

SMP100

Cost-effective Media Platform



- ◎ Most Valuable
- ◎ Any Input / Any Output
- ◎ Compact Design
- ◎ Module-based
- ◎ Reliable Dual Power
- ◎ Future Upgrading

Introduction

SMP100 is a cost-effective, platform-based and multipurpose video processing equipment targeted for various video delivery application.

With multiplexing/ASI/IP built in the platform, SMP100 supports 3 functional modules for receiving, de-scrambling, encoding, transcoding, decoding, scrambling, modulation and streaming.

Customers can easily adopt an analog-to-digital video service or turn around your service into IP-based network or leverage its high density to support multi-channel video processing with less investment.

Key Features

- ▶ Compact modular design: 1RU with 3 modules (see available modules in 'ordering information')
- ▶ Supports up to 4Gbps video multiplexing and TS stream multiplexing/grooming
- ▶ Supports EIT multiplexing (optional) and EPG/SI insertion (both DVB and ATSC standard)
- ▶ Embedded ASI/IP interfaces in the main chassis
- ▶ Dual redundancy power supply (optional)
- ▶ Easy configuration tools: Web-UI and SNMP
- ▶ Easy upgrade to new technologies with only module replacement
- ▶ Low power consumption and high reliability with MTBF (Mean Time Between Failure) $\geq 100,000$ hours

Applications

SMP100 is typically used for these applications:

Distribution/delivery, digital turn-around, local program insertion, MDU, etc

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Specifications

Chassis	
Capacity	4Gbps (approx. 1000 programs)
Slot Number	3 slots
Interface	2 x ASI Inputs (BNC, Female, 75Ω ports)
	2 x ASI outputs (BNC, Female, 75Ω ports)
	1 x GbE TS/IP (RJ45)
	1 x management (RJ45)

ASI (on-chassis)	
Bit-rate per Port	1 MPTS/SPTS at max. 100Mbps per port

Multiplexing	
Routing	Any input to any output
Table Supported	SI/PSI/PSIP
PID Processing	Pass-through, remapping, filtering
EIT Processing	Re-multiplexing (optional) and pass-through
External Data	EPG and SI insertion

Management	
Hardware Interface	1 x RJ45 (100Mbps)
User Interface	LED indicators
	LCD screen
	Front panel control
	Web UI
	SNMP (monitoring only)

IP (on-chassis)	
Protocol	TS over UDP/RTP, unicast/multicast
MPEG TS	MPTS and SPTS
Channel	64 streams input and 32 streams output
Bit-rate per Port	Max. 780Mbps (effective 650Mbps)
De-jittering	PCR
Management	IGMP V1, IGMP V2, IGMP V3
FEC	ProMPEG, input and output

Physical	
Input Voltage	90~260 VAC
Dual Power Supply	Optional
Power Consumption	Max. 60W
Chassis Dimension	480mm x 44mm x 440mm (WxHxD), 1RU
Operating Temperature	0°C ~50°C
Storage Temperature	-10°C ~70°C
Operating Humidity	<95%
MTBF	≥100,000 hours

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Order Information

Model	Description
SMP100	Chassis with 6 slots
SMP100-02	48V DC version
SMP100-03	Dual power supply version
SMP100-EIT	EIT multiplexing option
DVBS2	DVB-S/S2 receiving module (4CH, or 2CH with 16/32APSK), supports multi-stream receiving
DVBC	DVB-C receiving module (4CH, Annex A/C)
8VSB	8VSB/ATSC receiving module (4CH)
DVBT2	DVB-T2/T receiving module (4CH)
ISDBT	ISDB-T receiving module (4CH)
TSIP	TSIP module (2xSFP+2xRJ45, TSIP Qty.: 64In32Out, 16In256Out or 256Out)
IPASI	2-in-1 IP/ASI module (2xRJ45+2xASI, TSIP: 64In32Out)
DS3	DS3 module (4xBNC, input or output configurable)
SWITCH	ASI switch module (5CH)
CI	Descrambling module (2 CI slots, CAS or BISS options)
IQAM	Non-adjacent QAM modulating module (max. 16CH, Annex A/C or B)
QAM	QAM modulating module (8CH@Annex A/C or 4CH@Annex B)
LQAM	QAM modulating module (4CH@Annex A/C, 1 or 2CH@Annex B, local RF combination)
OFDM	OFDM modulating module (4CH)
8VSBM	8VSB modulating module (2CH)
SQAM	QAM with scrambling (max. 8CH, Annex A/C)
EN4AV-4M2B00	MPEG-2 or 4 SD CVBS encoding module (4 SD programs)
EN4SDI-2M2Axx	H.264 HD/SD or MPEG-2 SD SDI/CVBS encoding module (2CH, MPEG1L2, AC-3, AAC options)
EN4HDMI-xM2Axx	H.264/MPEG2 HDMI encoder (max. 4 x H.264 SD/HD or 4 x MPEG-2 SD, MPEG1L2, AAC, AC-3 options)
EN2SDI-2Hxx	MPEG-2/4 HD/SD SDI/CVBS encoder (2CH, MPEG1L2, AAC, AC-3 options)
TC4-2M2Axx	Transcoder to 2 x H.264 SD/HD or MPEG-2 SD (MPEG1L2, AAC, AC-3 options)
TC4-4M2Axx	Transcoder to 2 x H.264 HD or 4 x MPEG-2/4 SD (MPEG1L2, AAC, AC-3 options)
TC4-2M2B00	Transcoder to 2 x H.264/MPEG-2 SD (MPEG1L2, future)
TC4-4M2B00	Transcoder to 4 x H.264/MPEG-2 SD (MPEG1L2, future)
Decoder	2-SD&HD SDI&HDMI decoder module