DVR EXPRESS®
CORE 2

IOI
IO INDUSTRIES

Multi-Camera Uncompressed Digital Video Recorder

APPLICATIONS

High Speed Event Analysis

Industrial Process Troubleshooting

Multi-Camera Motion Capture

Stereo and 3D PIV/PTV

FEATURES INCLUDE:

· Reliable uncompressed video recording from
  Camera Link, CoaXPress or SDI video sources
· Long recording durations at high frame rates
· Live video display during recording
· Precise time stamping and synchronization
· Rugged, low-power and light-weight design
· Connects easily to laptops or PCs via USB 3.0
· Includes easy-to-use CoreView™ software
· Optional SDK for programmers

EXAMPLE SYSTEM

· Record up to (4) cameras with Camera Link Base, Medium, Full or Full 80-bit output formats and clock rates up to 85MHz
· Area and Line Scan camera types supported
· Power over Camera Link (PoCL) provided on all ports
· CORE2CLPLUS model has bidirectional ports allowing pass-through repeat features as well as output of recorded video over Camera Link, simulating up to (2) CL-Base cameras at once or (1) CL-Full camera

Supported Camera Link Connections				
Model	Base	Med/Full	Base In/Out	Med/Full In/Out
CORE2CL	4	1	n/a	n/a
CORE2CLPLUS	4	2	2	1

· Records up to (4) cameras with CoaXPress single-link, dual-link or quad-link interfaces with link rates up to CXP-6
· Area and Line Scan camera types supported
· Power over CoaXPress (PoCXP) provided on all ports when 24V AC adapter used (P/N COREPWRCXPxx)
· CORE2CXPLUS model supports four links at up to CXP-6 speed but the total readout rate must be reduced - contact IO Industries for more details and configuration suggestions

Supported CoaXPress Connections			
Model	Single-Link	Dual-Link	Quad-Link
CORE2CX	4 (up to CXP-3)	2 (up to CXP-3)	n/a
CORE2CXPLUS	4 (up to CXP-6)	2 (up to CXP-6)	1 (up to CXP-6)
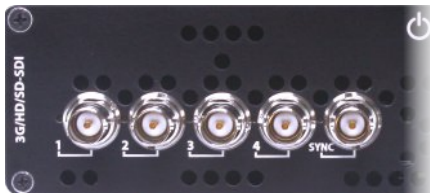
· Records up to (4) single-link SDI video sources simultaneously
· Flexible support for SD-SDI, HD-SDI or 3G-SDI connections
· Supported formats include SD, HD, 2K, UHD and 4K up to 60p
· Records SMPTE metadata (HANC/VANC) from each SDI link including embedded audio channels or KLV data packets
· Bidirectional ports allow dual-input/dual-output mode for (2) single-link cameras or (1) dual-link camera

Supported SDI Connections					
Model	Single-Link	Dual-Link*	Single-Link In/Out	Dual-Link* In/Out	Quad-Link*
CORE2SDI	4	2	2	1	1

*Dual-Link and Quad-Link connections support UHD/4K formats only

COMMON FEATURES

Supported Video Data Rate:
· Up to 1620 MB/s

Video Storage Media:
· Removable Drive Shuttle with up to (4) IO Industries VidIO Drive Modules (solid state media)
· Up to 30TB capacity

Connection to Control Computer:
· 6Gb/s eSATA (USB 3.0 adapter included)
· Required for configuration and operation
· Allows live video display, post-recording playback and video export to local storage

Recording Format:
· Uncompressed (IO Industries file system)
· Images or clips can be exported to common file types using control software (AVI, BMP, JPG, TIF, RAW, etc.), archived to backup format, or accessed via SDK

Control Software:
· CoreView™ or Streams™ 7 (SDKs available)

System Requirements:
· Windows 7/8.1/10 32/64-bit
· Ubuntu 16.04 LTS 32/64-bit
· Available eSATA or USB 3.0 port

Time Stamping:
· High-precision time stamp per frame
· Time stamps can be synchronized to external IRIG or GPS time code receiver

Multi-DVR Synchronization:
· Master/Slave configuration allows time reference distribution and synchronizes recording start/stop across multiple DVRs

Auxiliary Signal Input/Output:
· (6) Bi-directional TTL I/O
· (2) LVDS inputs and (2) LVDS outputs
· (1) Remote On/Off

Mechanical / Electrical / Environmental

Dimensions:
· 325 x 165 x 52mm (12.8 x 6.5 x 2")

Weight:
· Approx. 1.7 kg* (3.8 lbs)

Construction:
· Anodized aluminum

Power:
· 14-25V DC, Approx. 25W*

Temperature:
· Operating: 0° to 45°C
· Storage: -20° to 60°C

*Depending on model and installed media

COREVIEW™ SOFTWARE

easy-to-use dialog for recording one or more cameras with one or more DVRs

embedded camera control dialog for Flare™ cameras and ASCII terminal for generic cameras
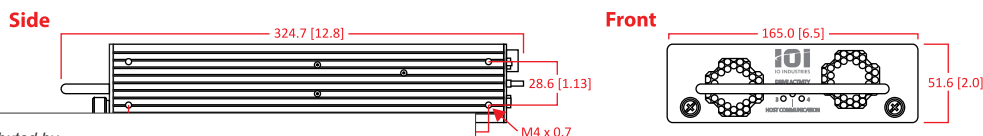
simple VTR-style operator controls
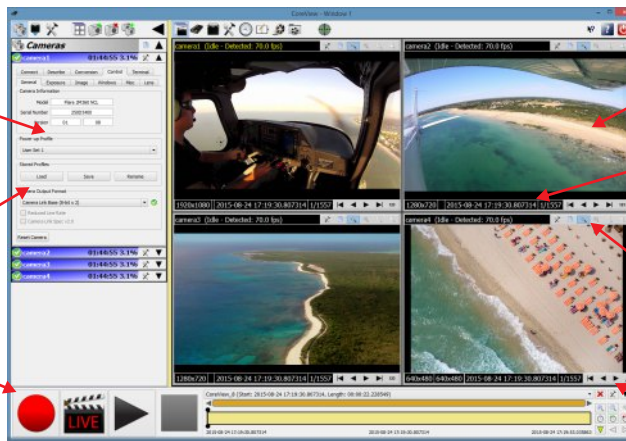
multiple video display windows

high-precision time stamps

pan and zoom displayed video or fit to window

seek to individual frames

MECHANICAL DIAGRAM

Side

324.7 [12.8]

28.6 [1.13]

M4 x 0.7

Front

165.0 [6.5]

51.6 [2.0]

LET'S STAY CONNECTED!

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