

HDS3600 SERIES

Multi-Format Distribution Platform



The TeleDelta HDS3600 Series platform is a space conscious 1RU modular platform, for DVB-T/C, IPTV, satellite DVB-S/S2 content management and distribution.

Selectable input and output modules including DVB-S/S2 Tuners, COFDM DVB-T, conditional access, HDMI/SDI/CVBS encoding/decoding modules and SPTS/MTPS IP and ASI input/out make the HDS3600 series a flexible content distribution platform

HDS3600 Series Key Features

- Support HD / SD MPEG 2 and H.264 Multi-bit-rate configurations
- DVB Table Management
- IPTV and RF delivery configurations
- Local and Remote Web Management
- Modular design—choose your required input/output configuration
- DVB-S/S2, DVB-T/T2/C, HDMI/SDI/CVBS encoding/ decoding modules, CI, ASI/ IP modules
- MPEG2 / MPEG4 SD/HD encoding options

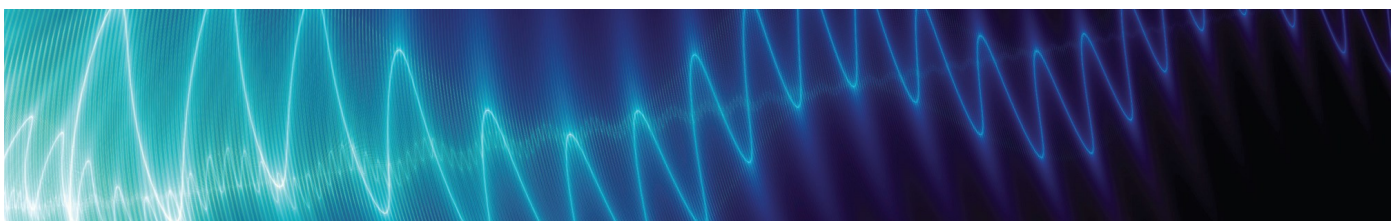
Common Applications

- IPTV / DVB-T Networks
- Broadcast Facility Play-out
- Live / Streaming Platforms
- Mining Camps
- Enterprise Deployments
- Retirement Villages
- Remote area communities
- Digital TV Black-spots

