PROMON U800

High Speed Streaming Camera

Easy - portable - economical

Imaging for smart decisions...

High Speed Power via USB3

Simply connect to USB3 port and start working.

A Powerful Software suite

Imaging Studio V4 is all you need for your high speed recordings.

Long Recording time

Stream to your SSD without any expensive add-on memory.

Extensions

Trigger Input for external signals, Motion Analysis with Auto Tracking Features

PROMON U800 – high-speed camera power via USB3

- **Direct to PC** – PROMON U800 streams image data directly to your PC RAM or hard disk. The comprehensive software allows making the most demanding recordings and also supports 24/7 recordings.
- **Setup that works**– Camera and software come from the same supplier, install software, connect camera and you are ready to record
- **Image trigger**– Extends the versatility of your PROMON by letting the camera trigger the system when an incident is detected by the camera.

PROMON U800 is a high-speed camera system combination of unique software with state-of-the-art camera hardware. This economical high-speed camera is the perfect companion when mobility is of essence. Nevertheless, the PROMON U800 package leaves no compromise open in view of functionality and offers all features such as circular buffer recording, triggering by external discrete signals or by motion detection. In addition, streaming directly to hard disk for minutes or hours captures the most intermittent events of your analysis.

Easy export of data to the popular movie formats is just another feature of the software.

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PROMON U800 | Key Specifications

Typical recording times vs resolution/frame speeds

Resolution ►	Resolution@fps	Resolution@fps	Resolution@fps	Resolution@fps	Resolution@fps	Resolution@fps
	1280x1024@203	1280x720@284	1024x1024@249	800x600@511	640x480@751	320x240@2070
Memory ▼	Recording time	Recording time	Recording time	Recording time	Recording time	Recording time
2 GB RAM	8 secs	8 secs	8 secs	8.5 secs	9 secs	13 secs
500 GB SSD	34 mins	34 mins	34 mins	36 mins	39 mins	56 mins

Table shows typical recording time and fps with good PC performance. Recording time in memory depending on available free memory in PC

Typical frame rates vs resolution

	1024	800	720	640	600	512	480	320
1280	203	257	284	318	338	392	417	604
800	311	392	432	482	511	591	626	892
640	378	475	523	582	617	710	751	1060
480	481	602	662	734	777	895	939	1305
320	663	823	900	994	1049	1193	1254	1700

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

Optical / Sensor specifications

Image Sensor	CMOS sensor
Pixel Size	4.8microns
Sensor Format	1/2" (6.14 mmx 4.92mm)
Optical Fill factor	56%
Light Sensitivity	ISO 3600 (monochrome), ISO 2400 (coulor) without gain
Shutter Type	Global, independent of frame rate
Exposure time	Free adjustable from 59 µsec to 1 / framing rate by software
Dynamic Range	Mono 8 Bit / Colour 24 Bit
Lens Mount	C-Mount or optional EF / F-Mount

Software and camera operation

Live Video	Live video out via USB3 link
BufferType	Circular buffer in PC DRAM or streaming to internal SSD, parametrized by software
Number of Buffers	Up to 100 buffers, individually configurable by software
Trigger Modes	Pre-post recording, adjustable in steps of 1 frame, rising falling edge, delayed trigger, trigger debouncing, shock trigger (high g trigger) Note: Needs AOS 2200105 USB Trigger adapter
Event Bookmarks	Events in the sequence can be tagged by bookmarks for easy orientation / finding
Snap Shot	Make a SnapShot of the image displayed for documentation purposes
Auto Exposure	Auto exposure for automatic brightness control
Auto Store Function	Auto-store function in PC for 24/7 recording supported
File Formats	Recording in AOS native format for performance reasons, conversion to avi,mpeg, mpeg4 single image formats such as BMP, JPEG, TIFF, Gif etc.
OSD	Information on camera, recording features, time stamp, camera name may be added in image data, Position of OSD is set by user
Point & Click Measurement	AOS Imaging Studio v4 includes an easy point & click measurement tool for on-the-spot analysis of sequence
Control SW	AOS Imaging Studio v4 for parametrization, recording, editing and exporting/converting of recordings included

Software

PROMON U800 cameras are delivered with comprehensive Imaging Studio v4-software. This modern and intuitive operating software can be installed on any number of computers, in order to edit recorded sequences without a camera, convert these into other formats, or perform further analysis. If connected to a camera, all device and recording parameters can be easy and clearly set. This is software that is unmatched.

PC requirements

Operation system	WIN 10 / 11 64Bit recommended
CPU	Pentium Core i5 or better
RAM	8GB or better
Hard Disk	for best performance: Separate SSD for image data streaming strongly recommended
USB3 Interface	Full open USB3 interface dedicated for camera Recommended chipset: Intel USB 3.0 eXtensible host controller

Options and add-on

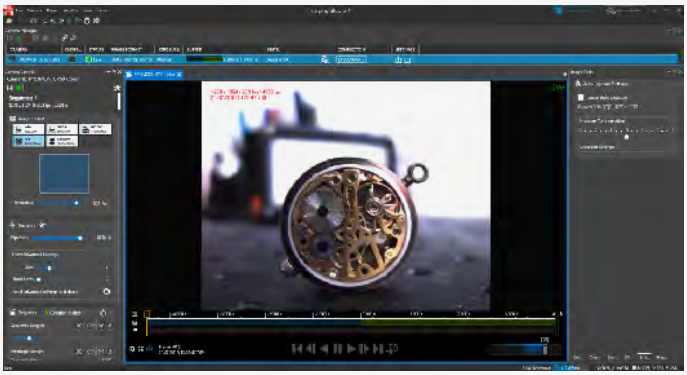
Trigger Adapter	USB Trigger adapter for triggering recordings by external signals 24V tolerant rising / falling edge

Physical specifications

Size & Weight	30 x 30 x 30 mm / 80 gr 1.18" x 1.18" x 1.18" 0.18lb
Temperature	Operating: 0 … +50 °C / +32 … +122 °F Storage: -40 … +70 °C / -40 …
I/O Connector	Hi-Rose HR25-7TR-8PA
CE	In compliance with relevant standards
Mounting	¼" UNC thread, bottom / M6 mounting threads on 4 sides

Ordering Information

Model	
PROMON U800 color	**AOS # 510211-00-0000**
PROMON U800 monochrome	**AOS# 510213-00-0000**
Trigger Adapter	**AOS# 2200105**
	Shipment includes: ◆ Camera ◆ 3m (9ft) USB3 cable ◆ Imaging Studio V4 Software **Order separately:** ◆ Trigger adapter



Parametrization of camera settings with Imagine Studio v4 CameraSuite

Your local AOS partner:

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Specifications are subject to change without prior notice – v06.2022