

2026 Reader Survey

AI Encoding Technology for Video Security

Half Storage, Max Focus

The full results

Saving
30% to 50% ↓
storage on average



HIKVISION

asmag.com
Security & IoT

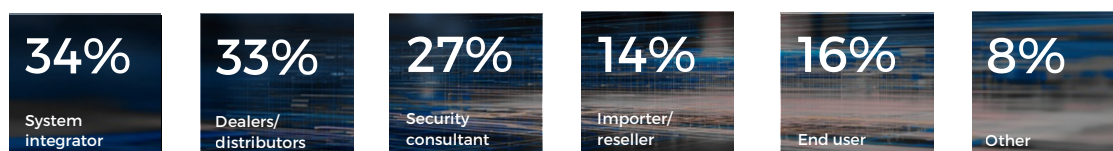
Methodology

Data storage has emerged as a major pain point in video security due to higher-resolution recording, rising storage hardware costs and other factors. To gauge the potential impact of AI-based encoding as a remedy that promises more efficient compression without loss of detail, Hikvision and Asmag.com have teamed up to survey the asmag reader database of physical security professionals from August 4 to 25, 2026. Invitations to take the online survey were shared on social media and sent via email. After a review of the responses and data cleansing, a total of 178 respondents were included in the analysis.

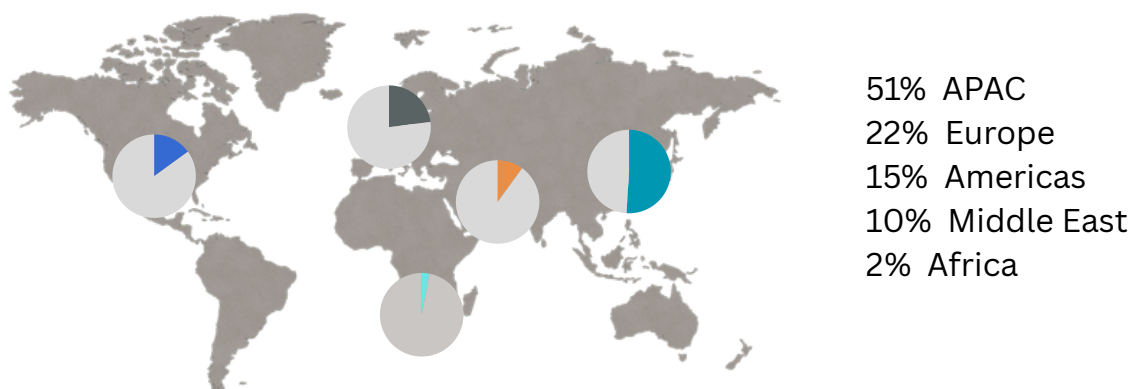
Note that reported percentages might not add up to 100% due to rounding and multiple answer possibilities.

Demographics

Business nature and profession in the industry



Regions



Executive summary

- **Storage pressure is real and growing:** A large majority of respondents call video storage cost or capacity a major or moderate challenge, and a similarly large share say the pressure has increased over the past 12 months—driven by rising storage hardware prices, expanding camera deployments and a shift to higher-resolution recording. The pain point of storage cost is also reflected in procurement meetings at a majority of organizations.
- **AI-based encoding is gaining momentum, but trust is still forming:** A significant majority of respondents view AI-based encoding as suitable for video security—“very” or “moderately well.” Respondents see the technology's biggest upside in cost and bandwidth relief rather than a specific feature.
- **Guanlan Encoding is on our readers’ radar, but largely untested:** Nearly half have heard of Hikvision’s new technology, and impressions are favorable among those who've seen it in action, yet the majority haven't tested it directly. This points to an awareness lead that hasn't yet converted into hands-on validation.
- **The economics tip the scale:** When presented with the prospect of a 30–50 percent average storage saving, a majority of respondents said they would consider purchasing the related product, while a large group remains undecided—suggesting the value proposition resonates once quantified, even where standards and interoperability concerns remain.