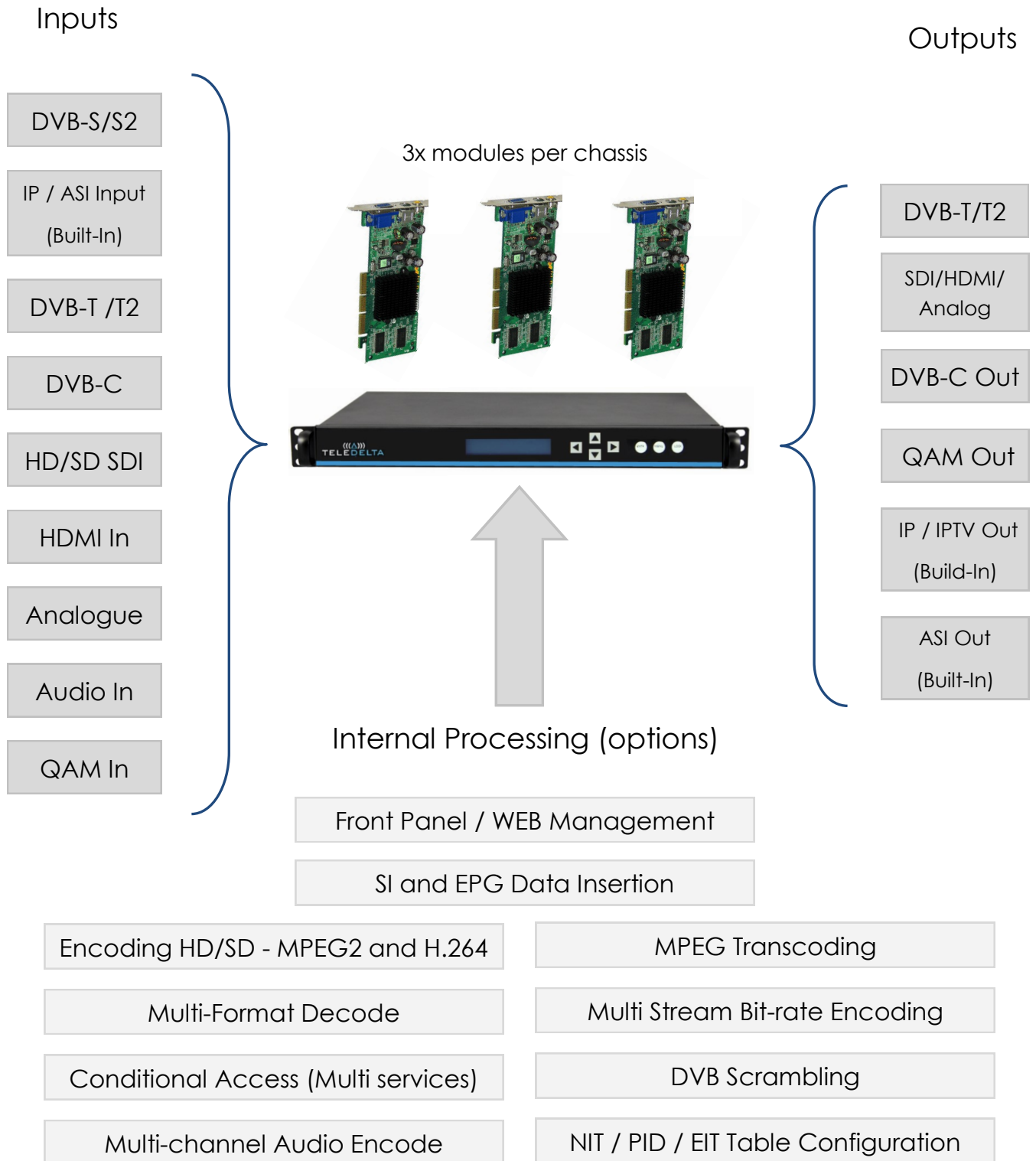
Control and Management

The TeleDelta HDS3600 built-in network management offers automated control and monitoring functionality. Based on the HDS integration agent users can manage and configure all parameters of each individual module and each unit independently or as a full system, Supporting SNMP, the TeleDelta HDS3600 series can be customised for different system applications.

For more information please contact your local distributor or sales@teledelta.com



HDS3600 SERIES Configuration Diagram

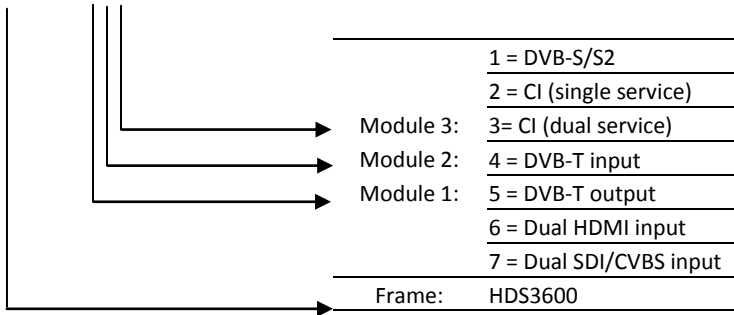


Ordering Options

Part No.	Ordering Suffix	Description
Frames:		
HDS3600		HDS3600 1RU Frame, 3 Modules - 2xASI in/out + IP Streaming + Management
Modules:		
HDS-MOD-S/S2	1	HDS3600 DVB-S/S2 Input Module
HDS-MOD-CI-1	2	HDS3600 Conditional Access (single-service)
HDS-MOD-CI-2	3	HDS3600 Conditional Access (multi-service)
HDS-MOD-DVBT-In	4	HDS3600 Four Input DVB-T Tuner module
HDS-MOD-DVBT-out	5	HDS3600 Four Output COFDM Tuner module
HDS-MOD-HDMI(2)	6	HDS3600 Dual HDMI Encoder module (MPEG4) *
HDS-MOD-SDI/AV(2)	7	HDS3600 Dual HD/SD-SDI / CVBS Encoder module (MPEG4) *
HDS-MOD-SDI-DEC	8	HDS3600 Dual HD/SD-SDI & HDMI Decode output module
HDS-MOD-BLANK	0	HDS3600 Blank Module

How to Order

HDS 3600 - 135



Ordering Examples

HDS3600-400	RF (DVB-T) to IPTV gateway
HDS3600-130	Satellite to IPTV
HDS3600-135	VAST to DVB-T/IPTV
HDS3600-665	HD HDMI encoder to RF/IP

HDS3600 Chassis configuration - Individual module configurations, refer to www.teledelta.com

IP Interface

Interface	1 x 1000 per port
IP Encapsulation	MPEG TS over UDP/RTP
MPEG TS	MPTS and SPTS
Addressing	Unicast and Multicast
Management	IGMPv1, v2 and v3

ASI Interface

Interface	4x BNC connectors 2x Input, 2x output
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Physical and Environment

