

Q-SYS NVM-302E

Network video encoder

KEY FEATURES

- Q-SYS native video encoder
- Choose from two NVM series encoding solutions, each pairing the NVM-302E encoder with a video application.
- Mediacast AV routing paradigm enables high-quality, network-efficient video distribution at scale
- Supports resolutions up to 4K60 4:4:4
- RS-232 and IR connectivity for third-party device control
- AV Bridging via USB-C (available in a future firmware update)



The Q-SYS NVM-302E is a network HDMI encoder that comes pre-installed with a single-channel encode video app (that can be expanded with a dual-channel encode video app). Q-SYS NVM Series network video endpoints deliver high-quality, low-bandwidth network video at scale to a broad range of spaces for hospitality, entertainment, collaboration, government and more.

SCALE Q-SYS VIDEO EXPERIENCES

The NVM Series NVM-302E encoder comes pre-installed with a single-channel encode video app (that can be expanded to a dual-channel encode video app with an optional application license).

Q-SYS NVM Series video endpoints expand the existing video use cases for your Q-SYS systems, pairing low-density HDMI I/O with network-efficient AV transport to deliver Q-SYS network video that is purpose-built for large-scale deployments into a broader range of spaces from entertainment and hospitality to collaboration, government and more.

NVM Series are designed on a software paradigm that reduces the reliance on single-purpose hardware and is ready for future feature updates and additional video apps that will allow your Q-SYS system to evolve alongside your business needs.

DESIGN NATIVELY. DEPLOY FASTER.

The new NVM Designer tool is an intuitive method for configuring and deploying large scale video systems natively within Q-SYS Designer Software, the singular software program that enables the rest of your system design, including DSP programming, AV routing and user control interface design. NVM Designer enables no-code deployment of hundreds of endpoints in minutes, without the need for additional video matrix or management hardware.

DELIVER HOLISTIC Q-SYS EXPERIENCES.

Driven by the Q-SYS Full Stack AV Platform, NVM Series video endpoints leverage an integrated audio, video and control engine that streamlines system integration, from no-code workflows and end-to-end automation to comprehensive user control, making it even easier to expand the Q-SYS experience into more types of application spaces.

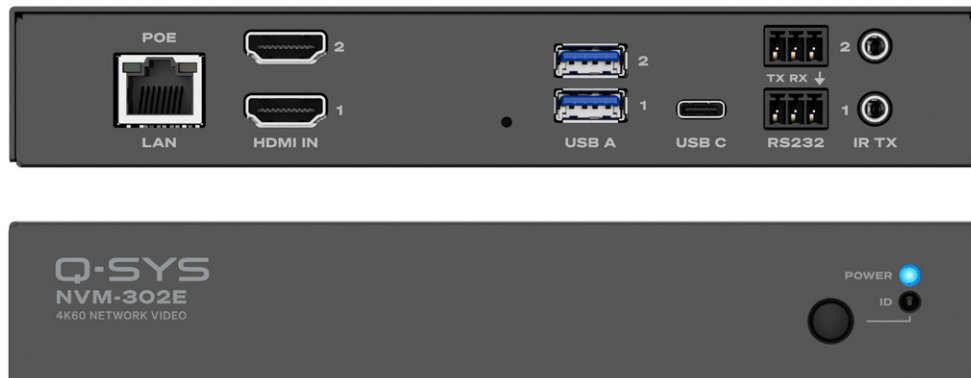
Choose from two NVM series encoding solutions, each pairing the NVM-302E encoder with a video application.

- **NVM-E1:** Includes the NVM-302E encoder with the single encode app pre-installed.
- **NVM-E2:** Includes the NVM-302E encoder and an application license that enables the dual-encode video app.

SUPPORTED VIDEO FORMATS

Resolution		Frame rate (Hz)	Chroma sampling level	Bit Depth
4K (UHD/DCI)	3840×2160, 4096×2160	23.976/24, 25, 29.97/30, 50, 59.94/60	4:4:4	8 bit
FHD/FHD+	1920×1080 (1080p), 1920×1200	23.976/24, 25, 29.97/30, 50, 59.94/60	4:4:4	8 bit
HD	1280×720 (720p)	23.976/24, 25, 29.97/30, 50, 59.94/60	4:4:4	8 bit
Ultrawide (21:9)	3440×1440, 2560×1080	23.976/24, 25, 29.97/30, 50, 59.94/60	4:4:4	8 bit
PC Resolutions	2560×1440, 2560×1600	60	4:4:4	8 bit
SD (NTSC)	720×480	29.97/30, 59.94/60	4:4:4	8 bit
SD (PAL)	720×576	25, 50	4:4:4	8 bit
VGA	640 × 480	59.94/60	4:4:4	8 bit

- All video formats are progressive
- 4:2:2 & 4:2:0 Chroma subsampling supported at some resolutions
- Dual-input operation: When both HDMI inputs are encoding simultaneously, maximum accepted format is up to 4K30 4:4:4 per input.
- Interlaced input supported: 1080i60 deinterlaced internally, encoded as 1080p30
- Encoder scales based on the source and encoded stream settings.



VIDEO I/O

	2x HDMI 2.0 inputs each capable of receiving input video formats up to 4K60 4:4:4
HDMI 2.0 input	NVM-E1 application: inputs are switched to a single 4K60 4:4:4 stream (max) NVM-E2 application: each input is streamed to unique 4K30 4:4:4 streams (max)
	HDCP 2.3 and 1.4 supported

AUDIO I/O

HDMI inputs	8-channel PCM audio, Q-SYS routable
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GENERAL

Dimensions	7.3 × 5.2 × 1.2 in (185 × 131.5 × 30.5 mm)
Weight	1.75 lbs (794 g)
Mounting options	Surface mounting hardware included; compatible with NV-RACK accessory for rack mounting

OTHER

RS-232	2x RS-232 (3.5mm pitch euro-block)
IR transmit	2x IR Transmit (3.5mm mini jack)
USB-C	USB 3.2 Gen 1 Type-C Device Port - Device Mode and Host Mode supported - Video bridging supported in future firmware release - 5 V DC 300/900 mA (total, shared across all USB peripherals)
USB-A	2x USB 3.2 Gen 1 - 5 V DC 300/900 mA (total, shared across all USB peripherals)
LAN	2.5GBASE-T compliant
Power over Ethernet	PoE+: PoE Type 2, Class 4 (25.5W at PD, 30W at PSE), 5V 300mA total for USB PoE++: PoE Type 3, Class 5 (40W at PD, 45W at PSE), 5V 900mA total for USB (PoE++ is only necessary when supplying more power-intensive USB peripherals)

ENVIRONMENTAL

Ambient operating temperature range	32° to 104° F (0° - 40° C)
Humidity	5 to 90 RH % non-condensing
Storage temperature	-4° to 158° F (-20° to +70° C)
What's in the box?	NVM-302E video endpoint Euro-terminal connectors for RS-232 Surface mounting accessories Safety and warranty statements