

Stream Protocol Converter



- Input stream formats:
 - UDP/RTP Multicasts
 - Unicasts: RTSP, SRT, RTMP, HTTP, HLS, FLV
 - UDP-Multicast, UDP-Unicast, TCP (private), RTP
 - SPTS and MPTS
- 6 Gigabit Network interfaces: 10/100/1000M RJ45
- Real-time monitoring of input streams: PSI/SI and PCR
- Three-level error detection based on TR101 290
- PSI/SI live information checking / display
 - IP-Jitter and PCR correction
- Input analysis such as encoding format, aspect ratio, resolution, etc.
 - 50 (100) Re-multiplexing-Streams,
 - max. 100 Mbit/s per channel
- Remote control by Web-Interface
- DVB and IPTV conform
- Dual redundant power supplies

5th Generation BLANKOM® IPTV Headend Technology

Broadcast grade, high performance protocol converter for up to 50 streams. Available as 100-Stream Version: BIG-1100X.

Use case: UDP -> SRT -> WAN (CDN) -> SRT -> UDP

The BIG-1050X is based on server architecture, can convert the usual streaming TS protocols efficiently for LAN/WAN Video stream Transmissions.

The TS protocol can be converted between UDP multicast or unicast URL's to or from SRT/RTP/HTTP/HTTP-HLS/RTSP/RTM to UDP while keeping the image quality.

By looping an URL to UDP -> UDP-> SRT such conversion is also possible.

A comfortable WEB- GUI makes it easy to configure and handle.

*Up to 50 or 100 streaming channels:
Conversion between Unicast and Multicast
UDP/RTP <-> SRT
Null-Packet adding VBR-> CBR possible
Output HLS-http will be installed optional by license*

TV Headend with multicasts



TECHNICAL SPECIFICATIONS

INPUT

- Interface: 6x 1000M/100M/10Mb/s RJ45, Full Duplex
- MPTS/SPTS TS/IP Input Bit Rate: max. 800Mbps per RJ45
- Data Protocol: TCP, UDP, ICMP, IGMP V1, V2, V3,
- IP Protocols Unicast, Multicast: UDP, RTP, SRT, HTTP, RTSP, RTMP(s), FLV, HLS (HTTP Live Streaming)

MONITORING / MODIFYING

- Input: SPTS / MPTS
- Null package process: Null packet pass through and insert (CBR)
- Monitoring: Live Services, PSI/SI, PCR
- Maximum bitrate: 100Mbps each
- Maximum TS count: 50 (100) input TS Streams + 50 (100) output TS Streams

OUTPUT

- Interface: 6x 1000/100/10Mbps RJ45, Full Duplex
- TS/IP Input Bit Rate: 800Mbps per RJ45
- Data Protocol: UDP, SRT, TCP
- IP addressing: Unicast, Multicast
- Type: IP Streaming, DVB conform remuxed streams

CONTROL & MONITORING

- Interface: 6x RJ45, 1000/100/10Mbit/s
- Protocol: HTTP Web GUI, Captcha

GENERAL

- Dimensions: BIG-1100X: 430 mm x 335 mm x 44 mm, 19" 1RU ()BIG-1050X 430x260x44mm =
- Approx weight: 5 (8,7) kg
- Power: 2x AC 110V~240V, 6,4A, 47~63 Hz
- Power consumption: max. 500W (750W BIG-1100X)
- Temperature: 5~45 °C (operation), -10~65 °C (storage)

Ordering Guide: **BIG-1050X (50 Streams), BIG-1100X (100 Streams), optional License for UDP->HLS**

The screenshot displays the BLANKOM BIG-1050X web interface. The top navigation bar includes the BLANKOM logo, the device name 'BIG-1050X', and user information 'English' and 'root'. The main content area is divided into several sections:

- Home:** Overview of system health with four circular gauges: CPU Usage (25%), CPU Temp (44°C), Memory Usage (10%), and Disk Usage (4%).
- System Info:** A table providing details about the device:

Device Name	BIG-1050X
Serial Number	56F74C48-87F6-36AC-A2A2-91A01597FCF2
Version Number	2.1.1.6-b3
Run Time	4 Days 0 Hour 27 Minutes 57 Second
System Time	2024/05/24 11:34:11
License	Empower Normal
- Netcard Status:** A table showing the status of six network cards. The first five are 'Linked' and the sixth is 'Not Linked'.

	Status	Name	Bootproto	IP	Linked Speed	Rx Speed	Tx Speed	Rx Error	Tx Error	Gateway	MAC
1	Linked	eth1	none	192.168.0.156	100Mb/s	34.61 mb/s	23.64 mb/s	0	0	192.168.0.1	28:b1:33:01:d5:b2
2	Linked	eth2	none	192.168.10.57	1000Mb/s	5.13 mb/s	6.53 mb/s	0	0	192.168.10.1	28:b1:33:01:d5:b3
3	Linked	eth3	none	192.168.20.56	1000Mb/s	34.31 mb/s	0.00 mb/s	0	0	192.168.20.1	28:b1:33:01:d5:b4
4	Linked	eth4	none	192.168.30.56	1000Mb/s	44.98 mb/s	0.14 mb/s	0	0	192.168.30.1	28:b1:33:01:d5:b5
5	Linked	eth5	none	192.168.40.56	1000Mb/s	49.81 mb/s	0.00 mb/s	0	0	192.168.40.1	28:b1:33:01:d5:b6
6	Not Linked	eth6	none	192.168.50.56	0Mb/s	0.00 mb/s	0.00 mb/s	0	0	192.168.50.1	28:b1:33:01:d5:b7