



Multi-Channel HEVC Encoder

# HC32000E



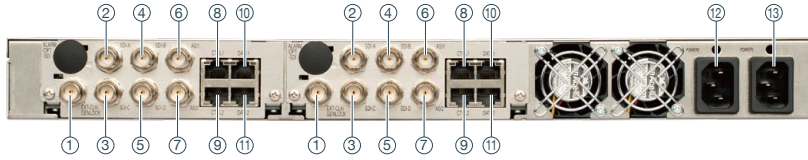
# Multi-Channel HEVC Encoder

The best answer to deliver sporting events with high density of 4k x 2ch/HD x 8ch encoding in 1RU.

## Key Features

- **World leading quality image and high performance encoder**  
 High image quality, high performance and reliability from NTT Electronics' designed H.265/HEVC Encoder chipset.
- **High Density, Multi-Channel Encoding**  
 Up to 2 x 4K ch/8 x HD ch in 1 RU.  
 The perfect density always available for any transmission, such as sporting events, live events and news gathering.
- **Supports BISS-1, BISS-2/CA of encryption Industry standard format**  
 Supports BISS-2/CA which is the latest scrambling protocol to guaranteed the highest security of the stream.
- **Selectable audio formats and maximum 64ch discrete audio performance**  
 64ch audio is enough number to support global multi-language transmission. MPEG-1 LayerII and AAC (at 2ch video encoding only) as an encoding format, and SMPTE302M and DolbyE pass though are supported
- **Dual Power Supply**  
 Built in Dual Power supply.

## Rear Panel



- ① GENLOCK
- ② SDI A
- ③ SDI C
- ④ SDI B
- ⑤ SDI D
- ⑥ ASI1
- ⑦ ASI2
- ⑧ CTRL1
- ⑨ CTRL2
- ⑩ DATA1
- ⑪ DATA2
- ⑫ AC inlet1
- ⑬ AC inlet2

## Specifications

Video	Input Interface	BNC: 3G-SDI (SMPTE ST 424)/HD-SDI (SMPTE ST 292)	
	Output Interface	BNC: 3G-SDI (SMPTE ST 424)/HD-SDI (SMPTE ST 292)	
	Encode Method	H.265/HEVC	H.264/MPEG-4 <sup>OP2</sup>
	Profile ; Level	Profile: Main 4:2:2 10, Main 10, Main Level : 5.1, 4.1, 4	Profile: High4:2:2, High10, High, Main Level : 4.2, 4.1, 4.0, 3.2, 3.0
	Video Format @ Frame Rate	2160P(3840 x 2160)@ 50Hz, 59.94Hz ; max.2PES 1080P(1920x1080)@ 50Hz, 59.94Hz ; max.6PES 1080I (1920x1080)@25Hz, 29.97Hz ; max.8PES	1080I (1920/1440x1080)@25Hz, 29.97Hz ; max.8PES
Audio	Input Interface	Embedded Audio 16ch(SMPTE ST 299)	
	Encode Method	MPEG-1 L2: 1ch(Mono), 2ch(Dual Mono), 2ch(Stereo) ; max.32PES SMPTE302M: 2ch, 4ch, 6ch, 8ch ; max.16PES MPEG-2 AAC-LC: 1ch(1/0), 2ch(1+1), 2ch(2/0), 4ch(3/1), 5.1ch(3/2/1), 6ch(2/2/2) ; max.8PES MPEG-4 AAC-LC: 2ch(2/0), 4ch(3/1), 5.1ch(3/2/1) ; max. 8PES MPEG-4 HE-AACv1: 2ch(2/0), 5.1ch(3/2/1) ; max. 4PES MPEG-4 AAC-ELD: 2ch(2/0), 4ch(3/1), 5.1ch(3/2/1) ; max. 4PES	
Ancillary	Data Format	SMPTE ST 2038 (at 2ch video encoding only,1PES/TS)	
Transport Stream (TS)	Output Interface	DVB-ASI: BNCx4(0.8Vp-p 75Ω); IP : 100BASE-TX/1000BASE-T(RJ-45)x4 RTP/UDP/IP(SMPTE2022-2-2007, RFC2250, RFC3550, RFC1889), Unicast/Multicast	
	Output Type	MPEG-2 TS(188/204byte)	
	Maximum Number of TS	4TS *When 8 video PES encoded in 2TS, each TS has 4x video PES (in case of 1080i) *When 4 video PES encoded in 4TS, each TS has 1x video PES (in case of 1080i/1080p)	
	Maximum Number of PES (Per1TS)	Video:4PES, Audio: 16PES	
	Maximum TS Rate (Per 1TS)	2TS : 200.000Mbps、 4TS : 100.000Mbps	
	TS Encryption <sup>OP1</sup>	BISS-2 1/E/CA, BISS-1 1/E	
	TS over IP	Output Interface	100BASE-TX/1000BASE-T(RJ-45)x4
Network Features		IPv4: IGMPv2/v3, IPv6: MLDv2	
Transmission		RTP/UDP/IP(SMPTE2022-2-2007, RFC2250, RFC3550, RFC1889), Unicast/Multicast	
Error Correction		FEC(SMPTE2022-1-2007/Pro-MPEG COP#3 R2), ARQ	
Test Signal	Video: Color-bar signal, Audio: 1kHz sine wave(-18/-20 dBFS)		
Control	Local Control	LCD(20digitsx4/brightness control available)+ Front Switch(7 buttons)x2	
	Network Interface	100BASE-TX/1000BASE-T(RJ-45)x4	
	Remote Control	Web GUI, SNMP v1, Ping, Syslog	
Others	Dimensions	W: 433xH: 44xD: 430(mm) (w/o Connector, Foot, Rack mount bracket)	
	Weight	8kg typ.	
	Supply Voltage	AC100V to 240V, 50/60Hz (Dual power supply for redundancy)	
	Power Consumption	300W max.	
	Operating Environment	0 to 45°C, 30 to 90% (non condensing)	
	Compliance	RoHS, VCCI, FCC, ICES, CE, UL, CSA	

	Suffix	Option Name	Description
Software	OP1	HC3x000E_OP_BISS2	BISS-2/-1 Encryption
	OP2	HC3x000E_OP_AVC10	H.264/MPEG-4 AVC 10bit Encoding
	OP3	HC3x000E_OP_ULDELAY	Super Low Delay Mode

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**Caution** Please use our products in accordance with the instructions provided in the manual, user's guide or specifications attached.



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