

# XOS Advanced Media Processor

FOR AT&T SPORTSNET & ROOT SPORTS AFFILIATES



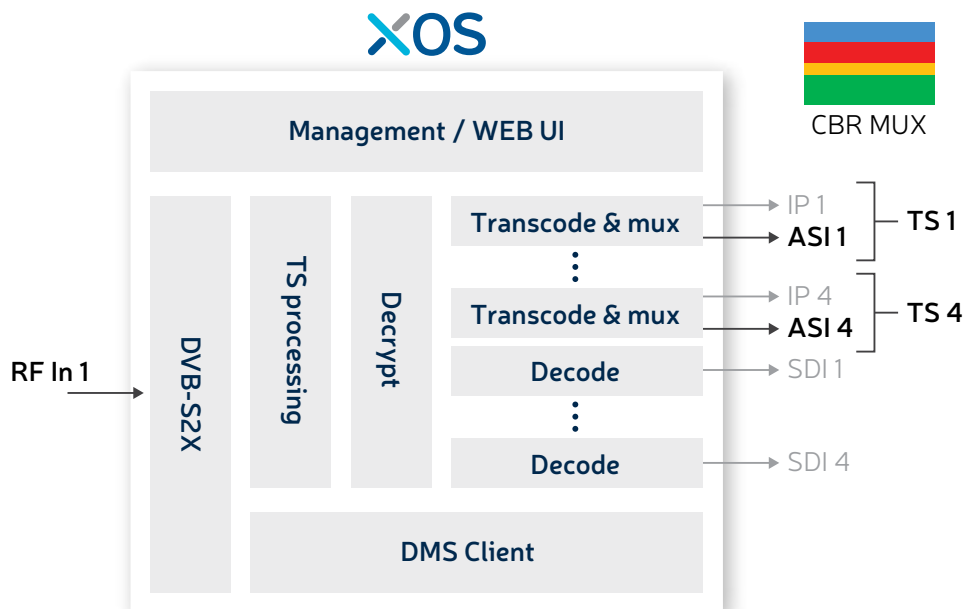
**The XOS Advanced Media Processor is an all-in-one appliance that allows AT&T RSN affiliates to receive and process any program from AT&T SportsNet & ROOT SPORTS.**

It is an advanced and powerful software-based Integrated Receiver Processor. The appliance is future proof and provides a complete feature set for satellite reception, decryption, multiplexing, transcoding and decoding of AT&T RSN signals. Refer to the generic XOS Advanced Media Processor datasheet for a full range of features and functionality.

The XOS Advanced Media Processor provides all of the required features to deliver multiple MPEG-2 Transport Streams and SDI output streams to feed downstream equipment like multiplexers or encoders.

Key features include:

- DVB-S2X satellite reception
- Content descrambling
- HEVC to H.264 or MPEG-2 video transcoding with multiplexing
- TS-over-IP and ASI output interfaces
- HEVC decoding to SDI output interfaces



XOS-2000 Input/Output and Functionality

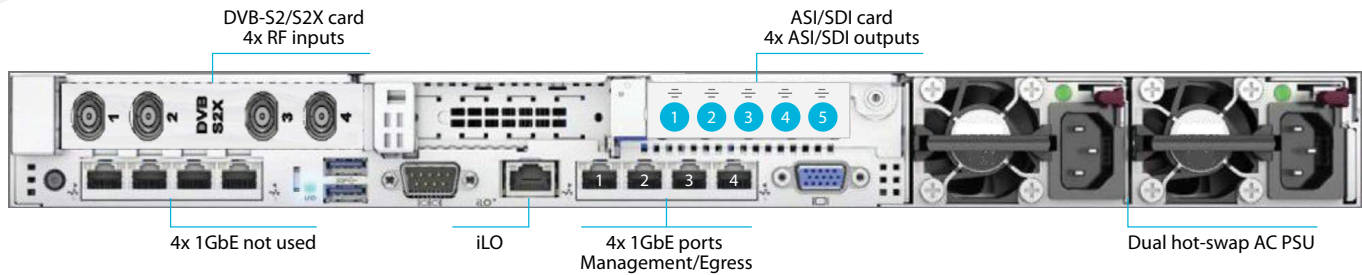
## Management

The XOS Advanced Media Processor is remotely controlled for channel subscription and authorization from a DMS central management system operated by AT&T RSN.

