

# THOR BROADCAST

## 8 Channel RF to IP Gateway Datasheet

ATSC 8VSB - Clear QAM - DVB-S/S2 - DVB-T/T2 - ISDB-T to IPTV



### Product Family

8 tuner RF demodulator gateway for converting broadcast RF channels into IPTV transport streams.

### IP Output

UDP, RTP, RTSP. Multicast or unicast streaming over LAN.

### Headend Ready

1RU rackmount design with ASI input/output and web browser management.

### Gateway Operation

Pass-through RF to IP conversion. Preserves the original broadcast video format.

### Program Output

Supports SPTS or MPTS output configuration for IPTV channel lineups.

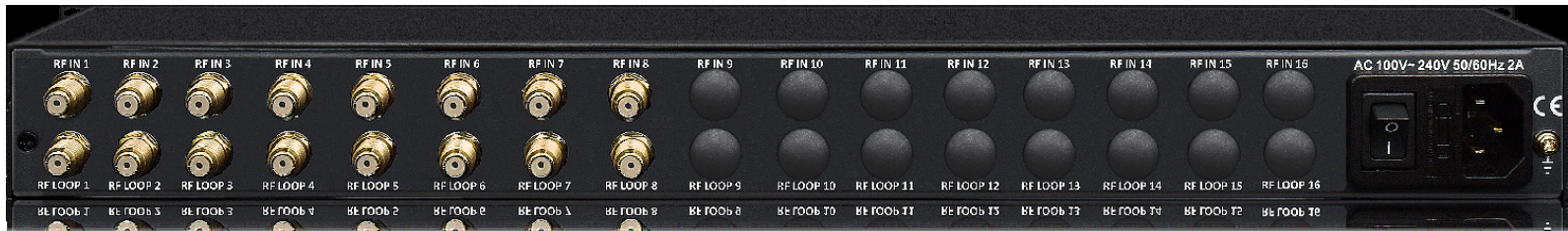
### Typical Endpoints

IPTV STBs, smart decoders, PCs, signage players, tablets, and monitoring systems.

Model Selection - Choose the Correct RF Input Modulation

Model	RF Input Type	Typical Source	Region / Application	Best Application
H-8ATSC-IP	8 x ATSC 8VSB	Off-air antenna	USA, Canada, Mexico, South Korea and ATSC systems	Local broadcast antenna channels to IPTV
H-8QAM-IP	8 x Clear QAM	Cable company or private QAM headend	Clear cable TV systems and private coax networks	Existing QAM RF channel lineup to IPTV
H-8DVBS-IP	8 x DVB-S/S2	Satellite dish / LNB / multiswitch	FTA satellite and private satellite headends	Satellite TV and radio services to IPTV
H-8DVB-T-IP	8 x DVB-T/T2	Terrestrial antenna / MATV	Europe, Africa, Middle East, Asia, Oceania	DVB terrestrial antenna multiplexes to IPTV
H-8ISDB-T-IP	8 x ISDB-T	ISDB-T antenna / RF distribution	Japan, Brazil, Latin America, Philippines and other ISDB-T regions	ISDB-T local broadcast services to IPTV

**Important:** Select the model by the actual RF modulation used in the project. ATSC, QAM, DVB-S/S2, DVB-T/T2, and ISDB-T are different RF broadcast systems and are not interchangeable.



Rear RF inputs: connect coax feeds from the antenna system, cable QAM headend, satellite distribution system, or terrestrial RF distribution network depending on model.

## Core Features and Technical Overview

### RF Input

Up to 8 independent tuner inputs, selected by model: ATSC 8VSB, clear QAM, DVB-S/S2, DVB-T/T2, or ISDB-T.

### IP Streaming

Outputs transport streams over Ethernet using UDP, RTP, or RTSP. Supports multicast or unicast delivery for LAN IPTV systems.

### SPTS / MPTS Modes

Use SPTS to send selected programs as individual IPTV channels, or MPTS to output multiplexed transport streams when required by the headend design.

### ASI Integration

Includes ASI input and ASI output for broadcast transport stream integration, monitoring, and headend workflows.

Parameter	Description
Chassis	1RU professional rackmount gateway
RF Inputs	8 tuner inputs, modulation depends on selected model
IP Output	Transport stream over Ethernet
Protocols	UDP / RTP / RTSP
Delivery	Multicast or unicast
Output Modes	SPTS or MPTS
Video Format	Pass-through from incoming RF stream, such as MPEG-2 or H.264 when present
Audio Format	Pass-through from incoming RF stream, such as MPEG audio or AC3 when present
Management	Web browser control and monitoring
Warranty	2 years

### Gateway Note

This product family converts RF transport streams to IP. It does not transcode or re-encode the video. The receiving IPTV device must support the same video and audio format that is present in the original RF broadcast stream.

