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INCORPORATED

## CamRecord **Sprinter-HD**

**Optronis**  
Make time visible

The CamRecord Series

The workhorse of compact digital high speed camera systems.

### CamRecord Sprinter-HD Features Include:

- CMOS Sensor: 1280 X 860 pixels
- Standalone Operation
- SSD Backup storage up to 1TB
- Fast 16 GB Camera Memory
- TimeViewer User Software Included
- Wireless control Via Tablet PC
- Multiple Trigger Modes
- Compact Housing
- Reliable
- Easy to Use
- Electronic Shutter: open to 2  $\mu$  seconds



**S**printer-HD of the CamRecord-Sprinter series is a high-speed camera with integrated frame memory. Various trigger and synchronization features make the camera an ideal tool for research and industrial applications. The camera is controlled by TimeViewer software via GigEinterface or WiFi connection. The Sprinter-HD records brilliant color images or crisp images at full resolution at 3,500 fps. The Sprinter-HD is a versatile, easy-to-use camera

system that provides affordably priced highspeed video solutions to a broad array of users. The robust CamRecord Sprinter-HD is perfect for a variety of applications, including: ballistics, combustion, materials research, machine design, microscopy, PIV, flow visualization, spray analysis, automotive testing, and many, many, more . . .

When it comes to reliable, high-quality, high-speed camera systems, make the proven choice with nit Americas and you'll see the visible difference!

Specifications	
Sensor resolution	1280 x 860
Frame rate @ max. sensor res.	3,500 fps
Memory	16 GB internal
Image sensor	CMOS, Global Shutter
Exposure time	2 µs - 1/framerate
Active area	17.5 mm x 11.8 mm
Sensor diagonal dimension	21.1 mm
Pixel size	13.7 µm
A/D conversion	8 Bit
Dynamic	48 dB
ISO	1,000 (Color) 4,000 (Mono)
Trigger modes	internal free-run, switch, rising or falling edge, pre- and post-trigger
Power	12 VDC
Weight	3.08 lb
Dimensions (inches)	5.9 x 3.6 x 3.6
Housing	lightweight anodised aluminium
SSD harddrive bay	data storage and backup
PC software	Windows based support for version 7, 8, and 10 for capture, video playback, export, image analysis with object tracking
Scope of delivery	Camera with 256 GB SSD, Camera control software with motion analysis features, Power Supply, WiFi dongle, GigE-cable, and Manual

Performance (Examples)		
Resolution ( H x V)	Framerate	Recording time
1280 x 860	3,500 fps	4.25 s
1280 X 488	6,000 fps	4.37 s
1280 x 284	10,000 fps	4.51 s
1280 X 132	20,000 fps	4.85 s
1280 x 80	30,000 fps	5.33 s
1280 x 52	40,000 fps	6.15 s
1280 x 8	110,000 fps	14.55 s

Interfaces	
Trigger input (TI)	TTL, 3.3 - 5 V, optically isolated, recording of sequence
Synchronisation input (SI)	TTL, 3.3 - 5 V, optically isolated, frame synchronization
Synchronisation output (TO)	TTL, 2.0 - 4.0 V, optically isolated, frame synchronous output signal
Programmable output (PO)	TBD
HDMI	video output
USB	WiFi dongle
GigE	control and download

Options	
CR-S-FM	F-Mount lens adapter
CR-S-FMG	F-Mount lens adapter with aperture control
CR-S-CM	C-Mount lens adapter

## CamRecord High Speed Camera Systems also Feature:

- Adjustable Frame Rates
- Fast Gig-E Interface
- Wireless LAN Setup and Control
- Multi Camera Control
- Continuous Live Video Output
- Interface - Gigabit Ethernet
- Memory Segmentation
- Remote Control via PC or Android
- Internal and External Sync Recording
- Intuitive Capture and Control Software
- Analysis Software for 2D tracking of velocity, acceleration and displacement.

Please Note: Specification described above are preliminary and subject to change.