 (OPTION)

Symbol Rate	1 MBaud to 45 MBaud
Modulation	QPSK, 8PSK, 16APSK
Alpha Factor	Full standards roll-off support

DVB Common Interface (OPTION)

DVB CAS	Supports 2 Common Interfaces for Conditional Access Modules (CAM)

NETWORK AND TRANSPORT

- In-band content management via IDC Production Manager
- In-band configuration addressable
- MPEG-2 Transport (ISO/IEC 13828) per ETSI EN 301 192
- MPE (Multiprotocol Encapsulation)

STORAGE

- 2 TB standard, upgradable to 4 TB
- SD Card Interface

STATUS AND CONTROL INTERFACES

- Web browser based status and control utilizes Ethernet NET connector, plus SNMP
- Password protected, allows for local setting of configuration parameters
- LCD display/keypad
- Terminal interface

FRONT PANEL INDICATORS

LCD Display/Keypad	Provides metrics and set up menus
Lock	Indicates locked or unlocked Transport Stream status
Status	Indicates normal operation or fault status
Control	Indicates authorization and data activity of in-band control
Option	Option Status

REAL PANEL CONNECTORS/INDICATORS

Network Ports (3)	• **Connector Type:** RJ-45 Ethernet • **Electrical Interface:** 3x 100/1000 Base-T • SNMP • 2 x High-Speed Data and 1 M&C
ASI (4) 2 Inputs and 2 Outputs	• **Connector Type:** BNC Female • **Electrical Interface:** DVB-ASI • **Filtering:** Complete DVB transport stream or up to 250 filtered PIDs • **Packet Size:** 188 bytes • **Data Rate:** Up to complete transport stream rate

STREAM INPUTS

Transport Stream	• Supports 2 MPTS per unit (ASI or optional RF) • Seamless insertion of content

POWER REQUIREMENTS

Supply Voltage	100 to 240 VAC, +6%, -10%, 50 or 60 Hz
Power Consumption	70 Watts maximum

PHYSICAL PARAMETERS

Chassis	1RU rackmount
Dimensions (H, W, D)	4.5 cm x 48 cm x 36 cm (1.75" x 19" x 14")
Weight	6 kg (14 lbs.)

ENVIRONMENTAL CONDITIONS

Operating Temperature	0° to 50° C (32° to 122° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Humidity	Maximum 90% relative, non-condensing

DECRYPTION (OPTION)

BISS1 (with in-band management)
DVB CI (supports 2 Conditional Access Module Common Interfaces) (Option)

FILE RECEIVE & TRANSMIT PERFORMANCE

Up to 50 Mb/s*   * Under IDC Lab Conditions