Typical RF to IPTV Signal Flow

**1. RF Source**

Antenna, QAM headend, satellite LNB/multiswitch, or terrestrial RF distribution.

**2. H-8 RF to IP Gateway**

Tunes up to 8 RF frequencies and extracts services from each carrier/transponder/multiplex.

**3. IP Network**

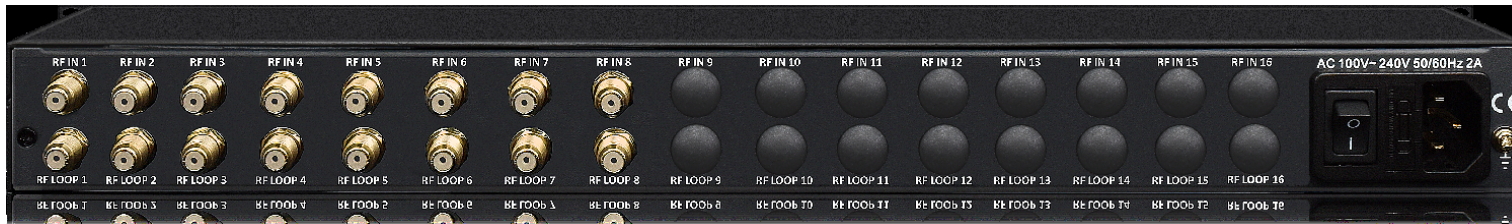
Ethernet switch distributes UDP, RTP, or RTSP streams by multicast or unicast.

**4. IPTV Endpoints**

Set-top boxes, decoders, smart TVs, PCs, signage players, tablets, and monitoring systems.