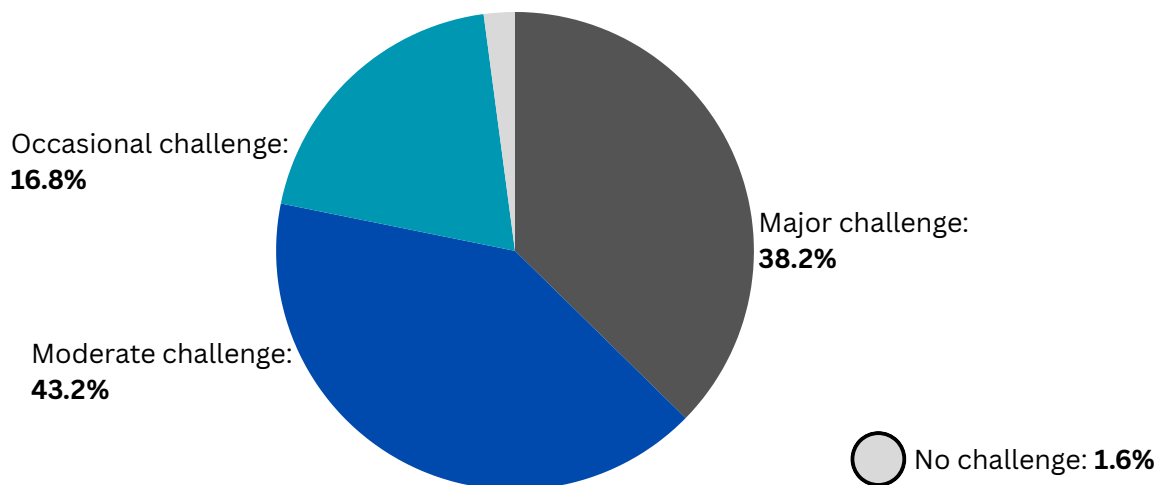
Will AI revolutionize encoding and solve the storage pain point in video security?

