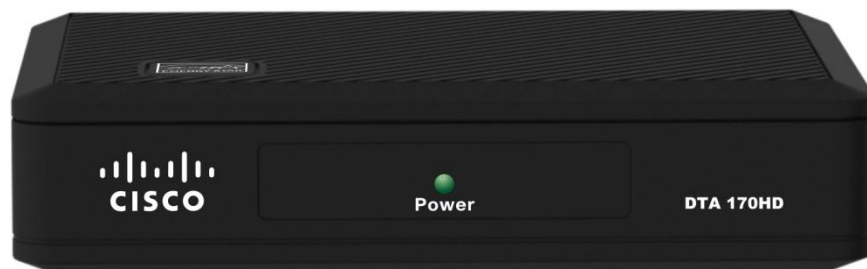# Cisco Digital Transport Adapter 170HD

The Cisco® Digital Transport Adapter (DTA) 170HD is a flexible solution that allows cable operators to transition to an all-digital network. This device, with its High Definition (HD) and Standard Definition (SD) capability and PowerKEY® Conditional Access, allows service providers to reclaim bandwidth for IP network transitions and expand HD offerings to all subscribers.

The DTA 170HD has earned the ENERGY STAR® [1].

Figure 1. DTA 170HD

Features

- High Definition and Standard Definition MPEG-4 and MPEG-2 Decode
- Digital-only QAM tuning up to 1 GHz
- HDMI™ and Channel 3 / 4 NTSC output
- Simple user interface for parental control, closed-caption, language, and output format
- PowerKEY Conditional Access mode provides digital security using an RSA encryption for operation with new or existing Cisco Digital Network Controller Systems (DNCS)[2]
    - Offer high-value linear content, including HD Premium channels
    - Competitive channel packages 'right-sized' to market needs
    - Controlled using conventional Cisco DNCS methodology
- Universal DTA (uDTA) mode provides control and content protection for Basic or Extended Basic channels in networks supporting uDTAs [3,4]
- Small form factor for unobtrusive placement
- OPTIONAL: Easy-to-use DTA remote control
    - Controls DTA and TV Power On/Off, Volume Up/Down and mute
- OPTIONAL: Subscribed Channels List for easy channel identification and selection
- OPTIONAL: Accessories Pack includes 2-Function IR Remote Control, Hook & Loop mounting squares, 6 ft HDMI Cable, 5 ft Coax RF Cable, and 3 ft IR Extender cable

Figure 2. DTA 170HD Front Panel

Table 1. Front Panel Features

Feature	Description
Controls	IR receiver lens (57 kHz, SA Protocol)
Indicators	Red/Green single LED, indicates standby/on power state, indicates remote command received, indicates service feedback
Color	Black finish, Black Lens, White Text
Branding	Cisco, DTA 170HD
Labels	Power

Figure 3. DTA 170HD Back Panel

Table 2. Back Panel Features

Feature	Description
Connections In	Cable In F- Connector, IR Extender Port
Connections Out	HDMI, TV Out F-Connector
Output Resolutions	HDMI: 1920 x 1080i 60 Hz, 1280 x 720p 60 Hz, 720 x 480i 60 Hz, 720 x 480p 60 Hz TV-Out: NTSC Channel 3 / 4, up to 720 x 480i 60 Hz
Output Control	Channel, Aspect Ratio-stretch 4:3 to wide, Aspect Ratio-zoom 16:9 to center 4:3, Second/Multiple Audio, BTSC, Audio Language, Closed Caption Rendering, Parental Control by rating and channels
Power Input	DC Power input, 5 VDC, 1.5 A or less
Power Supply	External, 100-120 VAC, 50-60 Hz, Wall Mount, US-type plug, 6 kV lightning
Labels	CABLE IN, TO TV, HDMI, IR IN, POWER +5 VDC IN
Labels Bottom	Cisco, Model, Assembly P/N, Rev, Date Manufactured, SN, MAC, FCC, RSA, Made In, UL

Figure 4. DTA 170HD Bottom Panel

Product Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
Tuning	QAM 64 or 256, In-Band 54-1.0 GHz, SCTE-65, ITU-T J.83 Annex B, 6 MHz channel spacing QPSK out-of-band (OOB) 70-130 MHz, Forward Data Channel, SCTE 55-2 MoCA™ tuning immunity, 5 V/m immunity
Video Decoders	MPEG-4 (H.264) up to HP@L4.0 (HD), MPEG-2 up to MP@HL (HD), 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz
Audio Decoders	MPEG-1, MPEG-2, Dolby™ Digital, Second/Multiple Audio
CA/Encryption	PowerKEY Conditional Access[2], RSA Encryption, uDTA content protection[3, 4], Internal Secure Processor, Hardware Assist to CA, Tamper Resistant Package, HDCP on HDMI, CGMS-A on Channel 3 / 4 Out
Memory/Storage	
RAM	128 MB
Flash	8 MB
Processors	
CPU	Minimum 500 DMIPs CPU
Graphics	On-screen display graphics plane, advanced 2d graphics accelerator, English UI, Spanish UI, French UI

