

# MEGA SPEED<sup>®</sup> MS35K 10G

FIBER SYSTEM

## Quality Control And Product Traceability

Suitable For High Definition Long Recording Frame Rates

### Product Application

The MS35K DVR 6F is a 10 Gbit Fiber high speed DVR recording unit which provides extended length video files for traceability and diagnostic review of mission critical applications.

High speed, high resolution video streaming files are sent via fiber optic cable transmission using 10G Ethernet to the recording unit.

Over 20 years of field proven dependable hardware and software technology. Outstanding customer service.

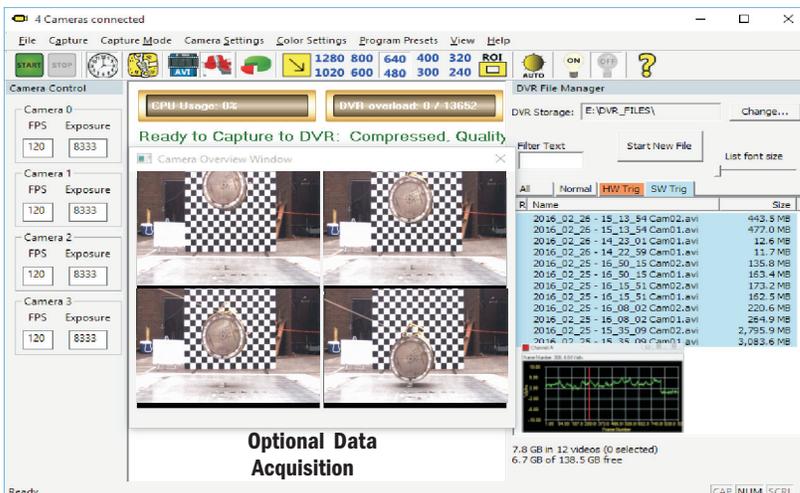
The MS35K DVR 6F 10 Gbit Fiber DVR is a purpose built turn-key platform designed to be used with several different Mega Speed cameras providing you with several speed range and connection options.



MS35K DVR-6F



MS35K 10G Fiber Streaming Camera



### MS-DVR-6F Specifications

- 2x 10 GigE fiber ports
- 1x 1 GigE LAN port
- 1x HDMI port,
- 2x USB-A 3.2 ports
- 1x USB-C port
- 1X IRIG in BNC port
- 2X trigger in BNC ports
- 2X ADC BNC ports - optional
- 2X Camera Communications out ports
- Processor: 1x Intel or AMD
- Recording speed: Supports 2x 10 GigE streams
- Operating Voltage: 16 VDC to 30 VDC
- Recording Media: 8 TB high speed SSD
- Dimensions: 17" x 15" x 4"
- Weight: 18 lbs
- Operating Temperature: -45° to +45°C

The Mega Speed MS 35K camera control software is a complete software package that is included with each system. With the camera control software you can simultaneously adjust the camera settings, record the process, review the recently recorded events, edit, play back, review and transfer files without interrupting the recording process.

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FIBER SOFTWARE

## Intuitive And Easy to Understand Menu Layout

The screenshot shows the MEGA SPEED software interface with several callout boxes highlighting key features:

- Main Menu:** Points to the top menu bar (File, Capture, DVR Settings, Camera Settings, Color Settings, View, Help).
- Main Toolbar:** Points to the top toolbar containing icons for Start, Stop, Play, Pause, and other controls.
- DVR Status:** Points to the status bar showing EPU Usage (1%), DVR overload (0 / 6144), and capture statistics (Capturing to DVR: Compressed, Frames Captured: 218, Time Elapsed: 3 seconds, Write Speed: 1.7 MB/s).
- File Manager Pane:** Points to the right-hand pane showing a list of captured video files with columns for Name and Size.
- Camera Control Pane:** Points to the left-hand pane showing settings for Camera 1 and Camera 2 (FPS, Exposure).
- Preview Window:** Points to the central video preview area showing a rocket launch, with a frame counter (Frame 222) and playback controls.