Read the full analysis:
www.asmag.com/project/Hikvision_Guanlan-Encoding

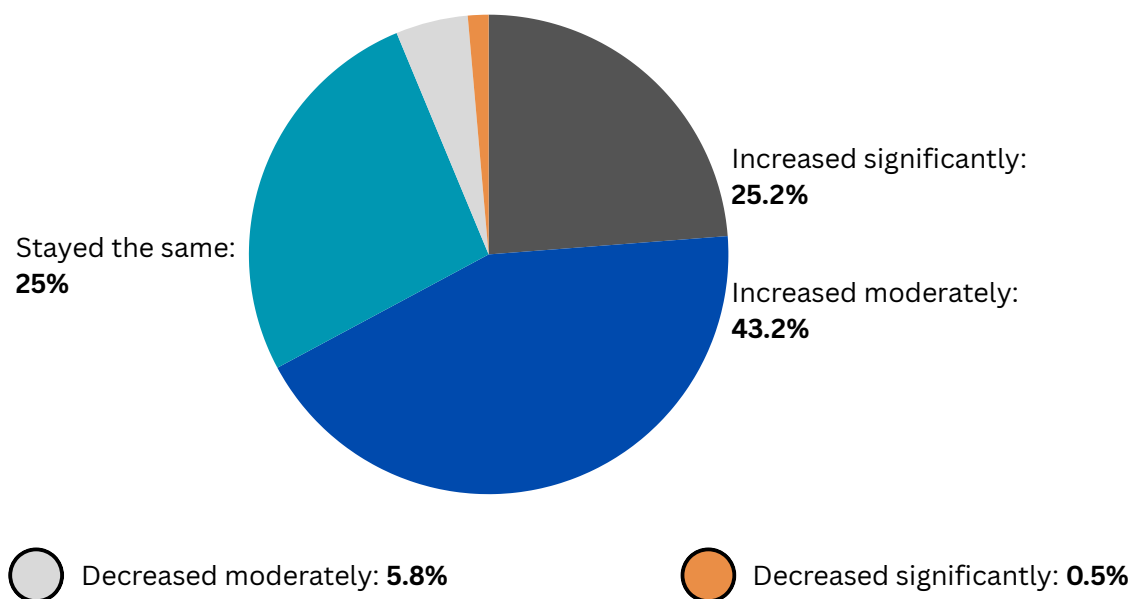


Results

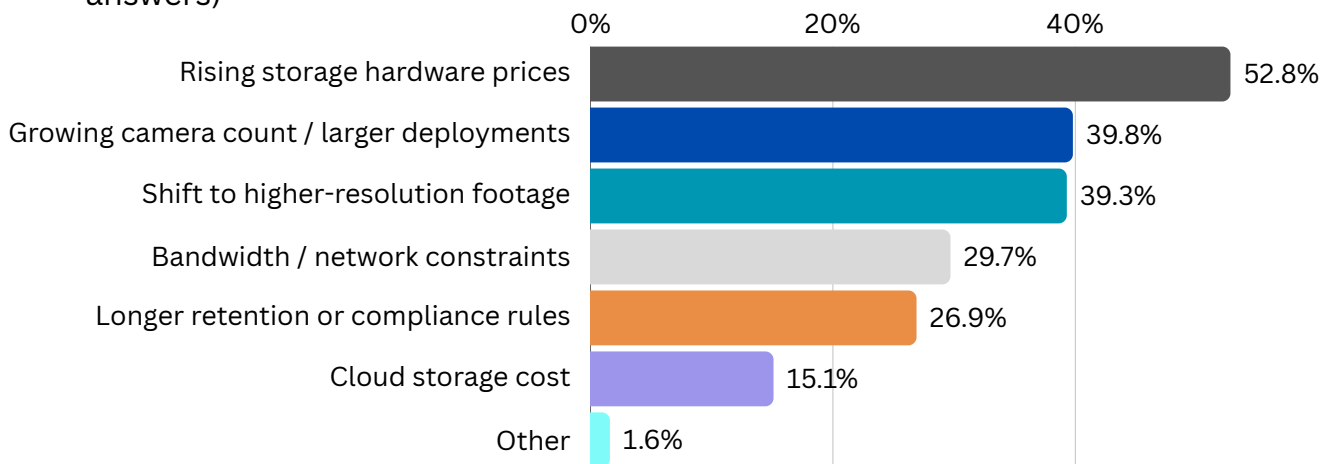
► **Q1a:** How significant a challenge is video storage cost or capacity in your business or projects?



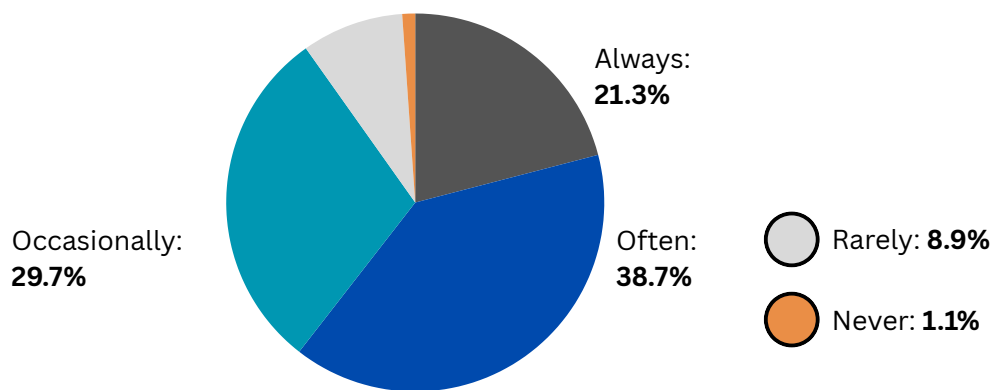
► **Q1b:** Has the storage challenge changed compared to 12 months ago?



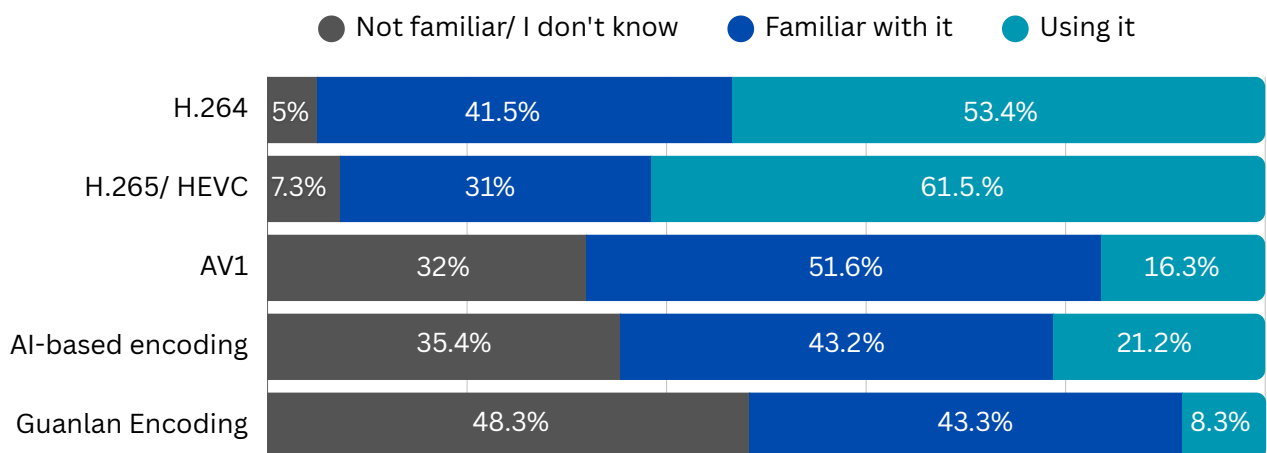
Q2: What are major drivers of storage pressure in security projects? (Up to 3 answers)