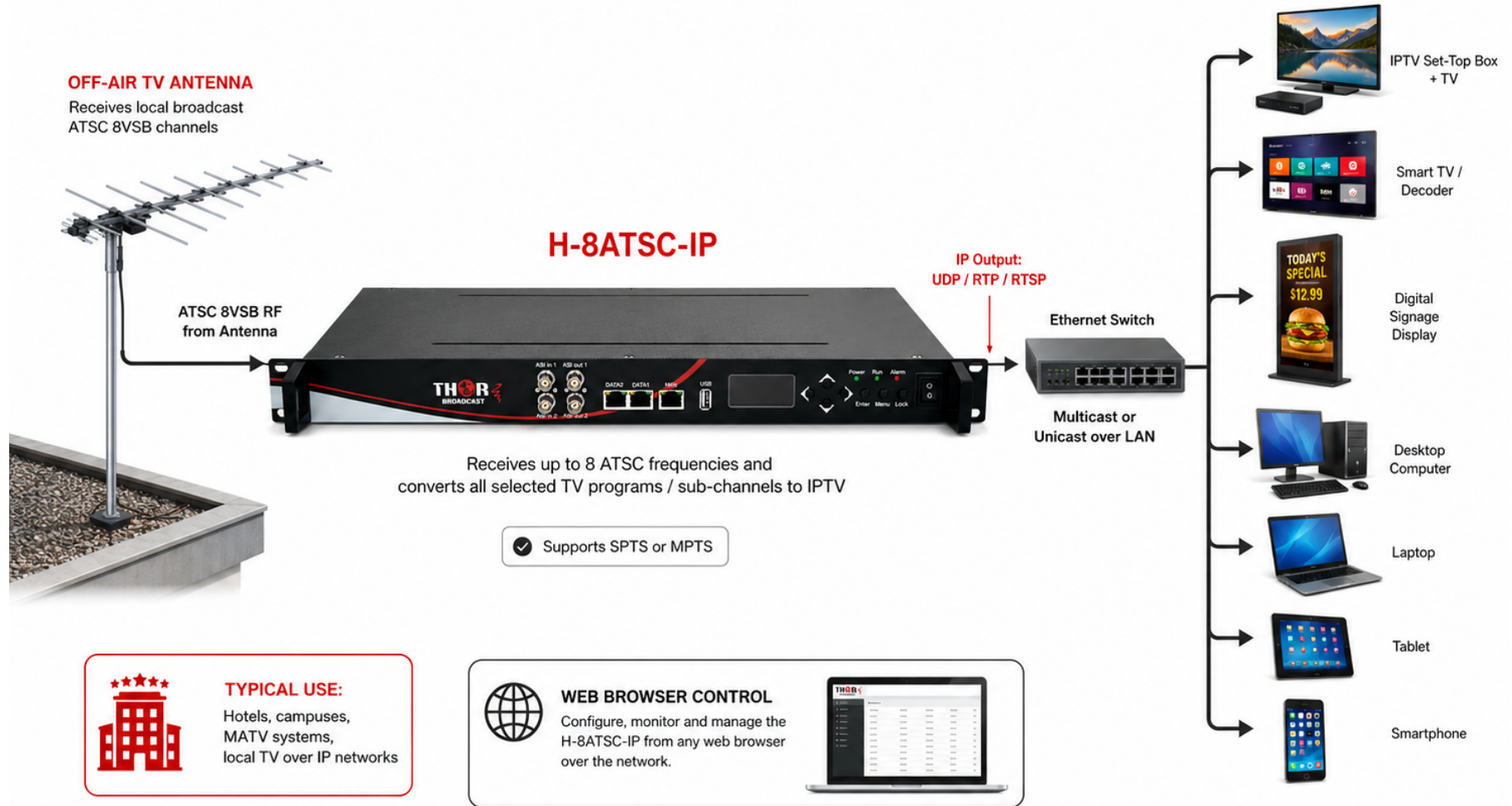


**Example Hybrid RF/IP System:** Thor HDMI or SDI modulators can create QAM RF channels. The H-8QAM-IP can receive those clear QAM channels and convert selected TV services to IPTV streams. Other models receive antenna, satellite, DVB-T/T2, or ISDB-T RF sources in the same platform style.



# H-8ATSC-IP Application Diagram

8 x ATSC 8VSB Off-Air Antenna to IPTV Gateway



# H-8QAM-IP Application Diagram

8 x Clear Cable QAM RF to IPTV Gateway

**OPTION 1: THOR RF HEADEND**

QAM RF channels from Thor modulators



Combined QAM RF Coax

**OPTION 2: CABLE TV COMPANY / MATV**

Clear Cable QAM feed



Clear QAM RF Input



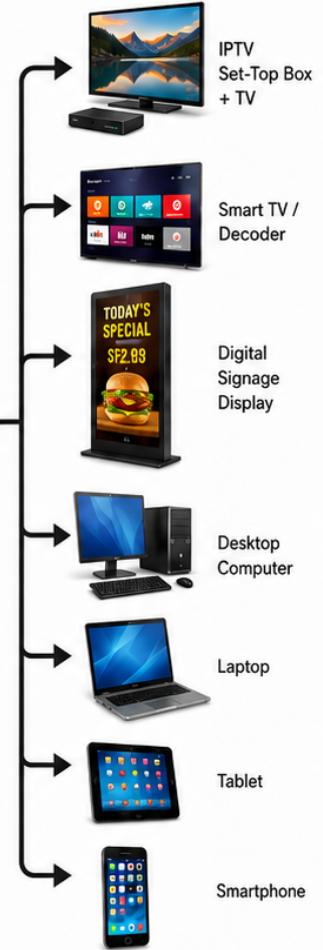
**H-8QAM-IP**

Receives up to 8 Clear QAM frequencies and converts selected TV programs / sub-channels to IPTV streams

