

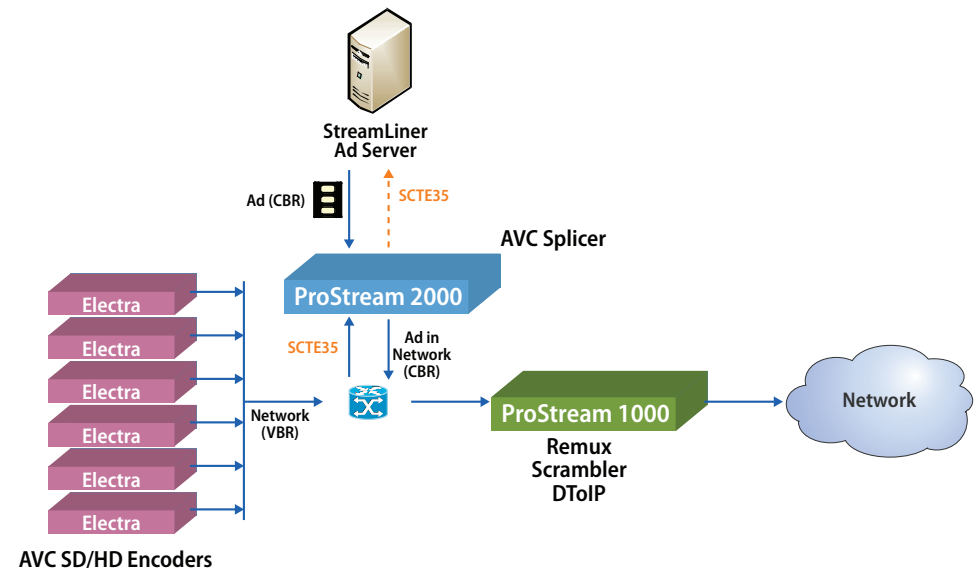
### HIGHLIGHTS

- Compact, modular 1-RU system based on Sun SPARC Enterprise server
- Gigabit Ethernet (GbE) I/O module, 4 GbE ports
- Simultaneous seamless splicing of up to 32 HD or 64 SD H.264 video services
- Supports splicing of AC-3, AAC, MPEG-1 Layer II audio streams
- Supports SCTE-35 in band cue triggers
- Supports SCTE-30 for integration with ad servers
- MPEG-2 TS or RTP/UDP over IP input and output
- Maintains all VBI and data PID information from input to output
- Controlled via NMX Digital Service Manager™

Harmonic's ProStream™ 2000 is a multi-service HD and SD MPEG-4 AVC (H.264) digital splicer that supports real-time and seamless splicing of multiple compressed video and audio services, primarily for ad insertion applications. Based on open standards, the IP-based ProStream 2000 is fully integrated with Harmonic's DiviCom® Electra® encoders, ProStream 1000 stream processing platform, DiviTrackIP™ distributed statistical multiplexer, NMX Digital Service Manager™ as well as the CLEARcut™ storage encoding solution and the StreamLiner® ad server.

The ProStream 2000 is the industry's first splicer featuring multi-channel and multi-service capabilities within a compact 1-RU chassis, and supports multiple SD or HD streams. Unlike other splicing solutions, the ProStream 2000 does not degrade video quality. As a result, operators can more effectively insert national or local ads in the digital stream.

The ProStream 2000's density and versatility make it possible for operators to reduce cost per channel with a scalable and distributed architecture, and better take advantage of incremental revenue opportunities with digital ad insertion as they launch new SD and HD services.



**Typical Application**

- Digital ad insertion for IPTV, direct-to-home (DTH) satellite and cable operators
- Enables targeted advertising

#### BENEFITS OF THE PROSTREAM 2000

- **Digital Splicing** – The ProStream 2000 allows operators to insert ads in any HD or SD services using the AVC compression format.
- **Density** - The ProStream 2000's highly dense platform, capable of splicing of up to 32 HD AVC or 64 SD AVC streams in 1-RU, dramatically reduces rack space requirements and power consumption.
- **Flexibility** - By offering multi SD and HD channels and firmware upgrades, operators can scale their system as it grows and provide a range of feature-rich services.
- **Support for all-IP infrastructure** – The ProStream platform's native IP interface seamlessly integrates into scalable, cost-effective IP networks.