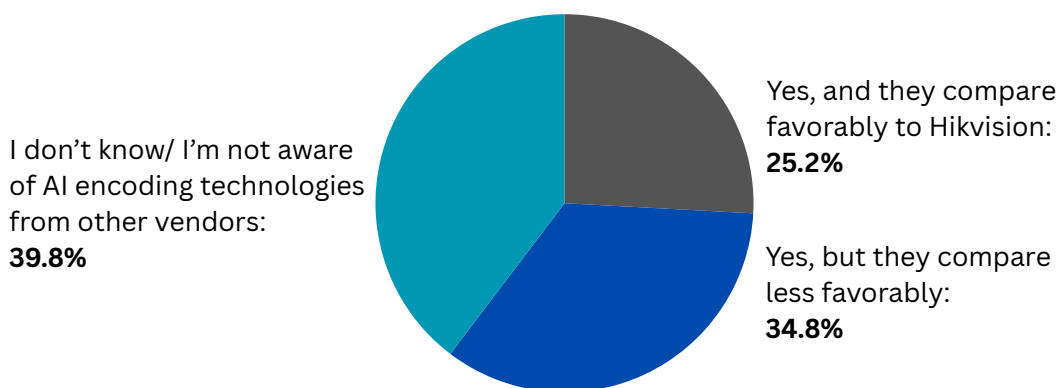
Q3: How often is storage cost a topic in your procurement meetings?



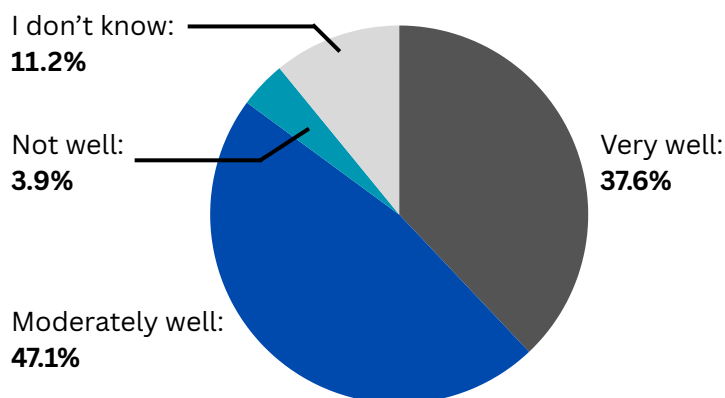
Q4: Which of the following video encoding technologies are you using, or are you familiar with?