Power	220-260V
Consumption	Approx. 50w
Rack Space	1RU
Dimensions (WxHxD)	480x44x440mm
Operating Temperature	0-50degrees



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|----------------------------|-----------------|
| 1. ASI Input (2x Inputs) | 5. Module Slots |
| 2. ASI Output (2x Outputs) | 6. Power |
| 3. Management | |
| 4. TS/IP Out | |

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Module Specifications

DVB-S/S2 Satellite Receiver Module	
Inputs	4x RF Inputs, 75ohm
Frequency Range	950-2150 MHz
Constellation	QPSK, 8PSK
FEC Mode (DVB-S)	1/2, 2/3, 3/4, 5/6, 7/8
DVB-S2	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
Signal Level	(-65dBm) ~ (-25dBm)
Symbol Rate (QPSK)	1M ~ 45MBauds
8PSK	1M ~31.5MBauds
22KHz	18~26 KHz
Per RF input bitrate	up to 150Mbps
Standard:	EST300421, ETS302307

DVB-T Receiver Module	
Inputs	4x RF inputs, 75ohm
Frequency Range	50 ~ 860 MHz
Constellation	QPSK, 16QAM, 64QAM
FEC Modes	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval	1/4, 1/8, 1/16, 1/32
OFDM spectrum	2K and 8K
Signal Level	(-80) ~ (-20dBm)
Channel Bandwidth	7Mhz
Per RF input bitrate	Up to 31.7Mbps
Standard	ETS300744

DVB-CI Module	
Connector	PCMCIA Dual CI slots
CA Module	Multicrypt/ Simulcrypt, Hot Plug
CAS Support	Irdeto, Conax, Viaccess, Norel-SupperTV, CTI, Nagravision
Standard	EN50221

COFDM Output Module	
Outputs	1 Connector for 4x RF outs
Transmission Mode	2K and 8K
Guard Interval	1/4, 1/8, 1/16, 1/32
Constellation	QPSK, 16QAM, 64QAM
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Output Level	90 ~112 dBuV (4 channels)
	90 ~ 115 dBuV (1 channel)
Output Frequency Range	50 ~ 858Mhz
Output frequency step size	50kHz



HDS3600 SERIES

Module Specifications

IP Output /Management	
Interface	1 x 1000 per port
IP Encapsulation	MPEG TS over UDP/RTP
MPEG TS	MPTS and SPTS
Addressing	Unicast and Multicast
Management	IGMPv1, v2 and v3
ASI In/ Output	
Interface	4x BNC connectors
	2x Input, 2x output

SDI / CVBS Encoder Module (MPEG4) - (MPEG2 - TeleDelta HDS2800 series)	
Inputs	2x SDI/ CVBS (BNC) 2x Audio inputs (bal and unbal)
Encoder Format	
Video	MPEG4 4:2:0 H.264-AVC HP@L4
Audio	MPEG1/2 Layer 1, 2
Video Standard	PAL
Aspect Ratio	4:3 and 16:9
Video Resolution	1080i, 720p, 576i, 480i
Sampling Frequency	33, 44.1 and 48KHz
Audio Mode	Stereo, joint stereo, dual channel, mono
Encoding Bitrate	Video: CBR and VBR 1.0 ~ 20.0Mbps Audio: 32 ~ 384Kbps

HDMI (SD and HD) Encoder Module (MPEG4) - (MPEG2 - TeleDelta HDS2800 series)	
Inputs	2x HDMI
Encoding Format	
Video	MPEG4 4:2:0 H.264-AVC HP@L4
Audio	MPEG1/2 Layer 1,2
Video Resolution	1080i, 720p, 576i, 480i
Sampling Frequency	32, 44.1 and 48KHz
Audio Mode	Stereo, joint stereo, dual channel, mono
Encoding bitrate	Video: CBR and VBR 1.0 ~ 20.0Mbps Audio: 32 ~ 384Kbps

SDI & HDMI Decoder / Output Module	
Outputs	2x HD/SD-SDI and 2x HDMI connectors
Supported Resolutions	1080i, 720P, 576i
Decoding Formats	MPEG-2 (SD 4:2:0 MP@ML) (HD 4:2:0 MP@HL) MPEG-4 AVC (SD MP@L3) (HD MP@L4/ HP@L4)
Supports program / PID decoding	
Subtitle	DVB/ EBU subtitle and closed caption
Audio Decoding	
Optional Audio Formats (Licenced)	Dolby Digital, AAC (MPEG-2, MPEG-4 HE v1.2, MPEG-4/LC)
Audio Channel	Left/Right, Stereo

