

## PROMON U750 – high speed power via USB3

**PROMON U750 is a high speed camera that connects directly to your PC via a single USB3 cable. The comprehensive software controls image acquisition, instant playback, post recording analysis and file conversion. The high resolution sensor with 1.3 megapixel provides frame rates from 200 fps at full resolution up to 3225 fps by reducing the resolution.**

PROMON U750 is a high speed camera system combination of unique software with state of the art camera hardware. The small USB3 camera delivers high resolution images directly to your PC. PROMON U750 is ideal for educational purposes and for true mobile applications. This extremely economical high speed camera is the perfect companion when traveling and mobility is of essence. Nevertheless PROMON U750 with its powerful camera control software leaves no compromise open in view of functionality and offers all advantages of a high speed camera such as circular buffer recording, triggering by external discrete signals or by motion detection. In addition, for longer recording time, you may stream directly to hard disk for minutes or hours making sure to capture the most intermittent events of your measurements. Easy export of data to the most common movie formats is just another one of the many features of the software.

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### Unique features

- **Direct to PC** – While observing the scene in the live image PROMON U750 streams image data directly to your PC RAM or hard disk. The comprehensive software allows making the most demanding recordings and also supports 24/7h recordings.
- **Setup that works** – Camera and software come from the same supplier, install software, connect camera and you are ready to record.
- **Long recording times** – Recording times of minutes or even hours allow to record, analyze and archive a complete process in all detail, important to detect trends and to catch those sporadic and intermitted occurring incidents.
- **Image trigger** – Extends the versatility of your PROMON by letting the camera trigger the system when an incident is visually detected.

# PROMON U750 – Key Specifications

## Typical recording times vs resolution/frame speeds

Resolution ▶	Resolution @ fps	Resolution @ fps	Resolution @ fps	Resolution @ fps	Resolution @ fps	Resolution @ fps
	1280 x 1024 @ 203	1280 x 720 @ 284	1024 x 1024 @ 249	800 x 600 @ 511	640 x 480 @ 751	320 x 240 @ 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

## Camera/Sensor specifications

<b>Camera Model</b>	USB 3 camera with CMOS sensor
<b>Light Sensitivity</b>	Color: ISO 2400 Mono: ISO 3600
<b>Image Sensor</b>	1280 x 1024 pixel with 8 Bit dynamic range
<b>Sensor Size</b>	4.8 µm pixel size / 1/2" (6,14 mm x 4,92 mm)
<b>Optical Fill Factor</b>	56 %
<b>Shutter Type</b>	Global, independent of frame rate
<b>Exposure Time</b>	Free adjustable from 59 µsec to 1 / fps by software
<b>I/O Interface</b>	Hi-Rose HR10A-7P-6S Trigger Set: AOS Art. Nr. 2200204 (Opto-isolated, 30V tolerance)
<b>Camera Mount</b>	C-Mount
<b>Temperature</b>	Operating: 0 ... +50 °C / +32 ... +122 °F Storage: -40 ... +70 °C / -40 ... +158 °F
<b>Size</b>	30 x 30 x 30 mm / 80 gr 1.18" x 1.18" x 1.18" 0.18lb
<b>Mounting Threads</b>	4 x M2 mounting threads on bottom UNC ¼" on bottom for tripod mounting

## PC requirements

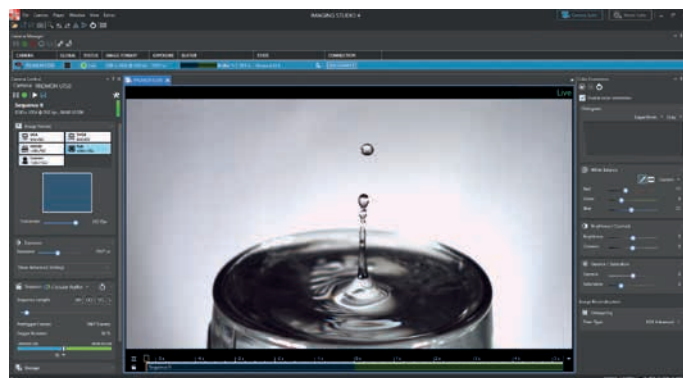
<b>Operation System</b>	Win 7/10 64 bit
<b>CPU</b>	Pentium Core i5 or better
<b>RAM</b>	4 GB or higher (only part of it usable for recording)
<b>Hard Disk</b>	<b>Separate SSD for image data recording is strongly recommended in order to achieve best performance for recording</b>
<b>Interface</b>	USB3: Full open USB3 interface dedicated for camera Recommended chipset: Intel USB 3.0 eXtensible host controller

## Ordering information

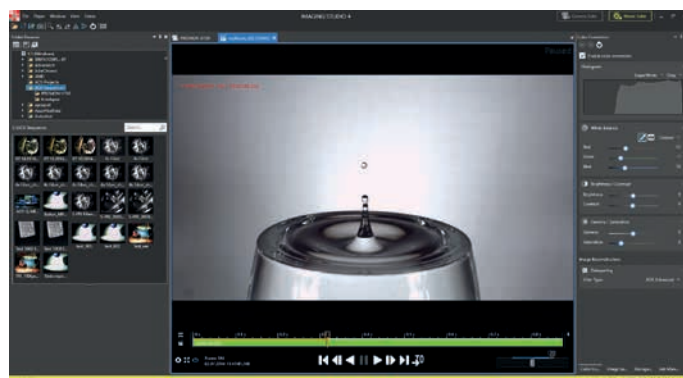
<b>510011-00-0000</b>	<ul style="list-style-type: none"> <li>PROMON U750 camera color</li> <li>3 m USB cable, lockable on camera side</li> <li>Triggeradapter with BNC connector</li> <li>Software, manual and documentation &gt; download from aos cloud</li> </ul>
<b>510013-00-0000</b>	<ul style="list-style-type: none"> <li>PROMON U750 camera monochrome</li> <li>3 m USB cable, lockable on camera side</li> <li>Triggeradapter with BNC connector</li> <li>Software, manual and documentation &gt; download from aos cloud</li> </ul>
<b>Optional Accessories</b>	<ul style="list-style-type: none"> <li>LED lights</li> <li>Mounts and tripods</li> <li>Lenses</li> </ul>

## Software

PROMON U750 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.



Complete graphical parametrization of the camera setting with Imaging Studio v4 CameraSuite



Comprehensive editing- and export function of the recorded sequence with Imaging Studio v4 MovieSuite

<b>Parameters</b>	Camera control, recording settings, playback and file conversion
<b>Auto-store Function</b>	Auto-store function in PC for 24/7 recording supported
<b>Trigger Modes, Positions</b>	Pre-post recording, adjustable by software from 0% to 100% in increments of 1% of total available recording time Re-arm after trigger for instantaneously new recording
<b>File Formats</b>	Recording in AOS native format for performance reasons, conversion to avi, mpeg, mpeg4 single image formats such as BMP, JPEG, TIFF, Gif etc.
<b>Snap Shot</b>	Single snapshot of live images supported
<b>Motion Detection</b>	Motion trigger and motion event marking in file
<b>Auto Exposure</b>	Auto exposure, free adjustable ROI
<b>Event Markers / Bookmarks</b>	Events in the sequence can be tagged by bookmarks for easy orientation / finding
<b>OSD</b>	Information on camera, recording features, time stamp, camera name may be added in image data, Position of OSD is set by user
<b>Custom Specific</b>	Extended functions for custom specific use are easy to integrate Contact us for further details

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