

DCM750

dibsys

IPTV Gateway IP protocol conversion scenarios

HTTP, UDP, RTP, RTSP, HLS, SRT



DCM750 is a powerful, yet low power consumption, rack-mount IPTV Gateway Controller& Control Interface for 24/7 operation. Its modular design enables integrators and operators to select from various protocol to customise operation and on-going service.

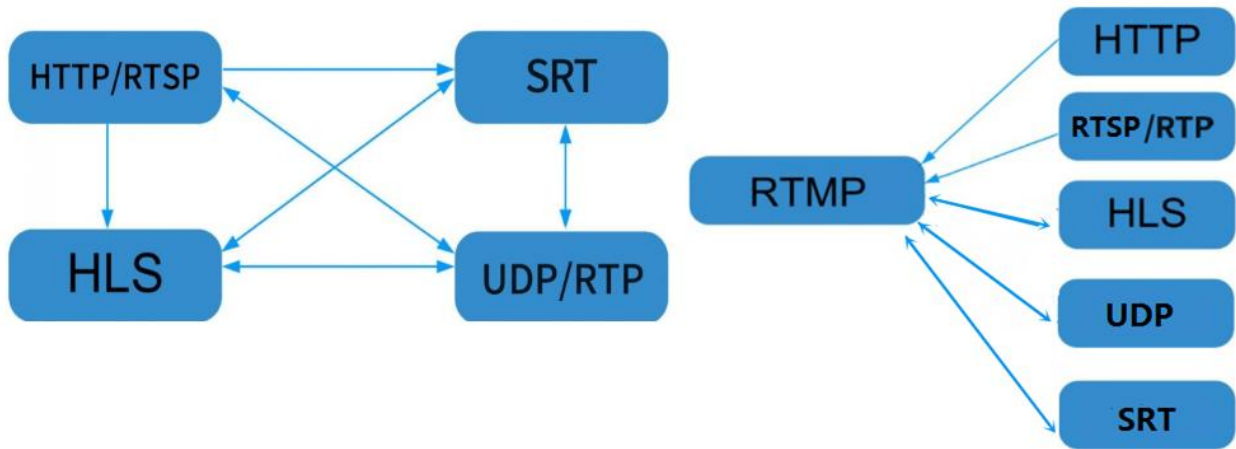
It can convert the broadcast network IP stream over HTTP, SRT, UDP, RTP, RTSP and HLS and TS file into HTTP, UDP, SRT, HLS and RTMP protocol. The platform can achieve the integration by receiving a variety of commercial streaming media services, and can provide streaming media services directly.

Designed for the centralised control of Android STB's the control protocol conversion function acts, used for the protocol conversion scenarios and streaming media distribution scenarios, to the commonly deployed STB's in the hotel, hospitality, corporate, education and entertainment sectors.

Key Features

- low power consumption, rack-mount design
- 8/10 Data ports(DCM750):
 - First Data port: IP out over HTTP, UDP, SRT,HLS and RTMP
 - Data CH1~CH7/CH9 ports: IP in over HTTP, UDP, RTP, SRT, RTMP, RTSP and HLS
 - IP out over HTTP, SRT, HLS and RTMP (Unicast)
- 8 Data ports(DCM750Plus):
 - First Data port: IP out over HTTP, UDP,SRT, HLS and RTMP
 - Data CH1~CH7 ports: IP in over HTTP, UDP, SRT,RTP, RTSP, RTMP and HLS
 - IP out over HTTP, SRT, HLS and RTMP (Unicast)
- UDP/RTP input support MPTS (bitrate $\leq 30M$)/SPTS
- TS files uploading through Web management
- IP anti- jitter function
- adding scrolling caption, welcome words, boot image and boot video
- Support downloading Dibsys IPTV APK directly from this device
- Up to **80 HD/SD programs (DCM750)**, or **150 HD/SD programs(DCM750Plus)** (Bitrate: 2Mbps) When HTTP/RTP/RTSP/HLS is converted into UDP (Multicast), **suggest maximum 80% CPU utilization**
- Support program playing with APK downloaded android STB and TV
- Control via web-based NMS management through DATA port