✔ Supports SPTS or MPTS

IP Output:  
UDP / RTP / RTSP

Multicast or Unicast over LAN



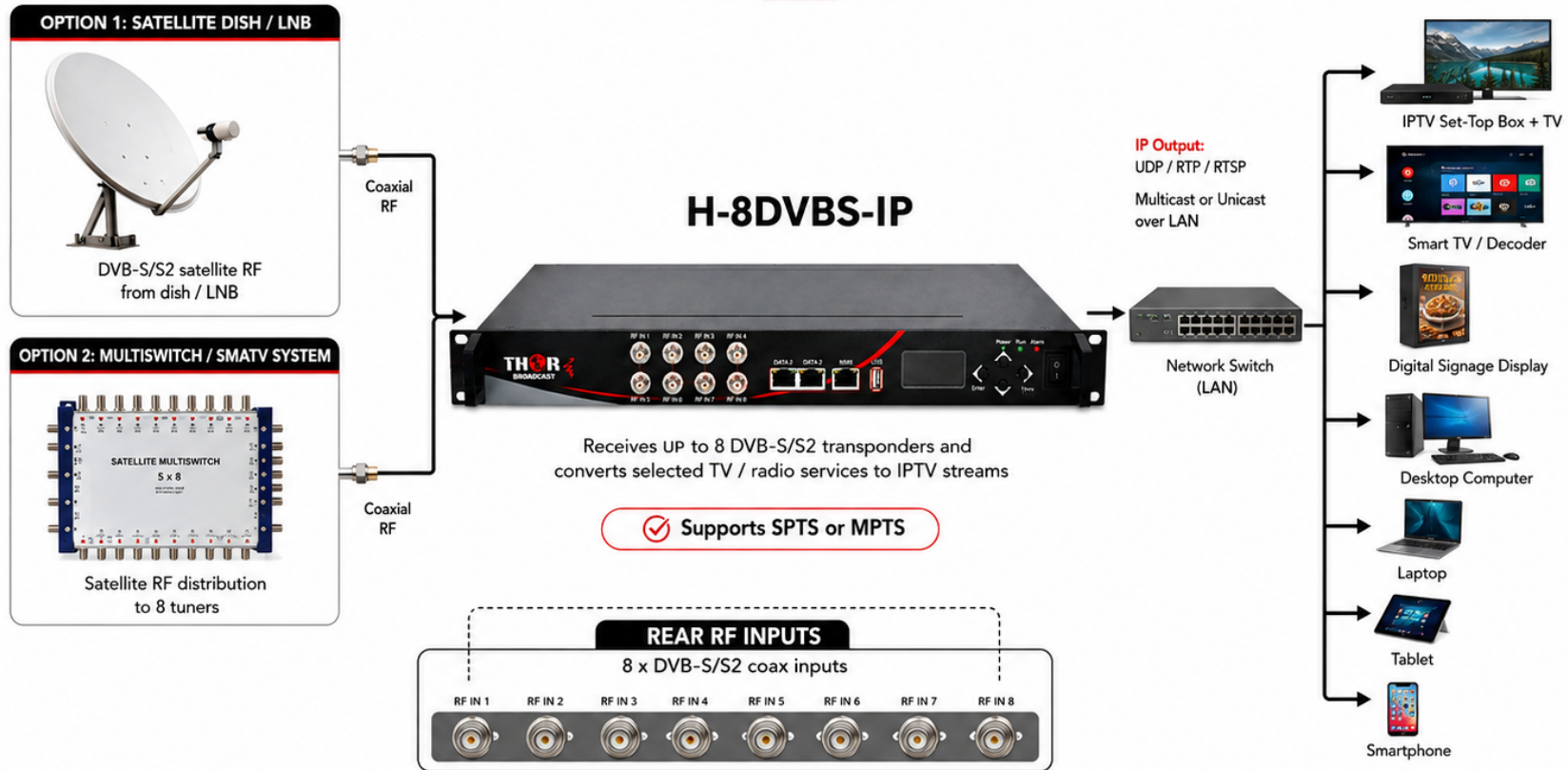
**TYPICAL USE:**  
Hotels, campuses, hospitals, cable TV systems, private headends, commercial buildings

**WEB BROWSER CONTROL**  
Configure, monitor and manage the H-8QAM-IP from any web browser over the network.



# H-8DVBS-IP Application Diagram

8 x DVB-S / S2 Satellite RF to IPTV Gateway



**TYPICAL USE:**  
Hotels, campuses, international TV systems, telecom rooms, private IPTV headends, government and commercial facilities.

