



High-Performance DVR in Ultra-Compact and Lightweight Design

Take the world's fastest DVR engine. Make it ultra-compact and lightweight. What do you get? IO Industries **DVR Express® Blade**. The DVR that catches more action in more places than ever before possible.

The Blade's 12V DC power input, low power consumption (45W max.), and optional built-in GPS receiver, ideally suit it for video recording in aircraft and vehicles. Integration into the factory environment is simplified by its small size, just 1U of rack space, and its facility for full remote control by Ethernet.

An embedded system design with no internal hard disk, ensures greater reliability and lower maintenance than PC-based DVR systems.

For pure unbridled recording performance, nothing compares. The Blade's DVR engine is powered by three 4Gb fibre channel disk controllers delivering a maximum sustained uncompressed recording data rate of 1.1 GByte per second, direct to hard disk or SSD.

Advanced features include precision time-stamping of video frames in hardware, hardware trigger inputs/outputs with FPGA-controlled timing manipulation, audio recording, and meta-data recording over RS232.

Product Highlights

- Records 1 to 3 cameras to external disk storage
- Supports camera link and LVDS cameras
- Fiber optic interface to external storage: fibre channel JBOD or fibre to SATA RAID
- Maximum recording rate is 1.1 GByte/s
- Weighs 2.8 lbs (1.3 kg)

Designed for use in aircraft,
vehicles, the factory and
the laboratory

Free PC image viewing
software included

DVR Express® Blade Specifications

Video Interface

Video Ports	Camera Link – up to 3x Base, 1x Medium + 1x Base, 1x Full + 1x Base (bi-directional) LVDS – 11 signals per MDR-26 connector (bi-directional) 3 MDR-26 Connectors
Maximum Input Clock Frequency	Camera Link – 85MHz LVDS – 100 MHz
Camera Readout Formats	Area scan, and line scan
Pixel Formats	Monochrome 8 to 16 bits Color – Bayer, RGB (24, 30, 36 and 48 bit) Other formats supported on request
Acquisition from Multiple Cameras	Record up to 3 cameras. Hardware-synchronized recording across multiple units.
Trigger Input/Output	LVDS – 2 outputs, 2 inputs TTL – 10 bi-directional lines Camera Link CC lines
Frame Time Stamping	Every recorded frame is time stamped by hardware time-code generator Time-code resolution is 100 nanoseconds Time-code generator can be synchronized to external IRIG, GPS or other timing device

Video Storage

Hard Drive Interface	Optional (1) or (3) 4Gb Fibre Channel SFP (optical) interfaces
Hard Drive Compatibility	Contact IO Industries for current manufactures and firmware levels
Maximum Sustained Recording Rate	1125 MByte per second
Maximum Storage Capacity	350 Petabytes (2 ⁵⁰)
RAID Configurations	RAID levels 0, 1(0+1) and 3 Other levels possible using 3rd party external drive arrays
Storage configuration	Flexible and scalable to accommodate any application Contact IO Industries for details

System Peripherals

	(2) USB 2.0 Ports (2) RS-232 Ports for meta-data streaming from auxiliary devices 10/100 Ethernet for remote control VGA output up to 1920x1440@85 Hz Microphone Input/Stereo Line Out Optional GPS Receiver
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Mechanical

Dimensions	Width x Height x Depth: 11.4" x 1.7" x 7.6" (290 x 43 x 192 mm)
Weight	2.8 lbs (1.3 kg)
Case	Lightweight aluminum
Power	12V DC, 45W Max.