### File Stitching & Rotation Options For Multiple Cameras

The 'Stitch Options' dialog box allows users to configure camera rotation and stitching:

- Camera Rotation:** Radio buttons for Rotate 0°, 90°, 180°, and 270°.
- Swap Camera positions:** A checkbox to swap the positions of Cam1 and Cam2.
- Change Stitch Type:** Radio buttons for Horizontal and Vertical stitching.
- Visuals:** A diagram showing two camera positions (Cam1 and Cam2) with red arrows indicating their orientation.

### Flexible Recording Options

The 'File Length Options' dialog box provides flexible recording settings:

- When capturing, automatically start new files:**
  - On Multiples of: 10 Minutes
  - After: 1 Hour Of Recording
- ie. If Capture is started at:** A list of time slots (12:13:05, 13:13:00, 14:13:00, 15:13:00, 16:13:00, 17:13:00).
- New files start at:** A list of time slots (12:13:05, 13:13:00, 14:13:00, 15:13:00, 16:13:00, 17:13:00).

### Dynamic Region Of Interest Adjustments For Easy Setup

The 'Region Of Interest' dialog box allows for dynamic adjustments:

- Camera Select:** A dropdown menu to select the camera (Camera 1 or Camera 2).
- Lock To Center:** A checkbox to lock the region of interest to the center of the frame.
- Center:** A button to center the region of interest.
- Visuals:** A diagram showing a gray rectangular frame with a smaller white square in the center representing the region of interest.

# MEGA SPEED<sup>®</sup> MS35K 10G

FIBER CAMERA



- \* Mega Pixel streaming at over 1000 fps
- \* VGA streaming at 2000 fps
- \* LC fiber for long cable runs or copper cables for set-up and bench testing
- \* Convenient "C" mount for easy lens selection.
- \* High sensitive state of the art CMOS image sensors
- \* Industry proven track record
- \* Full featured control software

Consult with dealer for 10G speed vs resolution recording speeds before placing your order.

## MS35K 10G Camera Specifications

Sensor type:	Color or monochrome CMOS sensor. Determined at time of order.
Image sizes:	User defined from software pre-sets or custom selections.
Maximum resolution:	1920 x 1080
Minimum resolution:	64 x 64
Maximum speed	1135 fps at 1280x 720 or 500 fps at 1920 x 1080 image sizes.
Pixel size:	10 micron x 10 micron square pixel.
Shutter speed:	Global shutter 2 us to 30 ms in 1 us steps with exposure time tags.
Spectral response:	400nm to 1000nm.
ISO:	12,500 monochrome, 4000 color.
A-D converter:	10 bit.
Trigger in requirement:	3 to 24 VDC, active high center pin positive or dry contact switch closure
Sync out:	TTL 3.3 VDC via cameras rear BNC jack. Center pin positive active high on exposure.
Trigger modes:	Continuos capture mode. External hardware trigger source required for trigger modes
Editing software:	Image analysis, data acquisition, object tracking, AVI editing & MP4 image compression.
File saving:	User can save in RAW, AVI, JPEG, BMP, TIF, PNG or MP4 format to the DVR's hard drive.
Control software:	Mega Speed DVR Control software
Video live-view:	Live 30 fps preview to DVR monitor during recording.
Video recording:	Camera streams real time video back to the DVR.
Event tagging:	Captured video files can be sorted & marked manually or with an external hardware trigger.
Video Review:	Video review, editing and playback can be done at anytime when the DVR is recording real time video.
Networking:	10 GB Ethernet cables, switches are required for connecting the camera to the DVR.
Camera cable:	Short haul copper or long haul LC fiber cable.
Lens mount:	Standard "C" mount. "F" mount, "G" mount and electronic lens are all available as an option.
Camera size:	4.6" wide x 4.8" high x 6.1" long. ¼ x 20 tpi threaded camera mount hole
Camera weight:	2 lbs.
Camera body:	Machined anodized aluminum.
Power requirements:	2 amps @ 12 V DC. ( 24 watts )
Shock Rating:	50g for 15 milli-seconds 10 times all axis. Operational vibration meets 0.25g, from 5-500Hz.