

DVR EXPRESS®

CORE2



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



AVAILABLE MODELS



- 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

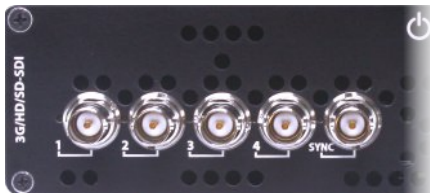
Model	Base	Med/Full	Base In/Out	Med/Full In/Out
CORE2CL	4	1	n/a	n/a
CORE2CLPLUS	4	2	2	1



- 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 COREPWRCPxx)
- 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

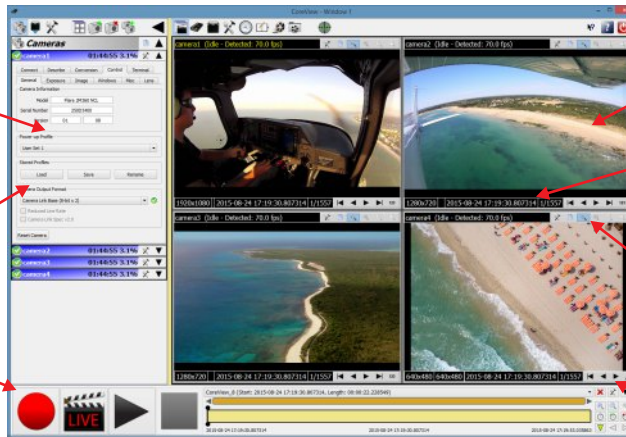
*Dual-Link and Quad-Link connections support UHD/4K formats only

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

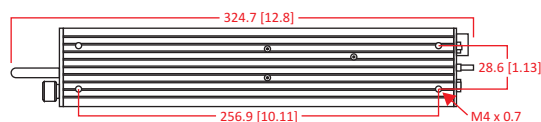
high-precision time stamps

pan and zoom displayed video or fit to window

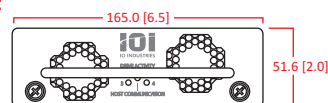
seek to individual frames

MECHANICAL DIAGRAM

Side



Front



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 15TB 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 XP/Vista/7/8.1/10 (32/64-bit)
- Linux: Ubuntu 14.04 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

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 Specifications subject to change without notice