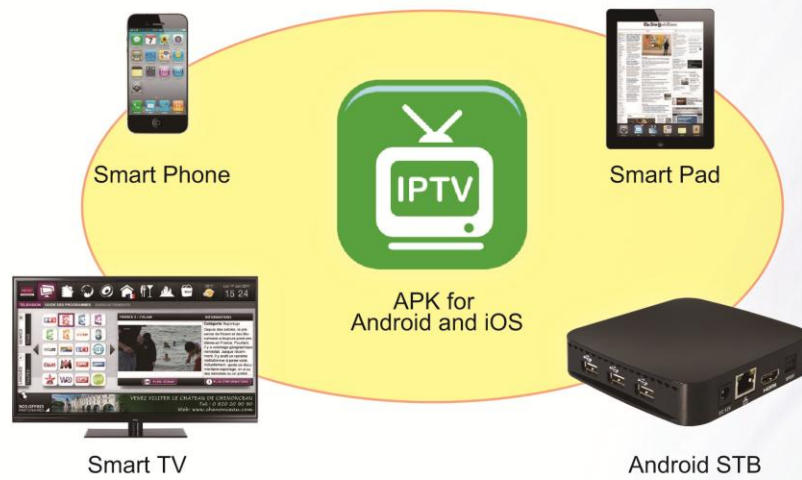


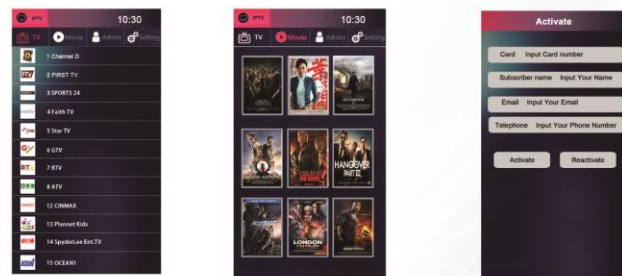
# IPTV/OTT System



Terminal .....



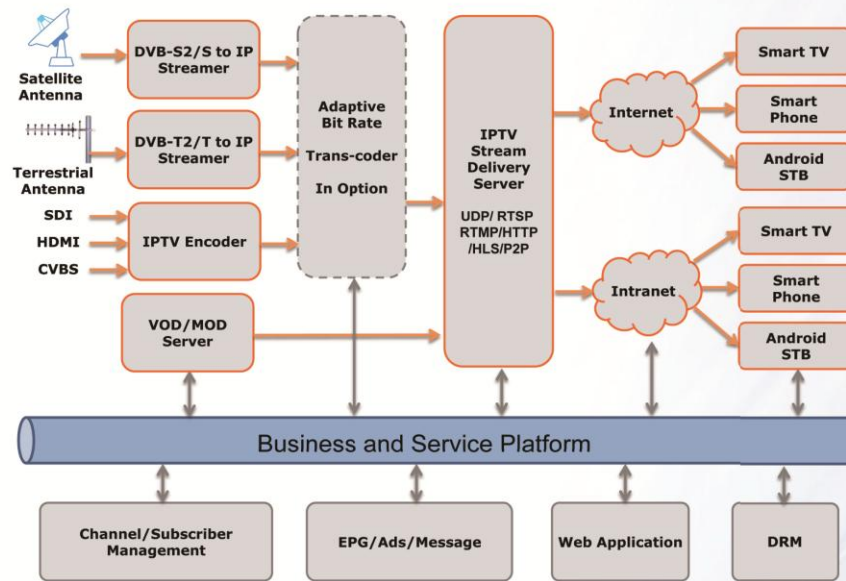
## PHONE &amp; APK -----



## STB &amp; APK -----



## Block Diagram



## Main Feature

- End to end solution with DVB-IP streamer, IPTV encoder, Stream server, VoD server, Service platform, terminals, APK, MMI design
- Support Internet and Intranet
- Live TV Radio, VoD, MoD, EPG, Advertisement and Message push
- Video format MPEG-2/MPEG-4AVC/H.264 SD/HD, HEVC 4K,
- Audio format MPEG1 Layer II, MPEG2/4 AAC-LC, Dolby AC3 path through
- DRM for content protection
- Multi-protocol streaming: UDP, RTSP, RTMP, HTTP, HLS, FTP
- Trans-coding with adaptive bit rate for different IP networks
- Cloud PVR, EPG PVR, Timer PVR
- Service Platform for TV Radio service bouquet building and subscriber management
- APK for Android and iOS multi-terminals: STB, Smart Phone, PAD

## IPTV/OTT Streamer and Delivery Station

### DS-160

- Based on the powerful x86 PC server with Linux operating system
- PCI satellite, terrestrial tuner and encoder input cards
- DVB to IP streamer with demux MPTS to STPS IP streams
- TV and VOD content delivery streaming in HLS format
- Trans-coding H.265, H.264 and MPEG2 assisted by powerful GPU card
- Private DRM for content protection, managed by TMS-100
- Adaptive trans-coding in option





