

DI102TE Triple-Channel HDMI HEVC Video Encoder



- Hardware-accelerated HEVC encoding from HDMI video inputs
- Low-latency, real-time network streaming
- Up to three simultaneous HDMI input channels



Interface

Ethernet	2x 10/100/1000 BASE-T
Video	3x HDMI 2.1 Input
LED	Power, Device Status

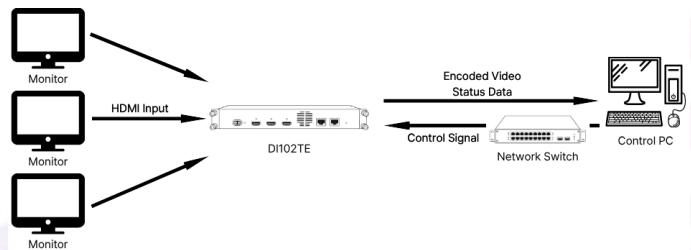
Specification

Hardware	NVIDIA Jetson Orin NX
Storage	NVMe / 64GB mSATA SSD
Power Supply	24VDC, 3A

Compression and Processing

Encode	H.265 – 1200p60 3ch/1080p60 3ch
Bitrate	5Mbps to 20Mbps
Low Latency	Average latency of less than 100 ms
Redundancy	Active-Active, Active-Standby

Application Diagram



I/O Layout



Port Description

1	Status LED 1	Power status monitoring	5	Cooling Fan	System cooling and thermal management
2	Status LED 2	Device status monitoring	6	Ethernet Port	Encoded video network output
3	Power Input	24VDC, 3A input	7	Reset Button	Device reset
4	HDMI Port	HDMI video input			

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UP TO

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TOPS AI PERFORMANCE

GPU

1024 CUDA Cores / 32 Tensor Cores

MEDIA ENGINE

H.264, HEVC and AV1 Hardware Encoding

CONNECTIVITY

Gigabit Ethernet, USB 3.0



Solution

AI Video Analytics	Object Detection / Tracking / Classification / Anomaly Detection
Multi-Stream AI Inference	Concurrent Inference Within Model, Resolution and Frame-Rate Limits
AI-Enhanced Encoding	ROI Encoding / Scene-Based Bitrate Control / Event-Triggered Streaming
Custom Video Processing	Enhancement / Resize / Crop / Color Conversion / AI Preprocessing
AI Metadata Pipeline	Detection Metadata / Video Overlay / Event Indexing / Data Transfer
Edge AI Operations	Local Inference / Remote Model Update / Status Visualization / System Integration