

ETHERLYNX FUSION - is it the world's most versatile photo finish camera?



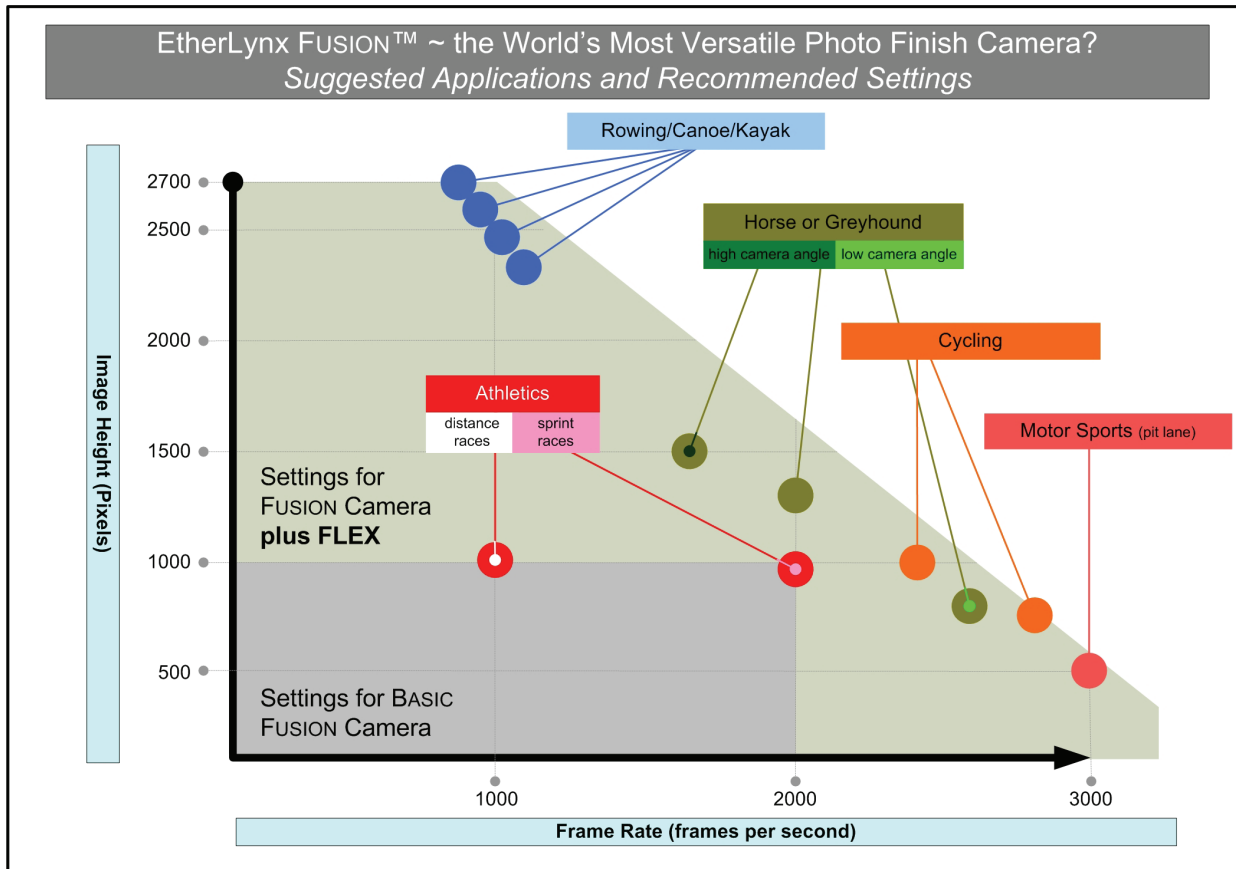
The **EtherLynx Fusion™** color digital photo finish camera combines the unparalleled light sensitivity of the **EtherLynx 2000™** series of cameras with the infrastructure options of the **EtherLynx PRO™** series: 100BT network port, 12VDC input, small physical size, and optional built-in WiFi. The operational versatility of the camera is clear: for true cable-free operation it has the ability to transmit image data wirelessly in real time from the camera to computer (with optional WiFi), and to operate from a 12 volt battery.

The **Fusion™** base configuration produces color images in over 2 million colors at up to 2000 frames/sec and 1000 pixels of image height, and with the **FLEX** option the camera's image resolution capability is increased dramatically. With **FLEX** the **Fusion™** three line sensor can either scan as fast as 3000 frames/sec at 500+ pixels of image height, or provide up to 2700 pixels of image height at 1000+ frames/sec. This

makes this camera especially useful in both higher-velocity applications, like motor sports and cycling; and wide finish line applications, like horse racing, rowing or canoe/kayak. Along with the **EtherLynx PRO™**, the **Fusion** completes a line of products that is exceptionally well suited to meet the varied and often difficult field conditions of horse racing venues.

The **Fusion™** range of cameras also incorporates the ability to perform digital zoom functions, accommodate both Nikon-compatible lenses and c-mount lenses, and compress data for real time transmission of very high resolution images with no loss of quality. All three ranges of FinishLynx cameras, **EtherLynx 2000™**, **EtherLynx PRO™**, and the **EtherLynx Fusion™**, can be combined seamlessly in a multiple camera setup, with the ability to time track objects across multiple cameras.