## DVB-IP Streamer

### DCP-3000, DCP-1000, DXP-3800D, DXP-8000D

- 1RU rack with dual power supplies
- Removable cooling fan assembly with alarm & speed control
- Control & Management by Front Panel Menu, Web and SNMP
- 4-24 Way DVB-S2, T2 and C tuner inputs
- CI card with 4 CAM slots to descramble pay TV channels
- 2 TS/IP SFP ports with max 920Mbps output for each port in IGMP v2/v3
- Up to 512 MPTS/SPTS TS/IP outputs,
- Main board with strong TS processing demux and remux
- Optional encoder, trans-coder cards



## H.264 IPTV Trans-coder

### DIH-4000V

- Video compliant with H.264/AVC Baseline, Main & High Profile @ L4.1 or less & MPEG-2 MP@ML
- Up to 4 way H.264 HD or 16 way H.264 SD trans-coding
- Audio compliant with MPEG-1 Layer II Audio, MPEG2 AAC trans-coding
- Support audio pass thru including Dolby AC+ and Multi-audio tracks
- Real time input program bit rate monitoring, TS packet error counter, PSI/SI analysis and CPU resource and temperature monitoring
- Supports TV channel demuxing and re-multiplexing
- Real time output trans-coding statistical report including bit rate, network data path, etc
- Separated TS/IP stream ports and system management port to ensure system security
- PCR self-correction
- PSI/SI edition and PID pass through
- Channel logo and message insertion
- Support 1+1 input stream backup for redundancy
- Remote management with Web GUI
- 3GbE, 2 for TS over IP streams, 1 for system management
- Single power supply, 1RU



## H.264/H.265 IPTV Trans-coder

### DIH-6000V

- Video compliant with H.265/HEVC Baseline, MainProfile@L6.2 or less, H.264/AVC Baseline, Main&HighProfile@L5.1 or less
- H.265/HEVC support 1 way 4K; 8 way HD in 1080P; 16-way HD in 720P and 32-way SD
- H.264/AVC support 16 way HD in 720P and 32 way SD
- Resolution from 96 x 96 to 4096 x 2160
- Input and output bit rate from 200Kbps to 20Mbps
- Support audio pass thru including Dolby AC+ and multi-audio tracks
- PCR self-correction
- PSI/SI edition and PID pass through
- Up to 200 MPTS/SPTS output, 100Mbps for each
- Channel logo and message insertion
- Support 1+1 stream input for redundancy
- Remote management with Web GUI
- 3GbE, 2 for TS over IP streams, 1 for system management
- Single power supply, 1RU, double power supply in option



## IPTV Media Delivery Streamer .....

### MS-8001-B/S/P

#### Main Feature

- Powerful media processing and streaming platform in 1RU rack
- CPU and memory and IP port refer to the configuration table below
- 4 GbE for data input and output configurable, 1 input/ 3 outputs as standard configuration
- Embedded TS demux to split MPTS to SPTS with TV channel management, bandwidth, service ID, service name, etc
- UDP/RTSP/RTMP/HTTP/HLS/FTP IP stream inputs, maximum 800Mbps per GbE
- H.264/MPEG/HEVC TV channel formats
- HLS/RTMP live TV channel streaming output
- HLS/RTMP VOD channel streaming output
- VOD service extension by external server via FTP
- Up to 500 live channels SD @2Mbps
- 2000 hours movies
- Support maximum 5000 users
- DRM en-cryptor for TV content protection, operating with TMS-100 for turn key DRM solution
- Catch TV and PVR via external NAS

Profile	Basic	Standard	Professional
Model	MS-8001-B	MS-8001-S	MS-8001-P
			
CPU	Quad core 1.8GHz	1 x Intel Xeon 2.0GHz (8 core 16 threads)	2 x Intel Xeon 2.0GHz (8 core 16 threads)
RAM	4GB RAM	16G RAM	48G RAM
ROM	120G SSD	4TB (Enterprise-Level)	2 x 4TB (Enterprise-Level)
IP Port	2 x GbE	4 x GbE	2 x 10GbE and 2 x GbE
Live TV	50 channels @ 2Mb/s	200 Channels @ 2Mb/s	500 Channels @ 2Mb/s
VOD	60 hours of Movies @ 2Mb/s	500 hours of Movies @ 2Mb/s	2000 hours of Movies @ 2Mb/s
No. of Client	200 users @ 2Mb/s	1000 users @ 2Mb/s	5000 users @ 2Mb/s
Dimension	134x124x46mm	1U, 445 (W) x 650(D) x 44(H)mm	1U, 445 (W) x 650(D) x 44(H)mm

