

AAT-P160 IRD

Integrated Receiver / Decoder



OVERVIEW

The TP160-IRD is a powerful and cost-effective broadcast level decoder. It supports signal receiving, multi-channel descrambling, PID filtering, and IP or ASI stream outputs. It also supports MPEG-2/H.264 SD/HD program decoding to HDMI, SDI and CVBS with dual audio PID decoding. By utilizing a remote, web-based management interface, it is ideal to support advanced content distribution, real-time signal conversion and transmission for any video delivery system.

ORDERING INFORMATION

Unit	Features
P160 IRD	MPEG-2/H.264 SD/HD decoding with HDMI, SDI and CVBS
	DVB-S/S2 input, ASI and IP I/O
	Genlock
	Full closed caption embedding

KEY FEATURES

Receiving and Input

- Includes a standard DVB-S/S2 RF input with loop-thru output
- Supports DVB-S2 multi-stream receiving (optional)
- Supports ASI and IP input and redundancy
- Genlock input for studio synchronization

Data Processing

- Two DVB-CI CAM slots support multi-channel descrambling and are compliant with various popular CAS systems
- Embedded BISS-1 & BISS-E support TS & Service level descrambling (optional license)
- PID filtering capabilities
- Full 608/708 caption decoding and embedding

Output

- MPEG-2 and H.264 SD and HD video decoding
- HDMI, SD/HD-SDI and CVBS video outputs
- SDI outputs capable of two embedded PCM audios
- One PCM audio output via AES/EBU digital audio connector
- Two pairs of balanced and unbalanced analog audio outputs
- Multicast or unicast TS-IP output
- GPI alarm output

Management

- 1 Ethernet 10/100Base-TX, RJ45
- Web-based user interface
- Front panel keypad and LCD
- SNMP supported for system integration

SPECIFICATIONS

DVB-S/S2 INPUT

Input	1xRF, F-type, 75Ω
Constellation	QPSK, 8PSK
Symbol Rate	1~45 Msps
Input Frequency	950~2150 MHz
Max Bit-rate	150Mbps
Signal Level	-65~-25 dBm
LNB PS	DC 13/18V
22K Switch	On/off

TS-IP

Interface	GbE level RJ45 port
Speed	Up to 1000Mbps
Package Format	UDP & RTP (auto detection)
Traffic Types	Unicast or multicast
IGMP	V2, V3
FEC	ProMPEG CoP3v2
TCP/IP Protocol	IPv4

ASI

Interface	4 BNC, 75Ω (2xASI input, 2xASI output)
Max Bit-rate	100Mbps
Packet Type	188/204 bytes
Input Mode	Byte and burst
Output Mode	Byte burst

DE-SCRAMBLING

DVB Common Interface	2 slots
Bit-rate	Max 100Mbps
CAM Supported	NEOTION, SMIT, ASTON and other major CAMs
CAS Supported	CONAX, IRDETO, Novel-Super TV, CTI and other CAS
BISS 1& BISS E	TS & Program level

VIDEO DECODING

Decoding Format	MPEG-2 SD 4:2:0 MP@ML
	MPEG-2 HD 4:2:0 MP@ML
	H.264 AVC SD MP@L3
	H.264 AVC HD MP@L4.0/HP@4.0

AUDIO DECODING

Audio Format	MPEG1 Layer II
	Dolby Digital (AC-3)
	Dolby Digital Plus (E/AC-3)
	AAC (MPEG2, MPEG4/HE v1, 2, MPEG4/LC)
Adjustable Volume Level	-63~0 dB

CAPTIONS

CEA-608 and	CVBS Line 21 (608)
CEA-708 Supported	SD-SDI digitized Line 21 (608)
Embedding	SD/HD-SDI VANC (608 and 708)

PHYSICAL & ENVIRONMENTAL

Input Voltage	100 ~ 240 VAC
Power Consumption	Approx. 40W
Rack Space	1 RU
Dimensions (WxHxD)	19"x1.7"x17.3"
Operating Temperature	0 °C to 50 °C
Storage Temperature	-10 °C to 70 °C
Operating Humidity	< 95% non-condensing
MTBF	>150,000 hours