Protocol conversion



TECHNICAL SPECIFICATIONS

Input

CH1 ~ CH9(1000M)
over HTTP, UDP(MPTS/SPTS), RTP(MPTS/SPTS), RTSP, SRT, RTMP (over UDP, payload: mpeg TS) and HLS
Note: DCM750 only support SPTS in TS files uploading through Web management

IP Output

Data port (1000M)
over SRT, HTTP (Unicast), UDP(SPTS, Multicast)
HLS and RTMP (Program source should be H.264 and AAC encoding)

SYSTEM

Memory 4G
Solid-State Disk(SSD) 16G, 60G optional
Channel switching time HTTP (1-3s), HLS (0.4-0.7s)
Function scrolling caption
welcome words
boot image

boot video (only in IP out application and the STB/Android TV installed DIBSYS IPTV APK)
Play programs with APK downloaded android STB and TV
web-based NMS
Bitrate 2Mbps each programs
SRT/HTTP/RTP/RTSP/HLS is converted into UDP (Multicast), the actual application shall prevail, and **suggest maximum 80% CPU utilization**

Environment

Power Supply AC 100V±10% 50/60Hz or AC 220V±10%, 50/60Hz
Dimension 482mm×324mm×44mm
Operating temperature -10 ~ 50℃
Storage temperature -10 ~ 75℃
Humidity 10 ~ 90% non-condensed
Weight 6KG

Ordering Information

Protocol conversion	Programs	Bitrate	Terminals		CPU utilization
			DCM750	DCM750Plus	
HTTP/RTP/RTSP/HLS to UDP	80	2M	/	/	55%
HTTP to HLS	50	2M	200	400	46%
HTTP to HTTP	30	2M	150	300	80%
	50	2M	80	160	80%
UDP to HTTP	50	2M	120	240	50%
UDP to HLS	50	2M	200	400	50%
	80	2M	150	300	72%

Model		DCM750	DCM750-10	DCM750Plus
Size		1U	1U	1U
Hardware	CPU	1037 3965	3965	intel I5
	Core	2	2	4
	RAM	8G	8G	8G
	ROM1	120G SSD	120G SSD	120G SSD
	ROM2	/	/	/
DATA Port Number		8 ports	10 ports	8 ports
SFP+		/	/	/
Software		Live TV	Live TV	Live TV
Load capacity	Input Channels	SD(4M) *40	SD(4M)* 40	HD(8M) *40
	User Number	100	100	120
VOD Load		/	/	/

WEB GUI

Streaming Media→ Protocol Conversion

Current Position: Streaming Media > Protocol Conversion

Input protocol: HLS, RTTP, RTP, UDP, RTSP(rtp over udp,payload MPEGTS);Output protocol: HLS, UDP, RTMP(RTMP output is only supported when input program source are H.264 and AAC encoding)

▶ start distribution || stop distribution ■ stop all ⚙ Batch Setting All ⬇ 📄 template download 📁 import programs 📁 export programs ➕ add program 🗑 batch delete 📄 program sorting

number	status	program name	input NIC	program type	input address	output address	realtime rate	operate
1	✓	DXTV-15	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.68:5140	http://192.168.202.136:8060/hls/114/114.m3u8	2776 Kbps	🔍 ✕
2	✓	DXTV-14	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.67:5140	http://192.168.202.136:8060/hls/113/113.m3u8	2807 Kbps	🔍 ✕
3	✓	DXTV-13	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.66:5140	http://192.168.202.136:8060/hls/112/112.m3u8	2843 Kbps	🔍 ✕
4	✓	DXTV-12	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.65:5140	http://192.168.202.136:8060/hls/111/111.m3u8	2802 Kbps	🔍 ✕
5	✓	DXTV-11	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.3:5140	http://192.168.202.136:8060/hls/110/110.m3u8	2554 Kbps	🔍 ✕
6	✓	DXTV-10	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.63:5140	http://192.168.202.136:8060/hls/109/109.m3u8	2602 Kbps	🔍 ✕
7	✓	DXTV-9	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.1.2:5140	http://192.168.202.136:8060/hls/108/108.m3u8	2621 Kbps	🔍 ✕
8	✓	DXTV-8	eth4 [1000Mbps] full duplex self-adaption	normal	rtp://239.93.0.112:5140	http://192.168.202.136:8060/hls/107/107.m3u8	2565 Kbps	🔍 ✕
total program: 50, number of distribution: 50			eth4 [1000Mbps]	normal				