## IPTV Content and Subscriber Data Server .....

### TMS-100-B/S/P

#### Main Feature

- Content, subscriber management system, hotel information, EPG in 1RU rack
- Inter Xeon 4 core 8 threads CPU, 32GB RAM, 512GB SSD ROM and 2 GbE ports
- Remote Management by HTTP/HTTPS protocol
- Channel management system(CMS) can synchronize and input TV and VoD channels from IPTV Live and VOD Delivery Streamer
- Channel management system(CMS) with edition of program name , association of logo and generation the TV bouquet, VoD bouquet
- Propriety DRM for TV content protection, operating with MS-8001 for turn key DRM solution
- Authorization management system(AMS) can manage up to 5000 subscribers with open close of subscriber's account, allocation of TV and VoD bouquet to each subscriber
- Authorization management system(AMS) can manage multiple terminals, STB, smart phone, PAD and PC
- TV channel EPG edition and generation
- Message and advertisement push
- Hotel information management
- Prepaid card management

Profile	Basic	Standard	Professional
Model	TMS-100-B	TMS-100-S	TMS-100-P
			
CPU	Quad core 1.8GHz	Intel Xeon 3.2GHz (4 core 8 threads)	Intel Xeon 3.2GHz (4 core 8 threads)
RAM	4GB	8GB	32GB
ROM	64G SSD	128G SSD	512G SSD
IP Port	2 x GbE	2 x GbE	2 x GbE
Protocol	HTTP, HTTPS	HTTP, HTTPS	HTTP, HTTPS
No. of Client	200	1000	5000
Dimension	134x124x46mm	1U, 445 (W) x 550(D) x 44(H)mm	1U, 445 (W) x 550(D) x 44(H)mm



# IPTV/OTT STB

## TimBox-IP, G908

### Main Feature

- Android 7.0 Operating System
- ARM Cortex 7 1.5GHz Quad CPU
- Mali-450 quad core GPU for 3D graphics processing
- MPEG2/H.264/H.265 H.264, AVS+,MPEG1,2,4,VC-1,VP6/8 video decoding
- MPEG L1/L2,AAC-LC,HE AAC V1/V2, Dolby in option audio decoding
- Support SD /HD up to 4k@60fps 10-bit high resolution
- IP stream input thru RJ-45 and 2.4G WiFi
- HDMI digital, CVBS analog outputs
- Airplay, Miracast, DLNA DMP(Digital Media Player) technologies
- Private DRM for audio video content protection
- Managed by PBI IPTV/OTT service platform TMS-100:
  1. Live TV channel streaming
  2. VOD streaming
  3. EPG, Message push, advertising
  4. Subscriber management
  5. Channel bouquet management