- **Network management** - Harmonic's NMX Digital Service Manager simplifies configuring, monitoring and automated redundancy of systems in both centralized and distributed architectures.

#### REDUNDANCY

Through a local management interface, Harmonic's NMX Digital Service Manager controls the primary and backup ProStream units in a redundant architecture. Together with NMX, the ProStream supports 1:1 and N:1 redundancy schemes.

### GIGABIT ETHERNET CARD

Type	Gigabit Ethernet 802.3z
IP Ports	3 independent ports
Connector	3 x copper connectors
I/O Speed	1 x 1000 Mbps per port
IP Encapsulation	MPEG TS over UDP/IP/MAC 1 to 7 TS/IP
MPEG Format	188 Bytes per TS
Transport Streams	MPTS and SPTS
I/O Processing	
Total Platform Bit Rate Throughput	700 Mbps <sup>1</sup> 233 Mbps <sup>1</sup>
Maximum Bit Rate Per Socket	14 Mbps
Addressing	Unicast and Multicast
Management	IGMP, ARP, ICMP

### MANAGEMENT INTERFACES

Ethernet	1000BaseTX
Connector	1 x RJ-45

### DIGITAL SPLICING

Services	Simultaneous splicing of up to 32 HD, or 64 SD MPEG-4 AVC (H.264) CBR or VBR (DiviTrackIP) streams Up to 3 stereo or 1 multi-channel stream Frame accurate and seamless splicing between programs Back-to-back splicing PCR/PTS/DTS re-stamping Fixed delay
Video	H.264 SD: MP@L3, H.264 HD MP@L4, HP@L4 Seamless video splicing 3:2 pull down support Integrated with DiviTrackIP
Audio	Seamless audio splice MPEG 1 Layer II AC-3 2.0 and 5.1 AAC
Data and VBI	Pass-through of data and VBI PIDs
SCTE35	In-band splicing triggers Pass-thru/drop
SCTE30	Compatible

### REDUNDANCY

Device Redundancy	1:1 chassis redundancy GbE port redundancy HHP support for muting output HHP support for 1:1 redundancy
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### POWER

Power Supply	One 300W
Maximum Operating Input Power	220W
Typical Operating Power	180W
AC Power	100-240 VAC, 50-60 Hz (2.2A @ 100 to 120 VAC, 1.1A @ 200 to 240 VAC)

### ENVIRONMENTAL

Operating Temperature	5° C to 35° C 41° F to 95° F <sup>2</sup>
Operating Humidity	10 to 90% relative humidity, noncondensing
Storage Temperature	-40° C to 70° C -40° F to 158° F
Storage Humidity	93% relative humidity, noncondensing
Operating Altitude	Up to 3,048 m 10,000 ft

### COMPLIANCE

Product Safety	UL/CSA-60950-1, EN60950-1, IEC60950-1 CB scheme with all country deviations, IEC825-1, 2, CFR21 part 1040, CNS14336, GB4943
RFI/EMI	EN55022 Class A, 47 CFR 15B Class A, ICES Class A, VCCI Class A, AS/NZ 3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB 9254 Class A, EN61000-3-2, GB 17625.1, EN61000-3-3
Immunity	EN55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Telecommunications	EN300-386
Regulatory Markings	CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/S-mark
Compliant with RoHS Directive 2002/95/EC	

### PHYSICAL

Dimensions (W x H x D)	16.8" x 1.75" x 19" (1-RU) 42.5 cm x 4.4 cm x 48.3 cm
Weight	20 lbs./9.1 kg (without OCI-E card and rack-mounts) 24 lbs./10.8 kg (with side rails)

1. Platform dependent

2. Operating/Idling acoustic noise 7.7B (LwAd, 1B=10 dB)