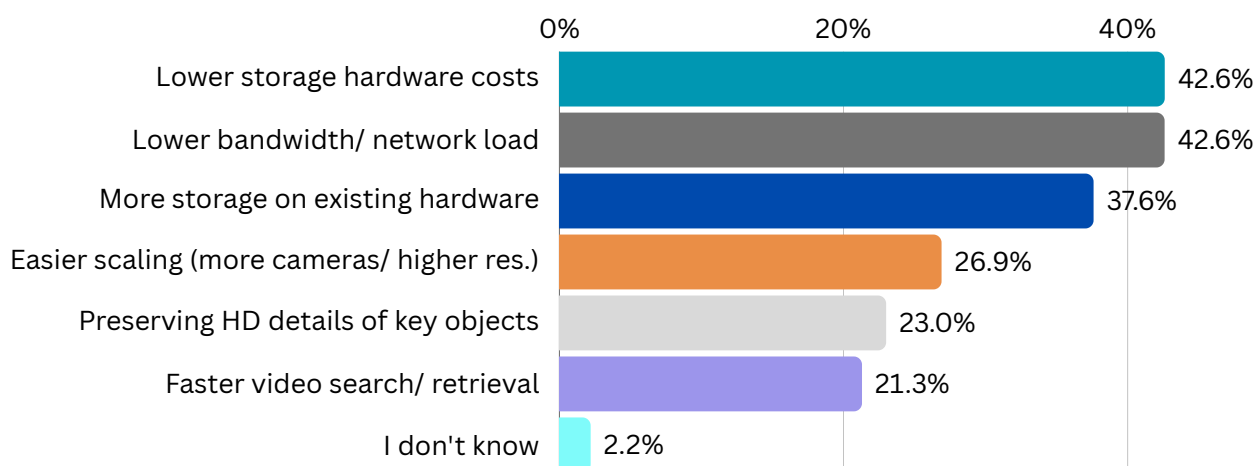
► **Q5:** Have you seen, evaluated or used AI-based/smart encoding solutions from vendors other than Hikvision?



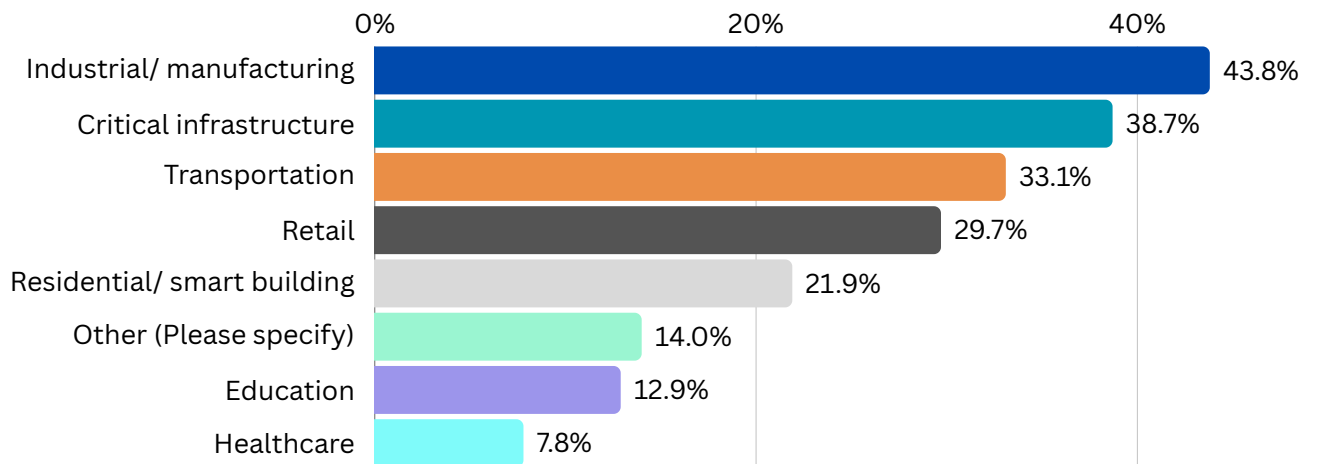
► **Q6:** How well do you think is AI-based encoding suitable to meet real-world demands in video security?



► **Q7:** Where do you see the most potential for AI-based encoding? (Up to 3 answers)

