Media Links® inside

Made for the

MD8000 Platform™

**Core Gateways** 

MD8000 Line Cards

**DATASHEET** 

Version 3.0



#### Description

The UVRX-J2K-2022 board is a 'Universal' four port video receiver card with decompression that is compatible with SMPTE 2022 sources

### **Applications**

- · Carrier Class Media Networks
- · Flawless Contribution Video-Transport
- High Performance Studio Interconnects
- · Reliable Content Delivery Systems
- Integrated Live, Recorded and File-Based Communications

#### Features & Benefits

- Outputs 1-4 input signals
- 3G-SDI/1080P
- · 3D Dual-Link Supported
- · ETR290 Performance Monitoring
- Optical (SFP) or Electrical (BNC) Video Interfaces
- SMPTE 2022 1/2 & 5/6
- Hitless Switching
- · Auto Protection Switching (per Service/Port)
- Passes up to 16 uncompressed audio channels along with the V-Ancillary data and Time code
- Low Latency

#### Technical overview

- Made for the MD8000 and MD8000-100G networking platforms
- JPEG2000 decoding in contribution quality, per ISO/IEC 1544-1 Annex A
- Extremely high video quality at 4:2:2 10 bit JPEG2000 part 1
- · Reduced network bandwidth consumption
- External interface to SDI/SDTI/DVB-ASI user circuits
- Internal electrical interface to MD8000 SW-CNT modules

# Compatible with

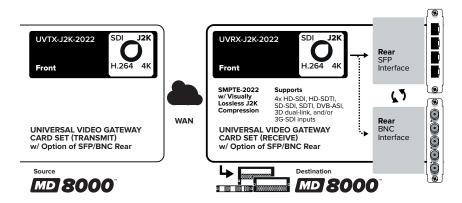
MD8000SX, MD8000, MD8000 EX and MD8000-100G Platforms

#### **DATASHEET**

# UVRX-J2K-2022 4 Port 3G/HD/SD-SDI & DVB-ASI Video Receive Module with JPEG2000 Decompression

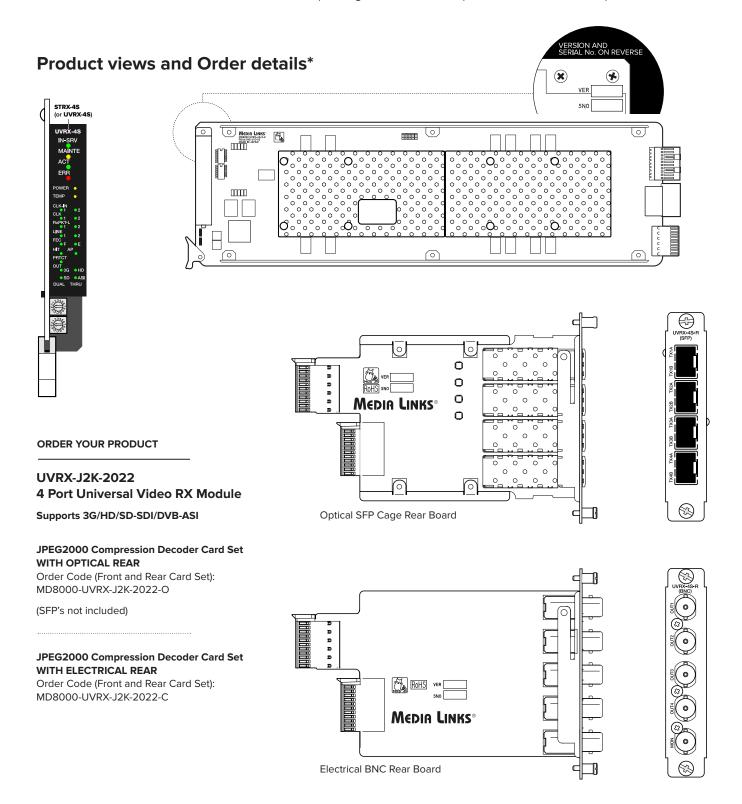
A versatile and widely deployed MD8000 line module, the UVRX-J2K-2022 is a 'universal' four port video receiver card with decompression that is compatible with SMPTE 2022 sources. The SMPTE 2022 specification describes a standardized method of encapsulating video signals for transmission across IP transport networks. Pairing this module with a compression card like the UVTX-J2K-2022 gives customers high quality video with significantly reduced bandwidth, saving transport costs and allowing more channels to be sent across the network. The UVRX-J2K-2022 module can output up to four uncompressed HD-SDI, HD-SDTI, SD-SDI, SDTI, DVB-ASI, 3D dual-link, and/or 3G-SDI signals.