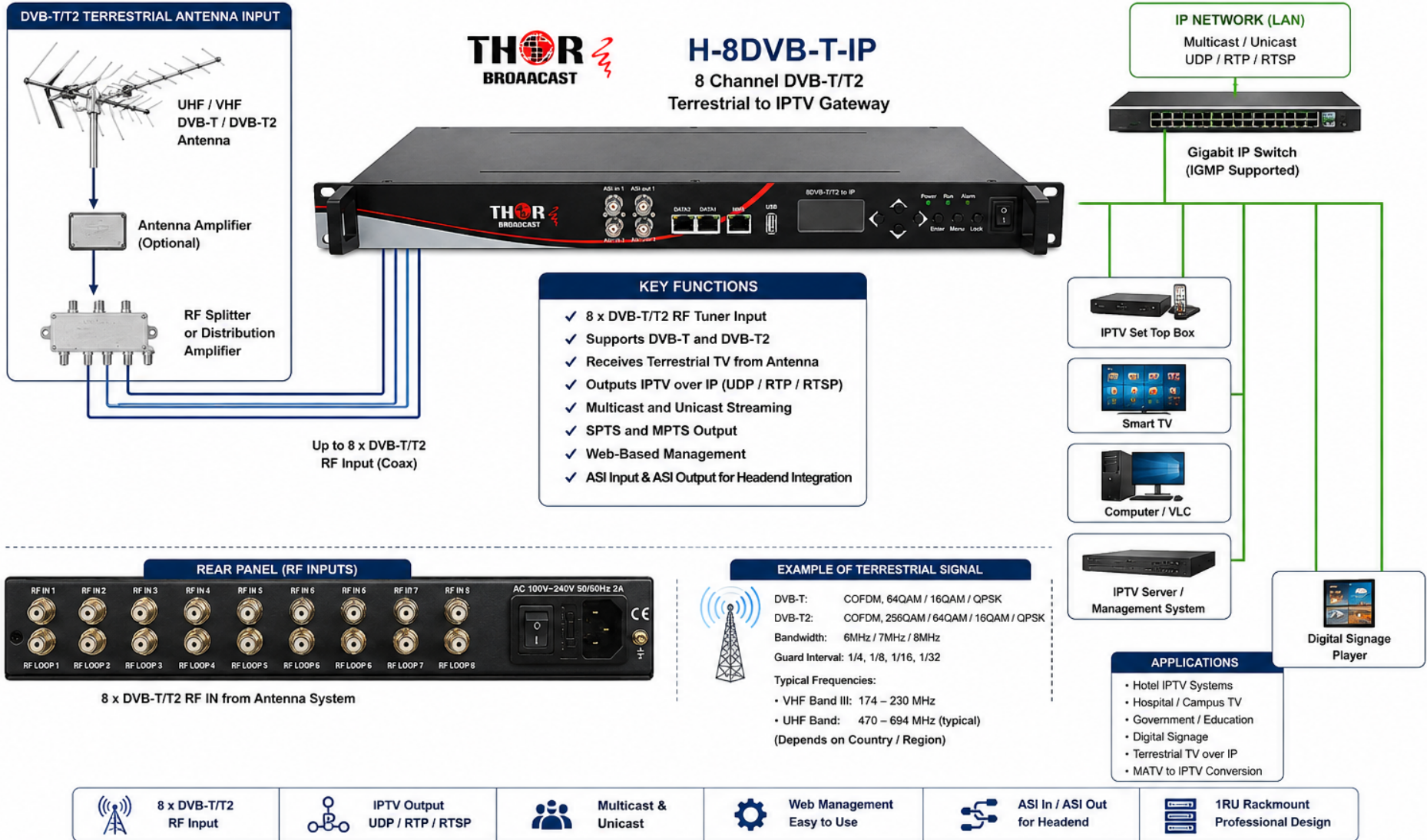


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**WEB BROWSER CONTROL**  
Configure, monitor and manage the H-8DVBS-IP from any web browser over the network.