Specification	Value
Packaging	
Package	Cartons from at least 70% recycled craft, Cushioning from 100% recycled craft, Unit bag from recyclable polyethylene, Pallet from recyclable composite or wood, 1 unit per carton, 16 cartons per multi-unit carton, 512 cartons (32 multi-unit cartons) per pallet
Package Label	Cisco brand, DTA Model, DTA Part Number, DTA Serial Number, Build Date, Hardware Version
Dimensions	
Product (WxHxD)	4.5 in. x 1 in. x 3.5 in. (114 mm x 26 mm x 89 mm), excluding connections
Product Weight	0.35 lbs (0.16 kg)
Unit Carton (WxHxD)	9.6 in. x 2.8 in. x 8.3 in. (243 mm x 72 mm x 210 mm)
Unit Total Weight	1.7 lbs (0.75 kg)
Multi-unit Carton	16 units
Multi-unit Carton (WxHxD)	24.1 in. x 9.7 in. x 20.1 in. (611 mm x 246 mm x 510 mm)
Multi-unit Total Weight	37 lbs (16.8 kg)
Pallet Units	512 units (32 Multi-unit Cartons)
Pallet Total (WxHxD)	48 in. x 78 in. x 40 in. (1222 mm x 2088 mm x 1020 mm)
Pallet Total Weight	Approximately 1220 lbs (555 kg)

Figure 5. DTA 170HD with IR Accessory Kit in Self-Install Kit

Environment Specifications	
Placement	Locate with at least 2 inches of open space above and on each side
Operating Temperature	32° to 104°F (0° to 40°C) during operation
Storage Temperature	-10° to 130°F (-20° to 55°C) during storage
Power Dissipation	5 W average, ENERGY STAR (version 3, 2011)

Ordering Information

Table 4.   Ordering Information

Model	Description	Part Number Set-Top Only
DTA 170HD w/ IR Accessory Kit	DTA 170HD, HD pk/uDTA, IR Accy Kit (multiples = 16) Channel 3/4 out, HDMI out, IR-57 kHz remote control interface, uDTA/PowerKEY CA, Power Supply, and Accessory Kit IR-57 (HDA-IR2 Remote Control, Attach Squares, IR-57 Extender Cable 3 ft, RF Coax Cable 5 ft, and HDMI Cable 6 ft)	4040184 (see Note 4)

Table 5.   Accessories

Optional & Replacement Components		
	Description	**Part Number**
	HDA-IR2 DTA Remote Control (multiples = 200) 57 kHz IR, SA Protocol, two-function with TV power, volume, and mute, includes batteries Keys: DTA Power, TV Power, Info, 0-9 Digits, Last, Menu, Enter, Exit, Channel +/-, Right/Left, Page +/-, Volume +/-, Mute, Program	1011698
	IR-57 Extender Cable, 3.5 mm Connector, 3 ft (1 m) (multiples = 200)	4031907
	Coax Cable, F-Connector, 5 ft (1.5m) (multiples = 200)	1009733
	HDMI Cable, Type A-Male Connector, 6 ft (1.8m) (multiples = 200)	1011540
	Power Supply, External, 5 V/7.5 W, DTA-HD (multiples = 200)	4040095
	Accessory Kit, DTA-HD, IR-57 (multiples = 16) (for redeploying churn HD DTAs) Carton w/Scan Window HDA-IR2 DTA remote and batteries IR-57 Extender Cable Coax Cable HDMI Cable Power Supply Attach Squares	1011721
Software		**Part Number**
	HDA 2.5 Software (bundle of 16 unit licenses) for pkDTA mode	4042991 (see Note 2)
	SP SAS SV – 1 yr Support, Software, HDA 2.5 (bundle of 16)	SP-SAS-4042991
	HDA 2.0 Software (bundle of 16 unit licenses) for uDTA mode	4042992 (see Notes 3, 4)
	SP SAS SV – 1 yr Support, Software, HDA 2.0 (bundle of 16)	SP-SAS-4042992

Notes:

1. Set-top boxes that earn the ENERGY STAR reduce greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. ENERGY STAR is a registered mark owned by the U.S. government.

2. Compatible with Cisco's Digital Network Controller Systems (DNCS) using System Information (SI) formatted per SCTE 65 delivered out-of-band that is typically used in North America. Not compatible with Cisco's DNCS using SI formatted per DVB.

3. Digital Transport Adapter Control System (DTACS) required in Cisco Controller networks or equivalent in non-Cisco Controller networks.

4. Products with uDTA mode compatibility limited to USA-only.

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