XOS standalone web UI, specifically designed for affiliates, provides local operation, monitoring and reporting capabilities.

# XOS Advanced Media Processor

FOR AT&T RSN AFFILIATES



XOS-2000 Back Panel Highlights

## SPECIFICATIONS

### VIDEO INPUT/OUTPUT

Satellite Inputs	<ul style="list-style-type: none"> <li>Any service from any transponder:                             <ul style="list-style-type: none"> <li>Up to 4 x TS over DVB-S/S2/S2X</li> <li>QPSK, 8PSK, 16APSK, 32APSK</li> <li>Symbol rate up to 85Msp/s</li> <li>Roll off 5% to 35%</li> </ul> </li> </ul>
Broadcast Live Outputs	<ul style="list-style-type: none"> <li>TS over IP</li> <li>SDI outputs</li> <li>ASI outputs</li> </ul>

### VIDEO PROCESSING

Features	<ul style="list-style-type: none"> <li>Harmonic PURE™ compression</li> <li>High-density transcoding:                             <ul style="list-style-type: none"> <li>SD, HD, HD to SD down-conversion</li> <li>MPEG-2 or H.264 (AVC) transcoding up to 28 SDs, 16 HDs</li> </ul> </li> <li>Video codecs:                             <ul style="list-style-type: none"> <li>MPEG-2</li> <li>H.264</li> </ul> </li> </ul>
Decoding Profiles	<ul style="list-style-type: none"> <li>SD, HD, HD to SD down-conversion</li> <li>HEVC 4:2:0</li> </ul>
Encoding Profiles	<ul style="list-style-type: none"> <li>SD, HD, HD to SD down-conversion</li> <li>MPEG-2 4:2:0 or H.264 (AVC) 4:2:0</li> <li>MPEG-2 or H.264 (AVC) transcoding up to 28 SDs, 16 HDs</li> </ul>

### ADVANCED FEATURES

Decryption	<ul style="list-style-type: none"> <li>Automatic service descrambling – Authorization from management system</li> <li>Up to 70 services, up to 400Mbps capacity</li> <li>AES-128, SIM-based hardware root of trust</li> </ul>
Multiplexing	<ul style="list-style-type: none"> <li>MPEG-2, AVC and mixed pool</li> <li>PSI/SI table Generation and Manipulation</li> <li>Up to 6 x MPEG-2 Transport Streams output</li> </ul>

### ENVIRONMENTAL

Temperature	<ul style="list-style-type: none"> <li>Operating: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating: -30°C to 60°C (-22°F to 140°F)</li> </ul>
Operating Humidity	8% to 90%
Product Materials	EMC Class A: FCC, CE, VCCI, KC, CCC, TCVN, C-Tick, BSMI
Product Safety	US/CA NRTL, CB Scheme, BIS, CCC, EAC, BSMI
Other Regulatory	EU RoHS, China RoHS, EU REACH, WEEE

### POWER

Redundancy	Dual redundant power supplies, hot swappable 100/240 VAC
Power In	50/60 Hz
Maximum Power	At room temperature: 440W At max. temperature (35°C): 500W

### MANAGEMENT

User Interfaces (Affiliates)	Dedicated Web interface for monitoring and troubleshooting
Other (Affiliates)	<ul style="list-style-type: none"> <li>Optional IP return path for telemetry and alarms</li> <li>HPE iLO management interface</li> </ul>
Remote Control and Supervision	<ul style="list-style-type: none"> <li>Over the air satellite control through Harmonic DMS management system for:                             <ul style="list-style-type: none"> <li><b>Device management:</b> Easily add, remove, upgrade, and configure edge devices in your distribution network</li> <li><b>Channel management:</b> Quickly grant/ revoke channel access to affiliates and manage black outs</li> </ul> </li> </ul>

### APPLIANCE/PHYSICAL UNIT

Appliance	Commercial off-the-shelf servers with built-in RF and ASI interfaces Flexible, full software-based appliance
Unit Size	1-RU
Dimensions	(HxWxD): 4.3 x 43.5 x 70.7 cm (1.7 x 17.1 x 27.8 in)
Weight	15 kg (33 lbs)