The four Ethernet streams terminating on this line module can originate anywhere in a MD8000 network. All Ethernet packets sent to and received by this module are transferred across the MD8000 backplane via the Switch Controller module (SW-CNT). DVB-ASI output signals are reconstructed from the transparent Ethernet transport of MPEG2TS. Null packets within the ASI wrapper and are re-inserted at the destination matching the original DVB-ASI input signal. The MD8000-UVRX-2022 provides TR101-ETR290 performance monitoring and real time analysis of each DVB-ASI stream.



The UVRX-J2K-2022 provides resilient Forward Error Correction (FEC) and Lossless/Hitless path protection switching for extremely robust signal transport. Multiple format outputs are supported simultaneously.

Compatible with MD8000-2022 compliant encoder (source) line cards operating in either an uncompressed or JPEG2000 compression mode.



 $<sup>^*</sup>$ Cards shown not to scale. Media Links reserves the right to alter specifications without notice.

# Service Specifications & Supported Parameters<sup>†</sup>

# UVRX-J2K-2022 - 4 Port Universal Video RX Module: Physical and Optical Characteristics

Item					
Output	SD-SDI HD-SDI	Format	625i (50 Hz), 525i (59.94 Hz); SMPTE 259M		
			525i, 725P, 1080i, 1080P (59.94 Hz)		
		Audio	Full VANC/HANC		
		Interface	SMPTE 259M, SMPTE 292M, SMPTE 424M		
	HD-SDTI/SDTI	Interface	SMPTE 305M, SMPTE 348M		
	DVB-ASI	Format	MPEG2TS		
	Maximum Cable Length	HD-SDI	70m		
		SDI	200m		
		DVB-ASI	100m (Belden 1694A)		
	All	Signal Amplitude	800 mVp-p =- 10% (75 Ohm Load)		
		Rise Time	0.4 - 1.5 ns (at 20% - 80% amplitude)		
		Fall Time	0.4 - 1.5 ns (at 20% - 80% amplitude)		
		ABS (Rise-Fall)	0.5 ns or less		
		Impedance	75 Ohm, unbalanced		
		Return Loss	15 dB or more (5 MHz - 270 MHz) 10 dB or more (742.5 MHz - 1.485 GHz) < 10 dB (2.97 GHz)		
		DC Offset	0.0 V +- 0.5 V		
		Jitter	Timing: 0.2 UI or less Alignment: 0.2 UI or less		

# **General specifications**

External dimensions	Front board: 17 mm (W) * 113 mm (H) * 367 mm (D) Rear board: 41 mm (W) * 96 mm (H) * 126 mm (D)	Weight	1 kg or less	Power consumption	33.0 VA or less
		Compliance	CE/CSA, NEBS Level 3		
Board Structure	Front and Rear	Operating temperature	0 $^{\sim}$ 40 $^{\circ}\text{C}$ (Ambient) (Under the no-condensing humidity condition)		
Chassis slots needed	Front board occupies a 1-slot width Rear board occupies a 1-slot width	Redundancy modes	All MD8000 modes of operation are supported (Single/Class B/Class C/Class J)		

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