

VN-Matrix™ 200 Series

DVI & RGB VIDEO OVER IP
ENCODERS & DECODERS

PURE.3 CODEC™
OPTIMIZED FOR NETWORKS



- Supports up to WUXGA resolution (1920x1200)
- HD Video over IP to 1920x1080p
- Low delay encoding and decoding; 70ms end to end
- Economical and easy to deploy
- Supports refresh rates from 24 to 85Hz
- Dual 1 Gigabit network interfaces
- Switchable encoder/decoder status via web browser interface
- Compatible with the VN-Matrix™ Recorder for real-time record, store, and playback
- S/PDIF digital audio streaming
- Extensive bit rate management

The VN-MATRIX™ 200 Series of real-time encoders & decoders enables interfacing of high-resolution computer or video images across LANs, WANs, or VPNs. All models apply the PURE3™ codec, which makes streaming, switching and recording of DVI or RGB, data and audio signals across IP networks possible. The VN-Matrix 200 Series delivers high image quality images at low delay while using low bandwidth. This performance makes real time collaboration with video / graphic imagery over IP networks a natural, interactive experience.



Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The VN-Matrix™ 200 Series provides real-time transmission of high resolution audio visual content across standard IP networks for live viewing, collaboration, storage, and playback. The VN-Matrix 200 Series encodes video or graphics sources at resolutions up to HD or WUXGA and decodes the content back to the original source resolution, utilizing Extron's PURE3™ Codec, a unique wavelet-based compression technology. Bi-directional digital audio accompanies the video content.

The VN-Matrix 200 Series offers real-time performance and low latency, making it ideal for remote collaborative use. It is easy to set up and use for live events and high level conferencing for specialized projects. The VN-Matrix 200 Series can be used on uncorrected networks and provides visually lossless picture quality for large projected images and high resolution graphics.

As a generic solution for streaming video, graphics, audio and control signals over IP, the VN-Matrix 200 simplifies complex systems. Because it supports existing cabling and network infrastructure, the VN-Matrix 200 is economical and easy to deploy.

APPLICATIONS

- Real-Time Video & Graphics Over IP
- Virtual Switching Over IP
- Image and Data Recording
- Point-to-Point and Long Distance Distribution
- Mission Critical Imagery
- Real-Time Visual Collaboration



Extron's PURE3™ codec is specifically designed for network transmission and provides an unmatched combination of bit rate efficiency, low latency and high image quality.

PURE3 features both spatial and temporal image compression; a guarantee of transparent image quality further enhanced by 4:4:4 sampling. The PURE3 Codec eliminates the need for forward error correction while still providing robust protection against network errors.

SPECIFICATIONS

IMAGE INPUT		
Resolutions (auto-sense)	Computer: VGA to WUXGA (1920x1200) & Custom Modes Video: 525i, 625i, 1080i, 480p, 720p, 1080p	
Refresh Rates	23.97 up to 85Hz	
Color Depth	24 Bit	
Scan	Progressive or Interlaced	
Format	Analog RGBHV, RGB or Digital DVI	
Connector	DVI-I	
IMAGE OUTPUT		
Resolutions		
- encoder loop >	Follows encoder input	
- decoder output	Follows encoded resolution or scaled to display resolution, re-synchronized to 50 or 60Hz	
Color Depth	24 Bit (follows encode)	
Scan Format	Progressive & Interlaced	
Format		
- encoder loop >	Follows encoder input	
- decoder output	Analog RGBHV, RGB or Digital DVI Optional: Scaled Output	
Connector	DVI-I	
AUDIO		
Format	S/PDIF	
Connector	RCA Phono with loop-through	
Functionality	Cross-network transport with loop-through	
KEYBOARD & MOUSE		
Connector	PS/2 in and loop-through	
SERIAL		
Format	RS-232	
Connector	9-pin D-type	
Functionality	Bi-directional cross-network transport; Simple remote control	
NETWORK INTERFACE		
Type	Dual 1 Gigabit Ethernet	
Protocols	TCP/IP, IP Multicast, RTP	
Error Correction	Embedded in image bitstream for broadcast transmission	
SYSTEM CONTROL		
System Control	VN-Matrix Enterprise Controller & Redundant Controller (ES8200)	
Network (IP) Interface	Integrated Web Client for system configuration; Telnet support for simple remote control; Command Line Interface; Software application configuration & control	
Serial Interface	Basic comms setup & simple remote control	
Traffic Control	Variable and Independent bit rate control for; Spatial, Temporal, Color or Motion	
POWER		
Voltage	100-240VAC, 50/60Hz	
Consumption	30 Watts Typical, 60 Watts Maximum	
Adapter	12V DC 6A max	
CONFORMANCE		
CE	EN 55022: Class B EN 55024: Class B	
EN60950	Part 15 Class B	
UL	60950	
FCC	Part 15 Class B	
ENCLOSURE		
Format	1U high desktop appliance case (optional rack mounting kit available to order)	
Overall Size (WxDxH)	215mm (8.5") x 310mm (12.2") x 55mm (2.1") including feet	
Weight	1.86kg (4.1 lbs) including power supply	
Model	Version Description	Part #
VNC 200 DVI (ES6100-01)	VN-Matrix Codec DVI-I, keybrd/mouse.....	60-1117-01
VNC 200 DVI-A (ES6100-02)	VN-Matrix Codec DVI-I, audio/keybrd/mouse.....	60-1118-01
VNE 200 DVI (ES6200E)	VN-Matrix Encoder DVI-I	60-1119-01
VND 200 DVI (ES6200D)	VN-Matrix Decoder DVI-I.....	60-1120-01
VNM RECORDER (ES3403)	VN-Matrix Recorder.....	60-1121-01

Specifications are subject to change without notice.



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