

GVPC220 4-Channel HD-SDI HEVC Video Encoder



- Four-channel HD-SDI video processing and HEVC compression
- Low-latency, real-time network streaming



Interface

Ethernet	4x 10/100/1000 BASE-T
Video	4x BNC Input(HD-SDI), 1x BNC Output(HD-SDI)
Audio	2x D-sub input

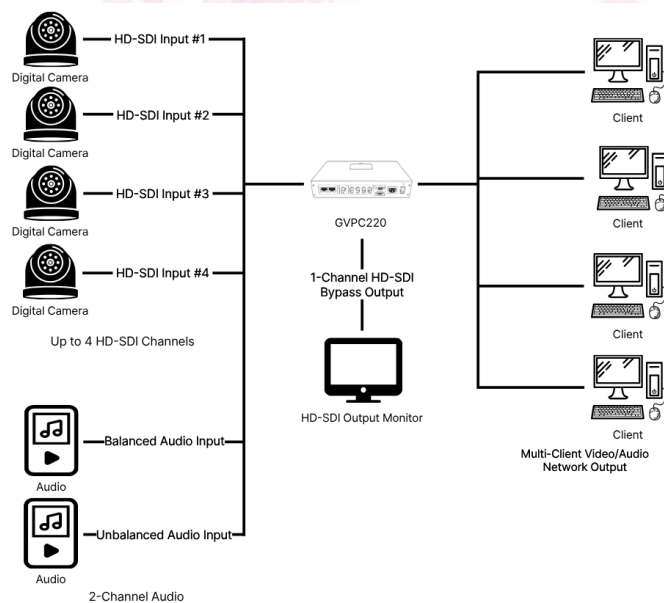
Specification

Hardware	NVIDIA Jetson AGX Orin
Storage	32GB eMMC 5.1
Power Supply	AC 220V

Compression and Processing

Encode	H.265(HEVC) – 1080p30 4ch
Sample Rate	32kHz to 48kHz
Bitrate	1Mbps to 10Mbps
Low Latency	Average latency of less than 100 ms
Pre-Processing	De-Interlace / Resize

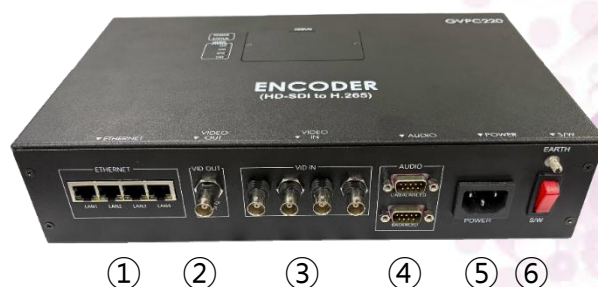
Application Diagram



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I/O Layout



Port Description

1	Ethernet Port	Network video, audio and data output Inlay information reception	4	Audio In	Balanced / Unbalanced mono
2	Video Out	1-channel HD-SDI bypass output	5	Power Port	Power supply for GVPC220
3	Video In	HD-SDI input	6	Power Switch	Power switch

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UP TO

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TOPS AI PERFORMANCE

GPU

1792 CUDA Cores / 56 Tensor Cores

MEDIA ENGINE

H.264, HEVC and AV1 Hardware Encoding

CONNECTIVITY

Gigabit Ethernet, Serial I/O



Solution

AI Video Analytics	Object Detection / Tracking / Classification / Anomaly Detection
Multi-Stream AI Inference	Concurrent Inference Within 241 TOPS, Model and Frame-Rate Limits
Intelligent Video Processing	Denoising / Enhancement / Resize / Color Conversion / AI Preprocessing
AI-Assisted Encoding	ROI Selection / Scene Analysis / Event-Triggered Encoding / Bitrate Optimization
AI Metadata Pipeline	Detection Metadata / Video Overlay / Event Indexing / Data Transfer
Edge AI Operations	Local Inference / Remote Model Update / Status Visualization / System Integration