Applications



## Technical Specifications

EtherLynx Fusion™	Base Model	With FLEX Option
<b>Maximum Image Pixel Height</b>	Up to 1000 pixels	Up to 2700 pixels (at 1000f/s)
<b>Maximum Frame Rate:</b>	Up to 2000 f/s	Up to 3000 f/s (at 500 pixels)
<b>Typical Extended Configurations (with FLEX Option):</b>	Up to 3000 fps x 500 pixels Suitable for low camera angles of fast moving objects – like Cycling, Motor Sports.	Up to 1000 fps x 2700 pixels Suitable for high camera angles and/or wide finish lines – like Rowing or Canoe/Kayak
<b>Sensor Type:</b>	Three Line CCD	
<b>Max Pixels:</b>	1000 (Standard) ~ 2700 (with FLEX Option) in 2,000,000+ colors	
<b>Gamma Correction:</b>	Real Time in camera hardware	
<b>Image Compression:</b>	Real-Time Lossless. Typically >5x	
<b>Network Connectivity:</b>	100Mbps Ethernet (802.3) Optional Wireless Ethernet 11- 54Mbps Wi-Fi (802.11g)	
<b>Time Base:</b>	1ppm Temperature Compensated Crystal Oscillator	
<b>Lens Mount:</b>	C-mount or F-mount (Nikon Lens Compatible)	
<b>Through the Lens Viewer:</b>	Optional on F-mounts	
<b>Minimum Lighting</b>	150lux at 1000 lines/sec	
<b>Remote Control Lens:</b>	Optional on C-mount (zoom/focus/iris) or F-mount (iris only)	
<b>Power Input:</b>	12VDC or 100-240VAC with included adaptor	
<b>Remote Control Positioner:</b>	Optional – available on all models	
<b>Options</b>	Auto-Capture, Lap Time, Time Trial, Remote Control Protocol, Virtual Photo Cell.	
<b>Physical (w/o lens)</b>	size: 20cm x 7.5cm x 15cm	weight: 2.8kg
<b>Operating Temp. Range</b>	0° to 50C	

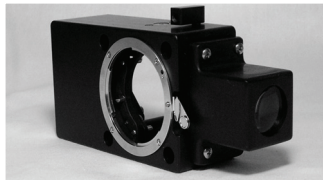
## FUSION™ Features

### FLEX Option

- Increases the range of camera settings to optimize use in multiple sports and camera locations.
- Up to 3000 frames/sec at more than 500 pixels of vertical resolution for higher velocity sports like cycling and horse racing.
- Up to 2700 pixels of vertical resolution at up to 1000 frames/sec for sports with wide finish lines, like rowing or canoe/kayak.

### Lens Mountings and Lens Choices

- Cameras provided with F-mount (Nikon compatible) lens mounts have the option to be fitted with a through the lens viewer for easier camera alignment, and with remote iris functionality allowing remote and automatic iris control.
- The wide range of available high quality F-mount lenses provide the very best in image quality, and with the FLEX option, allow the user to utilize the full 2700 pixels of image height.



**Through-The-Lens Viewer (Optional on F mount)**

- Cameras provided with C-mount lens mounting, and an optional motorized lens, allow the operator to control remotely the zoom, focus and aperture functions of the lens directly from the FinishLynx software.
- The combination of exceptional low-light sensitivity and true digital zoom allows use of an extended range of lenses that can provide additional light sensitivity at a lower cost and higher image resolution.

### Infrastructure:

- On board 100Mb Ethernet connectivity comes as standard and allows the camera to be up to 100 meters away from the Evaluation computer.
- Optional WiFi function provides 802.11g connectivity for maximum flexibility of camera location and optimum data throughput.
- 12 volt DC power requirement, and low power consumptions, means that battery operation is possible in remote locations.
- Rugged extruded aluminum housing for durability and long life.

## FinishLynx Software Features

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>Secure file system with enhanced file sharing permissions</li> <li>Control of multiple cameras simultaneously, mixing models – <b>EtherLynx 2000, EtherLynx PRO and EtherLynx Fusion</b></li> <li>Multiple simultaneous camera views on-screen - with customizable time tracking between cameras</li> <li>Native virtual memory for continuous Imaging (unlimited maximum capture time)</li> <li>Included real-time scoreboard serial interface for Running Time and Results (optional TCP/IP connectivity)</li> <li>Generic file-sharing database interface</li> </ul> | <ul style="list-style-type: none"> <li>Image/Results printing with automatic start indication</li> <li>Intelligent continuous image zoom and Rolling Scrolling</li> <li>Live video mode for accurate camera alignment</li> <li>Multiple image post-processing options, brightness, contrast and gamma control</li> <li>Start logging and retrieval capability</li> <li>Object finder and automatic dead-space elimination</li> <li>Software available in more than 14 languages, including character-based languages like Chinese and Arabic.</li> </ul> |
|--|--|