HPR3624M-N Series Digital TV Front-end System

V1.0

Product introduction

HPR3624M-N series products are Catcast's latest research and development of a digital TV front-end audio and video processing equipment, which can be used for various types of audio and video coding and multiplexing modulation, so that can meet the needs of users in various systems. Standard 1U body, compact structure, easy to install and use. The machine has excellent performance, adopts modular design, can adapt to a variety of interfaces, flexible functional configuration, users can choose functions according to demand for customization, with a high cost performance. According to the selected module type, it can support HD coding to IP output, SD coding + modulation output, HD coding + modulation output, Tuner receive to IP output, Tuner receives modulation output, etc. IP output supports UDP/RTP protocol (MPTS/STPS), and supports IP outputs over RTMP/HTTP/RTSP/HLS/SRT protocol. Modulation module can choose ATSC, ISDBT, DTMBT, DVB-C/-T modulation output mode. The single machine integrates a complete set of front-end system functions, which is very suitable for all kinds of digital TV transmission systems.

HPR3624M-N

Equipment structure type

24 channel SD input equipment

24 channel HDMI input equipment

24channel Tuner input equipment

12 channel PCMCIA input equipment
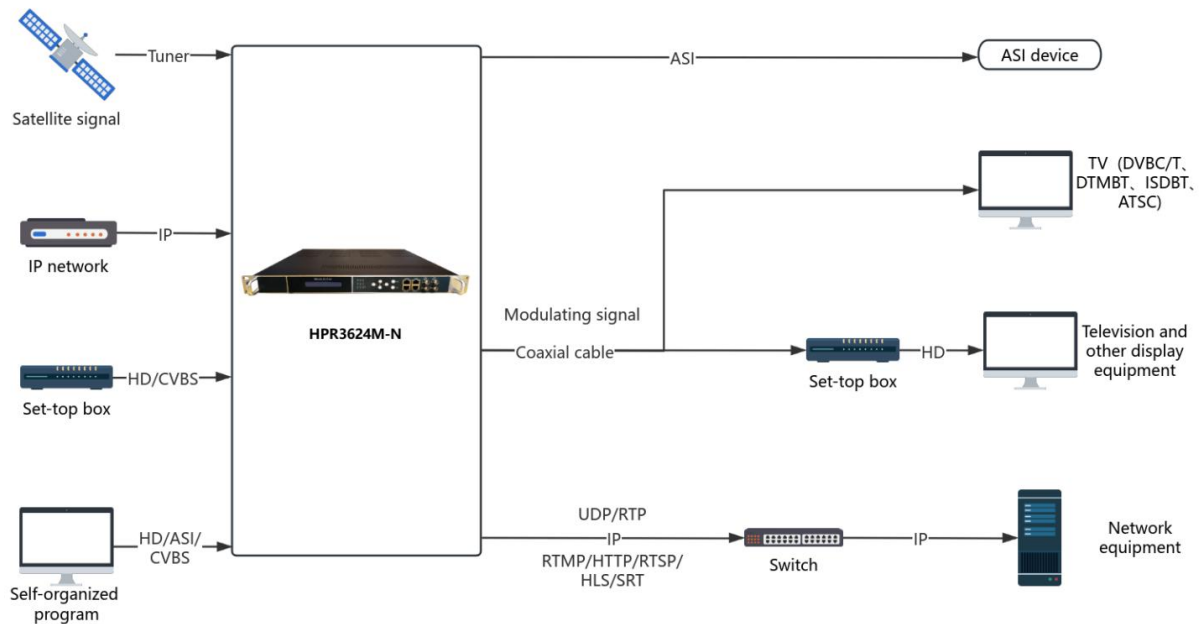

Multi interface input equipment 1

Multi interface input equipment 2

System function

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Product features

- Supports multiple port module inputs, with optional Tuner/HDMI/CVBS ports. A single module supports 4 channels of input, with a maximum of 6 modules supporting a total of 24 channels of input.

- Supports PCMCIA card modules, with a single module supporting 2-channel card descrambling and a maximum support of 12 PCMCIA card channels

- Support different Tuner (DVB-C, DVB-T/T2, DVB-S/S2, DTMBT, ISDBT, ATSC) inputs, or mixed use (such as 4 DVB-T and 4 ATSC inputs simultaneously, forming an 8-channel input)

- Supports 3 Gigabit IP input/output (DATA1:IP output over RTMP/HTTP/RTSP/HLS/SRT protocol ;DATA2: IP output over UDP/RTP protocol; DATA3: 128 IP address inputs,

- Support 8/16/24 RF output optional, output standard ATSC, ISDBT, DTMBT, DVB-C/-T optional

- Supports 2 ASI inputs

- Supporting 2 independent ASI outputs

- Support encoder module OSD, subtitle insertion, logo insertion, QR code, and image functions

- Supports LCD and button control functions

- Support network management and online upgrade function(WEB)

Equipment panel

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1.	RF output	
2.	LCD Display	
3.	Buttons and Indicator lights	
4.	NMS	Network management port
	DATA 1	IP output,RTMP/HTTP/RTSP/HLS/SRT protocol
	DATA 2	IP output,MPTS/SPTS output over UDP/RTP
	DATA 3	IP input
5.	ASI input/output	
6.	Tuner （HDMI/CVBS optional） input	
7.	Power	

Product Module Selection

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Mainboard module	Interface	Input	Output
IP output module	3 Gigabit port；1 NMS port；4 ASI port	128 IP address inputs；2 ASI input	IP output；2 ASI output
4-carrier modulation module	3 Gigabit port；1 NMS port；1 RF out 4 ASI port	128 IP address inputs；2 ASI input	4 RF output；IP output；2 ASI output
8-carrier modulation module	3 Gigabit port；1 NMS port；1 RF out 4 ASI port	128 IP address inputs；2 ASI input	8 RF output；IP output；2 ASI output
16-carrier modulation module	3 Gigabit port；1 NMS port；1 RF out 4 ASI port	128 IP address inputs；2 ASI input	16 RF output；IP output；2 ASI output
24-carrier modulation module	3 Gigabit port；1 NMS port；1 RF out 4 ASI port	128 IP address inputs；2 ASI input	24 RF output；IP output；2 ASI output

Subboard module	Input interface	function	
Tuner Input module	4-channel Tuner interface with loop out (Except for DVB-T2)	Tuner receive （DVB-C、DVB-T/T2、DVB-S/S2、DTMBT、ISDBT、ATSC optional）	
HD encoder module(H.264)	4-channel HDMI input	HD encoder，supports MPG4/H.264	
HD encoder module(H.265)	4-channel HDMI input	HD encoder，supports MPG4/H.264/H.265	
SD encoder module	4-channel CVBS input	SD encoder，supports MPEG2	
PCMCIA card module	2-channel PCMCIA （2 Card slot+2 Tuner port）	Tuner receive + PCMCIA card descrambling	

Note：

1. The mainboard and subboard can be combined according to requirements.One device is equipped with 1 mainboard module and up to 6 subboard modules.

2. DATA1 is suitable for IP output over the RTMP/HTTP/RTSP/HLS/SRT protocol; DATA2 is suitable for IP output (MPTS/SPTS) over UDP/RTP. DATA3 is the IP input port.