### Specification

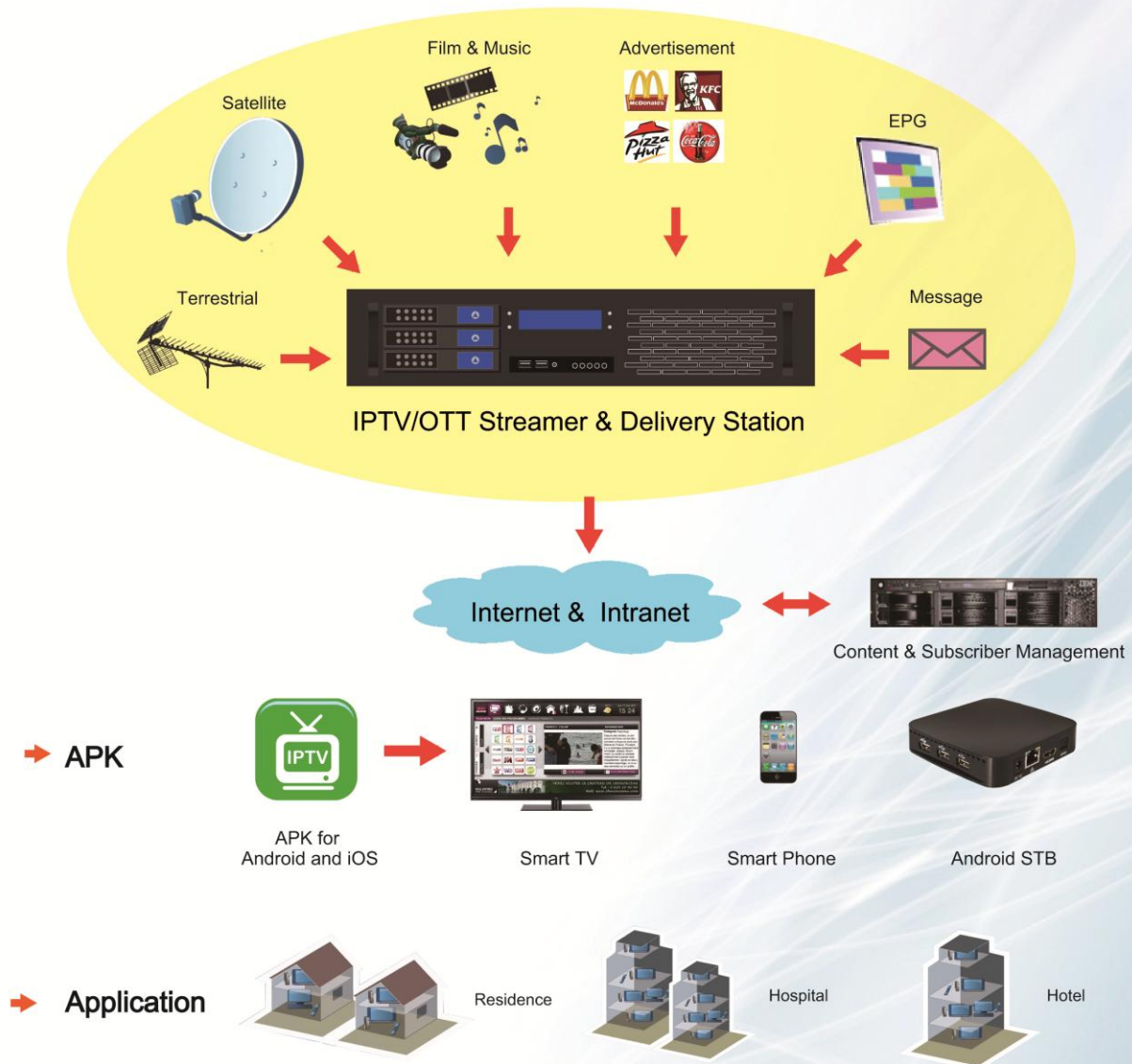
System	
OS	Android7.0
CPU	ARM Cortex-A7 ,up to 1.5GHz
EMMC Flash	4GByte or 8GByte
DDR3	1GByte or 2GByte
Video & Audio Decoding	
Video Decoding	H.264,H.265,AVS,AVS+,MPEG1,2,4,VC-1,VP6/8
Video Output	PAL/NTSC, HDMI
Video Resolution	1080P,2K,4K@30fps
Audio Decoding	MPEG L1/L2,AAC-LC,HE AAC V1/V2,APE,FLAC, Ogg,AMR-NB,AMR-WB, Dolby in option
Audio Mode	Mono, Stereo
Audio Sampling Rate	8KHz,16KHz,11.05kHz,24kHz,32kHz,44.1kHz,48kHz
Image Format	JPEG, PNG,etc
IP Protocol	
Network	TCP/IP, UDP, HTTP
Access Control	PPPoE, DHCP, Static IP address configuration
Interface	
LED	Power ( Orange/Green, Ethernet (Red/Green), Infra Red(Blue)
HDMI OUT	1 x HDMI ; Version 1.4a, HDCP1.2
Infra Red	Remote control
S/PDIF	Optical
ETHERNET	RJ-45 10/100M Base-T
USB	2 x USB2.0
IR Extender	IR Cable(3.5mm phone jack type)
RESET	For STB reboot
WIFI	802.11b/g/n,2.4G
Power Supply	DC Input 12V/2A, <24W
Power Control	Push type button

Software	
Menu	Multi languages, Multi templates for different operator and customization
Service	Live TV, VOD, EPG, Message push, advertising
Multi screen	Airplay, Miracast, DLNA DMP(Digital Media Player) technologies
Content Management	Managed by PBI Service and Data Server, TMS-100 Content Synchronization with PBI Media Delivery Streamer, MS-8001 TV bouquet, VOD creation, classification, supervision EPG, Message and advertisement edition, generation, pushing
Subscriber Management	Managed by PBI Service and Data Server, TMS-100 Subscriber creation, personal information edition Purchase of services by subscribers Management of subscriber right, start and end date, type of service Multi terminal management: STB, smart devices, rooms Electronic money coin management
Supervision	Terminal administration information management Terminal technical information management
DRM	Private content video audio content protection system in operation with PBI Media Delivery Streamer, MS-8001-B/S/P PBI Service and Data Server, TMS-100
Physicals	
Temperature	Work Temperature: 5~45°C Storage Temperature: -10~65°C
Net Weight	About 300g
Net Dimension	120mm(L)×120mm(W)×20mm(H)

Note: All specifications are subject to change without notice

## IPTV/OTT System in 2U Rack

- ➔ **Starter Kit: 200 Subscribers, 50 TV Channels, 10 Films, 100 Musics, Messages, EPG and Ads push in option.**



- ➔ **Sales Business Model: Very Low cost owneship.**
- ➔ **Location Business Model: pay only hardware, Go and pay for software licenses.**

## Application .....



Enterprise



School



Hotel



Hospital