

VC-870/VD-870

H.265 (MPEG-H/HEVC) Real-time Codec For 2K

The VC-870/VD-870 is a hardware-based half rack size CODEC, which supports perfectly H.265 as well as H.264 formats to features premium quality of SD and HD , with Ultra Low-Delay processing, optimized by NEC's original technology.

Adoption of H.265 meets the users' demand such as higher quality of Video than H.264 or MPEG-2 coding. Besides, it can effectively contribute towards your cost-effective operation by saving transmission bit rate.



Encoder: VC-870



Decoder: VD-870

Features

- Ultra Low-Delay
 - Original low delay technology
 - 20msec to 300msec for ultra low-delay mode
 - 600msec to 1500msec for normal delay mode
 - *Transmission delay is excluded
- Video Codec
 - H.265 | HEVC
 - H.264 | MPEG-4/AVC (option)
 - Main10@Level4.1 High Tier
 - High Quality Video Coding supported by NEC unique algorithm
- Audio Codec
 - MPEG-2 AAC, MPEG-1Layer2, LPCM
 - MPEG4-AAC ELD (for Ultra Low Delay)
 - Dolby AC-3/ Dolby E pass through
 - *Dolby AC-3® and Dolby-E® are registered trademark of Dolby Laboratories, Inc
- Ancillary Data
 - Transmission of Station control data
 - Transmission of Digital subtitle data (Closed caption data)
- IP Interface
 - Ethernet interface of 100 and 1000Base-T
 - Error correction of ProMPEG CoP#3
 - Support of SNMP, Telnet and HTTP
- Compact size
 - 1U half rack size
 - Lightness of approximately 3kg

VC-870/VD-870 H.265 (MPEG-H/HEVC) Real-time Codec for 2K

Specification

	Encoder VC-870	Decoder VD-870
Input signal Output signal	(1) Encoder Input Signal/Decoder Output Signal <ul style="list-style-type: none"> ■ 1080p serial digital component video Standard: SMPTE-274M, I/F: SMPTE-292M, Frame freq.: 59.94/50Hz, Interlace ratio: 1:1 ■ 1080i serial digital component video Standard: ITU-R BT.709, I/F: SMPTE-259M, Frame freq.: 59.94/50Hz, Interlace ratio: 1:1 ■ 480i/512i serial digital component video Standard: ITU-R BT.601, I/F: SMPTE-259M, Frame freq.:29.97, Interlace ratio: 2:1 ■ 576i/608i serial digital component video Frame freq.:25Hz, Interlace ratio: 2:1 ■ Audio format Embedded Audio (16ch) / AES/EBU (8ch) (2) Encoder Output Signal/Decoder Input Signal <ul style="list-style-type: none"> ■ MPEG-2 TS (Transport Stream) , I/F : DVB-ASI, Ethernet 100/1000/Base-T Format : (204,188) or (188), Mode : byte or packet mode (3) Encoder External TS Clock input <ul style="list-style-type: none"> ■ Maximum: 160MHz 	
Video codec	(1) H.265(HEVC) Main @L4.1 High Tier, Main 10@L4.1 High Tier Max. rate 60Mbps Chroma 4:2:0 / 4:2:2 Bit depth:8bit / 10bit GOP structure : I-Only, Intra Slice, Long GOP (2) H.264 High422 @L4.1 High422@L4.0, High@L4.1,High@L4.0, Main @L4.1 (option) Max. rate 160Mbps Chroma 4:2:0 / 4:2:2 Bit depth : 8bit / 10bit GOP structure : I-Only, Intra Slice, Long GOP (3) MPEG-2 422P@HL,MP@HL,MP@H14L,SP@HL,SP@H14L, 422P@ML,MP@ML,SP@ML Max. rate 120Mbps Chroma 4:2:0 / 4:2:2 GOP structure : I-Only, Intra Slice, Long GOP	
Audio codec	MPEG-2 AAC-LC profile, MPEG-4 AAC-ELD, MPEG-1-Layer2, LPCM(SMPTE302M-2002)	
Ancillary	ARIB TR-B22, ARIB TR-B23, ITU-R BT. 1366	
Delay	· Low delay mode : 20ms~300ms · Normal delay mode : 600ms~1500ms	
Reference	N/A	SMPTE170M,ITU-R BT.709-4
Network	I/F : Ethernet 100/1000Base-T Transport : MPEG-2 TS over RTP/UDP/IP	Protocol : Unicast, Multicast FEC: Pro-MPEG CoP#3
Control	I/F : Ethernet 10/100Base-TX	Protocol : SNMP, HTTP
Operation temperature	0°C~50°C	
Power Supply	AC85~264V, 50/60Hz	
Power Consumption	50VA or less	
Dimensions / Weight	210 (W) ×400 (D) ×44 (H) mm/3kg	

ISO/IEC 27001

ISO 9001

ISO 14001

JQA-IM1064
NEC Broadcast and Media DivisionJMI-0119
NEC Broadcast and Media DivisionJQA-E-90066
NEC

Safety precautions

To install, make connections and operate this product, please carefully read and observe instructions, precautions and recommendations in our instruction manuals.

- The colours in this brochure may differ from those of the actual unit. Designs and specifications of this product is subject to change without prior notice.

For additional information: Please contact your nearest NEC sales offices

NEC Corporation
Americas and Platform Solutions Division
Europe, the Middle East and Africa Division
Greater China and Asia Pacific Division

7-1, Shiba 5-chome, Minato-ku, Tokyo,
108-8001, Japan
Tel: +81-3-3798-5463
Fax: +81-3-3798-6359
<http://www.nec.com/global/prod/nw/broadcast/>

NEC Europe Ltd.

Athens, Odyssey Business Park
West End Road, South Ruislip,
Middlesex HA4 6QE, United Kingdom
Tel: +44-20-8836-2000
Fax: +44-20-8836-2001

NEC Asia Pacific Pte. Ltd.

80 Bendemeer Road,
#05-01/02, Hyflux Innovation
Centre, Singapore 339949
Tel: +65-6273-8333
Fax: +65-6271-2088

NEC Latin America S.A.

Avenida Angelica 2197 -10th Floor
-01227-200- Sao Paulo -SP- Brazil
Tel: +55-11-3151-7000
Fax: +55-11-3151-7199