ADV→ Rolling Subtitles

Current Position: ADV > Rolling Subtitles

🔍 + Add

welcome to XXX Hotel

welcome to XXX Hotel

Content: welcome to XXX Hotel Speed: 100%

Position: Bottom

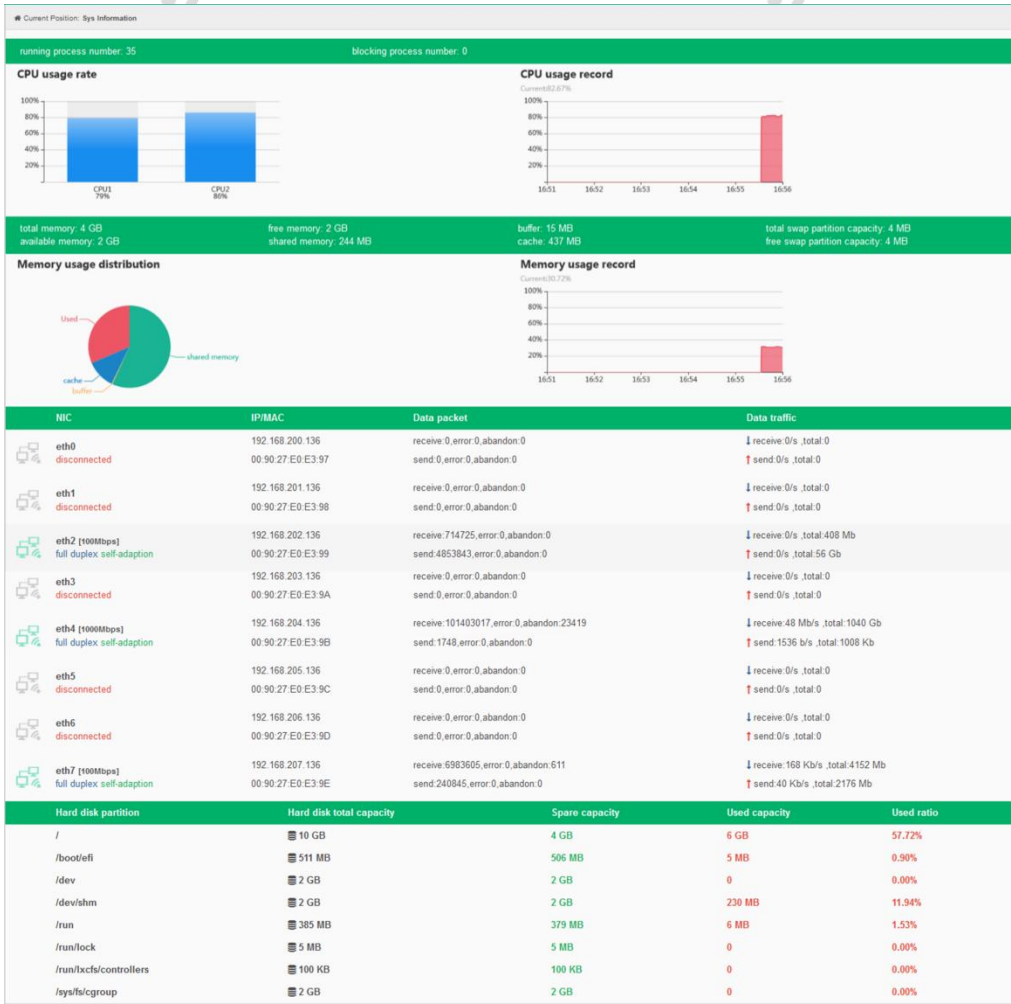
Font-color: #000000 Shadow-color: #000000

Font-size: 24 Transparency: 100%

BGM-color: #000000 BGM-transparency: 100%

Starting time: Finish time: 🗑 delete 📄 submit

System Information



Application

- IPTV Gateway Controller& Control
- Contribution and Distribution
- Protocol conversion scenarios