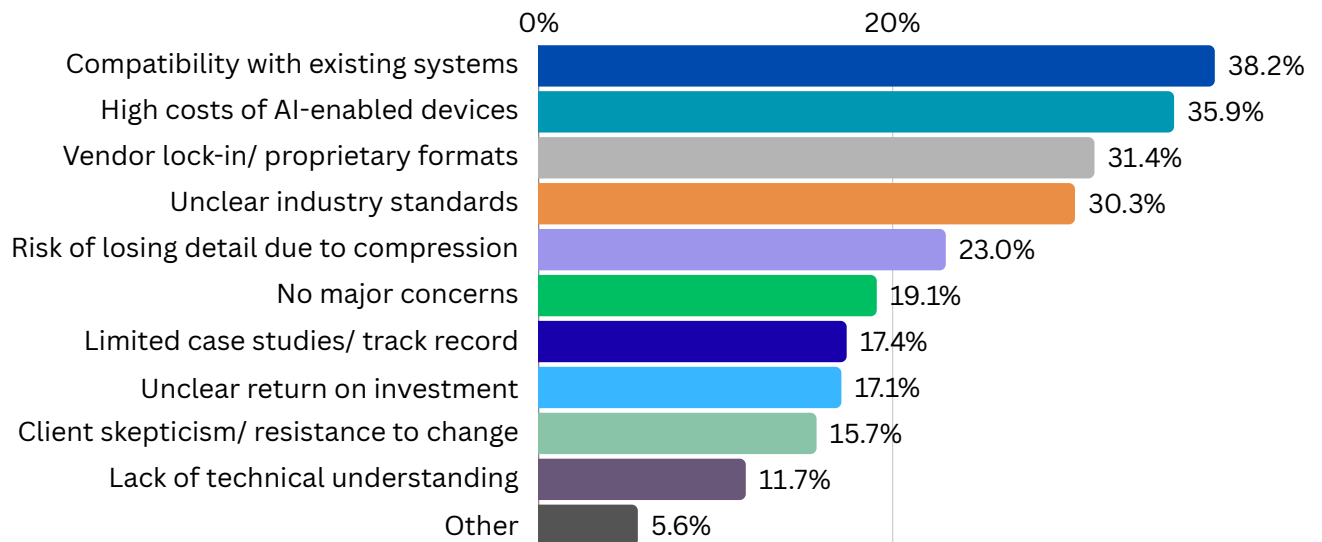


Q8: In which vertical do you see the most benefits? (Up to 3 answers)

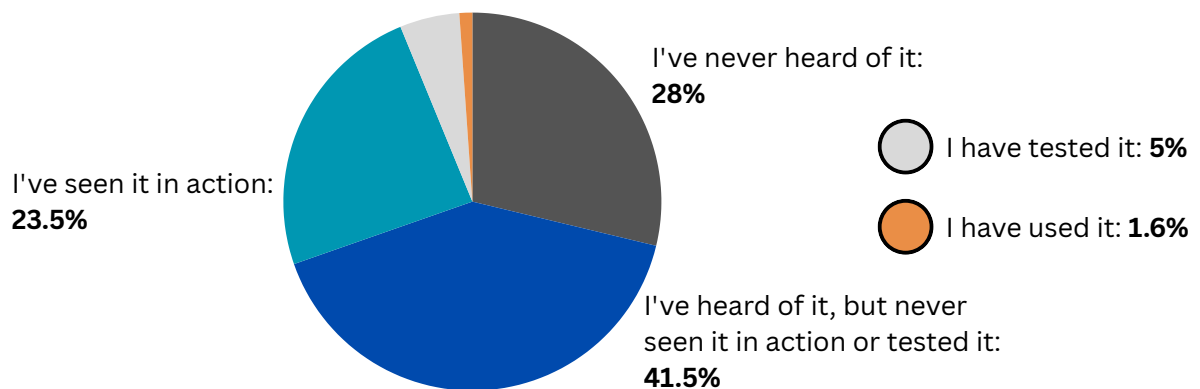


- Top write-in choices:
- “Remains to be seen” (3.3%)
 - “Smart city” (1.7%)
 - “Banking and finance” (1.1%),
 - “General video surveillance” (1.1%)

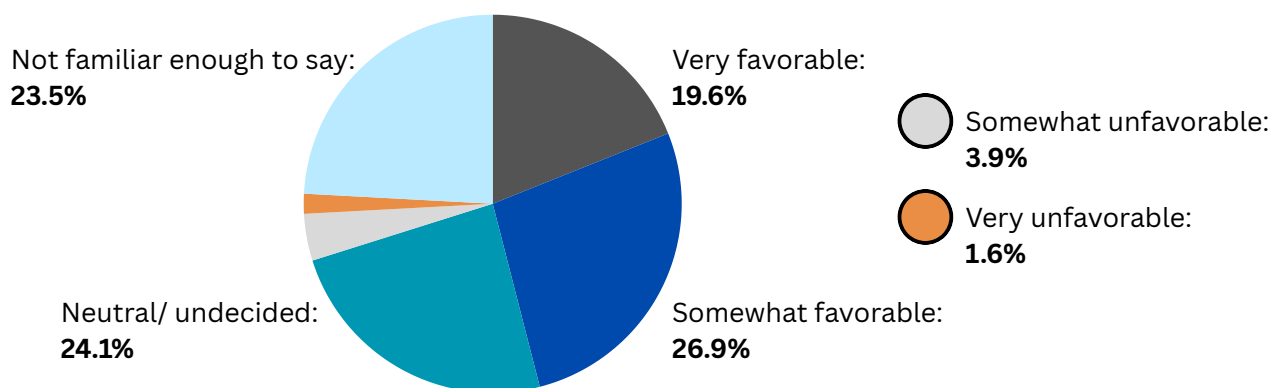
Q9: What concerns or barriers do you see in adopting AI-based video encoding? (Multiple answers possible)



