PROMON 2000 HSR
High Speed Camera System

Full HD @ 1000 frames/sec
direct non-volatile recording

AOS Technologies AG

Imaging for smart decisions...

High Speed Camera with Tethered Head

Compact, small camera head fits into tight places

Boundless Memory

Record in up to 8TB memory without the risk of data loss

High Speed – High Dynamic

Record with up to 12 bits dynamic range

Powerful Software

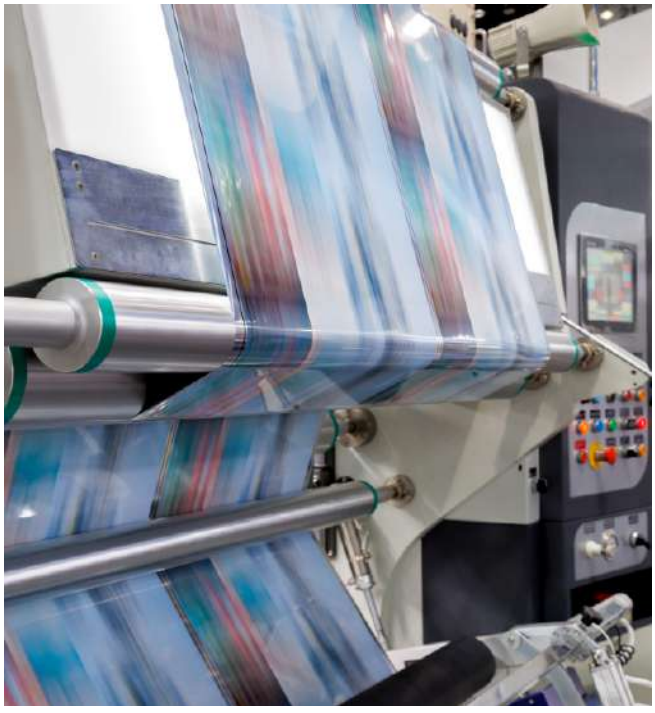
Connects to any PC running Imaging Studio V4. Seamless integration in AOS camera family

PROMON 2000 - High-Speed Recording Made Easy

- **Full HD at 1000 fps: Capture every detail with precision.**
- **Direct-to-Non-Volatile Memory: No need for downloads - start your next recording instantly.**
- **Maximize Efficiency: Eliminate downtime and keep your workflow smooth.**

PROMON 2000 HSR is a high-speed camera system that combines a recording station with a powerful yet compact camera head. Direct recording into non-volatile memory eliminates download times while securing your high-speed sequences. Unlike traditional high-speed cameras constrained by internal memory size, PROMON 2000 HSR offers up to 8TB of recording memory, breaking these limitations. Capturing at 1000 frames per second with a 1920 × 1080 resolution, it is a powerful tool for a wide range of applications, including industrial troubleshooting, fast repetitive testing tasks, and research in both industrial and academic fields.

The PROMON 2000 HSR integrates seamlessly with AOS Imaging Studio Software for easy setup, real-time monitoring, and post-recording analysis. Packed neatly in a rugged Pelican-style case, it is designed for portability and ease of use.



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PROMON 2000 HSR | Key Specifications

Typical frame rates vs resolution

Resulution x	Resulution Y	8-bit	12-bit
1920	**1080**	1000	393
1920	**1024**	1055	415
1920	**800**	1349	531
1920	**720**	1498	590
1920	**600**	1795	707
1920	**512**	2100	829
1920	**480**	2239	884
1920	**256**	4158	1655
1920	**128**	8149	3299
1920	**16**	50'847	25'150

Table shows typical resolution vs. fps, Resolution is freely adjustable within limitations of camera/sensor

PROMON 2000 HSR Specification

Controller	Industrial grade controller with software installed, ready to run
Recording memory	Standard 2TB (approx. 30 mins recording with 1000fps Full HD. up to 8TB optional
Dimensions	h:180 x w:140 x d:80 (7.1" x 5.5" x 3.15")
Weight	2kg (4.4 lbs)
Camera connection	Link to PROMON 2000 camera 5m (15feet) standard, optional up to 10m (30 feet)
I/O	• 2.5Gb Ethernet for PC connection with Imaging Studio V4 • BNC Trigger input on controller • LEDs for recording state indication • USB 3.2 connection for data download • HDMI Output for Live view on controller
Power	19VDC / 90W (power supply part of delivery)

PROMON 2000 Camera specifications

Image Sensor	CMOS sensor, monochrome
Pixel Size	10 microns
Resolution	1952x 1080 active pixels
Spectral range	CMOS monochrome standard 350-950nm
Dynamic Range „high speed"	1920 x 1080 @ 1000fps / 8-bit
Dynamic Range „high dynamic"	1920 x 1080 @ 393fps / 12-bit
Sensor Format	4/3" 19.2 x 10.8mm / Diagonal 22.3mm
Responsivity (@560nm)	1600 x 103 DN / (J/m2)
Light Sensitivity	ISO 8000 (monochrome)
Shutter Type	Global, independent of frame rate
Exposure Time	Free adjustable from 10µsec to 1 / framing rate by software
Data Link	10Gb link for image data
I/O	Trigger input Sync in Sync out Power
Lens Mount	C-mount with adjustable back focus
Canon EF mount	Optional with external control box
Mounting Threads	Tripod mount thread 1/4" Camera without ChillBox: 2x M5 thread on all four sides

Software Functions (Imaging Studio V4)

Control SW	AOS Imaging Studio v4 for parametrization, recording, editing and exporting/converting of recordings included
Live View	Display of live view of camera while recording
Number of Buffers	Up to 100 buffers, individually configurable by software
Recording type, Trigger	Circular buffer recording, Trigger adjustable by software
MotionDetection	Trigger a recording based on image information
Focus assistant	Focus assistant to record sharp images
Overexposure assistant	Avoid overexposure by using the software assistant
Languages supported	English / German / French/ Spanish /Portuguese/ Korean /Chinese

Ordering Information

Model	
PROMON 2000 HSR	**AOS# 782041-40-5500**

Shipment includes:

- HSR Station with 2TB camera memory
- PROMON 2000 camera
- 5m (15feet) cable for camera - HSR M12 / RJ45
- ChillBox
- Adapter M12 to 14 pin push-pull connector
- Power trigger adapter
- Manual trigger switch
- 5m Ethernet cable
- Camera Power supply 100-240V / 24V / 36W
- HSR Power supply 100-240V / 19V / 90W
- All packed in Pelican sync case

Order separately:

- AOS# 2200116 pigtail cable for sync in/out

Your local AOS partner:

AOS Technologies AG

Specifications are subject to change without prior notice – v02.2025