# H-8DVB-T-IP APPLICATION DIAGRAM

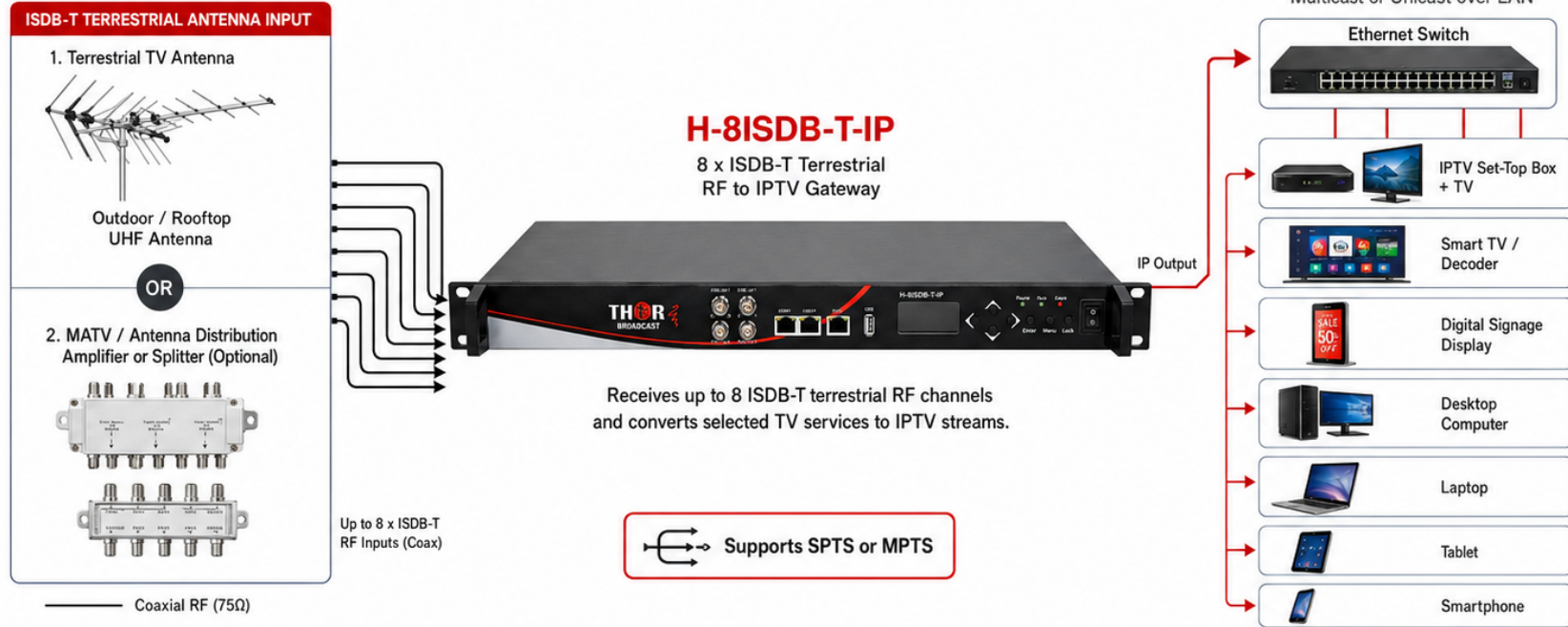
8 Channel DVB-T/T2 Terrestrial Antenna RF to IPTV Gateway





# H-8ISDB-T-IP Application Diagram

8 x ISDB-T Terrestrial Antenna RF to IPTV Gateway



**ISDB-T DETAILS**

- Terrestrial digital TV standard
- Common in Japan and Latin America
- Typically UHF 470–770 MHz
- 6 MHz channel bandwidth
- 1-Seg mobile support
- EWBS emergency alert support

**WEB BROWSER CONTROL**

Configure, monitor and manage the H-8ISDB-T-IP from any web browser over the network.

**TYPICAL USE**

- Hotels
- Campuses
- Hospitals
- Government
- Telecom Rooms
- Private IPTV Systems

**COUNTRIES USING ISDB-T**

Japan, Brazil, Argentina, Chile, Peru, Uruguay, Paraguay, Bolivia, Ecuador, Venezuela, Costa Rica, Guatemala, Honduras, Nicaragua, El Salvador, Philippines, Maldives, Sri Lanka, Botswana, Angola.

8 x ISDB-T RF Inputs	IP Output UDP / RTP / RTSP	Multicast or Unicast	Web Management Easy to Use	SPTS or MPTS Streaming	Reliable & Stable	1RU Rackmount Professional Design
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Question	Why It Matters
What RF standard is used?	Determines the correct model: ATSC, QAM, DVB-S/S2, DVB-T/T2, or ISDB-T.
How many RF frequencies need to be received?	Each chassis supports up to 8 RF frequencies/tuners. Use multiple units for more frequencies.
How many programs are inside each RF channel?	One RF channel can carry multiple TV services or sub-channels, depending on the broadcast system.
Are the services clear or encrypted?	The gateway is intended for clear/authorized streams. It does not decrypt protected services.
Do endpoints support the incoming video format?	The unit passes through the broadcast format. Endpoints must support the original codec and audio type.
Will the network use multicast?	For multiple viewers, use managed switches with IGMP support for efficient multicast IPTV.

## Thor Broadcast 8 Channel RF to IP Gateway Family

A flexible professional gateway platform for bringing RF broadcast, cable, satellite, and international terrestrial television signals into modern IPTV distribution systems.

**Website Summary:** 8 Channel RF to IP Gateway for ATSC, Clear QAM, DVB-S/S2, DVB-T/T2, and ISDB-T inputs. Supports IPTV output over LAN using UDP, RTP, RTSP, multicast or unicast, with SPTS/MPTS operation, ASI input/output, web management, and 1RU rackmount design.