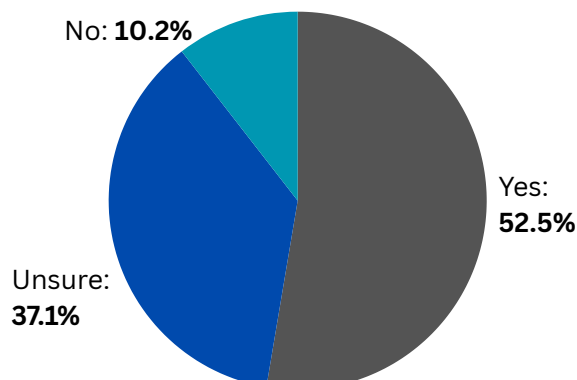
► **Q10:** How familiar are you with Guanlan Encoding?



► **Q11:** What's your impression of Guanlan Encoding, based on what you've seen or used so far?



► **Q12:** As Guanlan Encoding could on average deliver 30%–50% storage saving without compromising critical footage quality, would you consider purchasing the related product?





Q13: In your own words, what are your thoughts on AI encoding — do you see it as an innovative application of AI, and will it become a mainstream encoding approach in the video security industry in the coming years?

Top replies: “A genuinely useful application of AI, likely to become mainstream — but as an evolution of smart codecs, not a revolution... The blockers are interoperability — proprietary streams still break playback, scrubbing and export on third-party VMS — and forensic risk: an aggressively compressed background can destroy exactly the detail an investigation needs.”
— *an Italian distributor*

“I think AI encoding has potential, but it should be judged by real-world performance rather than marketing claims... AI encoding could become a widely adopted technology, but only if it consistently delivers benefits that justify the investment.”
— *an Indonesian dealer*

“The real question is how reliably does it work with my VMS. For example, does it affect asset/person recognition/tracking?”
— *a Singaporean consultant*

“Price pressure is growing for every gadget/ service. How much lower is the cost really with AI encoding? I have to know first, then I can see.”
— *an Nepalese importer*

“Every part of the system need to be fast reliable and smart, i.e. AI. Otherwise you have data and analytics bottlenecks that slow everything down. Guanlan looks good.”
— *a Kuwaiti consultant*

The Hikvision material about Guanlan looks good but I want to wait until I see some independent data on bandwidth saving.
— *a Bulgarian dealer/ distributor*

- Top mentions:**
- 22 respondents cited storage or bandwidth reduction as core benefits.
 - 15 respondents raised interoperability, proprietary formats, or industry standards as a concerns or open questions.
 - 11 respondents said they want to see real-world proof of the benefits before committing to AI-based encoding.
 - 6 respondents mentioned Guanlan Encoding by name as the leading AI encoding technology.

About asmag.com

asmag.com is a global online publication for physical security channel professionals: manufacturers, distributors and integrators. We provide the latest product and technology news in video surveillance and access control, in-depth market trend reports, and case studies for different verticals. Our services include targeted, measurable advertising solutions and live events that help our clients reach a qualified audience.

About Hikvision

Founded in 2001, Hikvision focuses on integrated security and scenario-based digitalization. Propelled by the AI-powered Internet of Things (AIoT), the company remains committed to serving various industries with its machine perception and artificial intelligence technologies. Guided by the core values of 'Professionalism, Reliability, and Integrity', Hikvision explores innovative ways to better perceive and understand the world. It empowers visionary decision-makers and practitioners to work together to enhance safety and advance sustainable development around the world. The company's business grows through technologies that are deeply rooted in innovation and an increasingly diverse range of AIoT products and solutions. With an open ecosystem, Hikvision is empowering the industry and advancing with its partners. The company currently provides products and services to over 180 countries and regions. In 2025, Hikvision's revenue was RMB 92.50 billion (USD 12.98 billion).