

## PROMON 12M – 12 megapixel high speed streaming camera

**AOS Technologies offers the highest resolution, high speed streaming camera configured with a PC recording device via CoaXpress. This high performance camera system comes ready to use with powerful operation software.**

The PROMON 12M camera is available as monochrome or color version. PROMON 12M offers stunning data rates of 12 megapixels @ up to 166 fps and higher with reduced resolution. Full HD-TV Format with 1920 x 1080 pixels provides sequences with up to 461 fps. Circular buffer recording, triggering by discrete signals and automatic re-arm after download are just a few functions made available in the easy-to-use software. Images can be recorded to PC-RAM or for longer recording time PROMON 12M can stream directly to HPD (high performance drive) for minutes. Easy export of image data to common movie formats is included as one of the many features of the software suite. PROMON 12M covers the 'Commercial Super HD (4K)' standard, perfect for broadcast or movie applications.

### Unique features

- **Resolution** – PROMON 12M with its powerful 4064 x 3072 pixel resolution opens completely new possibilities for many different applications. Images can be analyzed in great detail by taking advantage of the impressive zoom capability.
- **Long recording times** – PROMON 12M records images directly to your PC RAM or HPD, providing recording times from seconds up to minutes.
- **Long cable** – a single cable link between controller and camera bearing all required data links of up to 20 m (60 ft); options to extend up to 1000 m or more.
- **Turnkey** – PROMON 12M system comes with camera, cables, controller and pre-installed software ready for use. No time-consuming setup procedures necessary.

# PROMON 12M – Key specifications

## Typical frame rate vs resolution vs recording time (partial)

Resolution ▶	Resolution @ fps	Resolution @ fps	Resolution @ fps	Resolution @ fps	Resolution @ fps	Resolution @ fps
	4064 x 3072 @ 166 fps	4064 x 1560 @ 300 fps	1920 x 1080 @ 461 fps	1280 x 720 @ 678 fps	4064 x 480 @ 986 fps	320 x 120 @ 3100 fps
Memory ▼	Recording time	Recording time	Recording time	Recording time	Recording time	Recording time
25 GB RAM	12 sec	12 sec	41 sec	41 sec	13 sec	220 sec
800 GB HPD	6.4 min	6.4 min	21 min	21 min	6.9 min	117 min
1.6 TB HPD	12.8 min	12.8 min	42 min	42 min	13.8 min	234 min
3.2 TB HPD	25.4 min	25.4 min	86 min	86 min	27.7 min	465 min

Table shows typical resolution vs. fps, resolution is freely adjustable within limitations of camera/sensor, recording time and fps depends on PC performance

## Optical/Sensor specifications

Sensor Type	PROMON 12M color	PROMON 12M monochrome
<b>Image Sensor</b>	4064 x 3072 pixel with 8 Bit dynamic range, monochrome and colour, max 166 fps @ full resolution	
<b>Sensor Size</b>	5.5 µm pixel size / 22.44 x 16.90 mm <sup>2</sup>	
<b>Dynamic Range</b>	Sensor: 60 db, Output 8 Bit	
<b>Sensitivity</b>	ISO 160	ISO 320
<b>Shutter Type</b>	Global, independent of frame rate	
<b>Exposure Time</b>	Freely adjustable from 28 µs to 1/fps by software	
<b>Power</b>	Via CoaXpress	
<b>Filter</b>	UV-NIR Cut filter for MONO and COLOR	
<b>Camera Mount</b>	F-Mount (other mounts on request)	

## Control Software

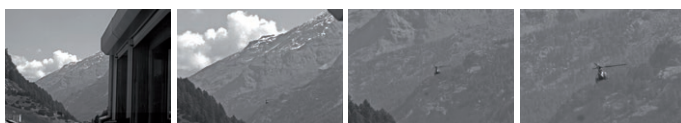
<b>Functionality</b>	Camera control, recording settings, playback, store data, and file format conversion
<b>Auto Store Function</b>	Auto store function in PC for 24/7 recording supported
<b>Trigger Modes, Positions</b>	Pre-post triggering, adjustable by software to 0% / 10% / 25% / 50% / 75% / 90% / 100% of total available recording time Re-arm after trigger for instantaneously new recording
<b>Event Markers / Bookmarks</b>	Events in a sequence can be tagged by bookmarks for easy retrieval / location.
<b>File Formats</b>	PROM, RAW3, AVI, TIFF, PNG and JPG with integrated batch converter
<b>OSD</b>	Information on camera, recording features, time stamp and camera name can be added in image data, position of OSD is set by user.
<b>Motion Analysis (optional)</b>	2D basic motion analysis with auto-tracking feature for up to 5 points is optionally available
<b>Custom Specific</b>	Extended functions for custom specific use can be integrated. Contact us for further details.

## Interface and Connector

<b>Data Interface</b>	Coaxpress CXP-6
<b>Connector</b>	4x DIN 1.0/2.3
<b>Trigger In</b>	BNC switch closing, TTL

## Physical specifications Camera

<b>Size</b>	With cable lock 98 x 88 x 100 mm Without cable lock 93 x 88 x 84 mm
<b>Weight</b>	With cable lock 800 g
<b>Operation Temp.</b>	0 °C ... +40 °C ambient
<b>Storage Temp.</b>	-40 °C ... +60 °C
<b>Mounting Threads</b>	M6 Mounting threads on all sides UNC ¼" on bottom side



Zooming in on PROMON 12M images – making the invisible visible

Your local AOS partner:

**IMAGING DYNAMICS, LLC**  
734 207-8245  
email: idbillb@msn.com  
web: www.imaging-dynamics.com

## Physical specifications Compact PC System \*

<b>CPU</b>	Intel Core i7-4770S
<b>RAM</b>	32 GB DDR
<b>Operating System Storage</b>	250 GB SSD
<b>Sequence Storage</b>	1 TB in mobile rack, front-accessible for easy data transfer
<b>Streaming Storage (HPD)</b>	Optional, 800 GB – 3.2 TB
<b>Data Export</b>	4x USB 3.0
<b>Video Out</b>	HDMI and VGA
<b>Dimensions</b>	(DxWxH) 421 mm x 232 mm x 176 mm (7 kg)

\* Other configurations optional, please inquire

## Available System configurations

Configuration	Recording time 25 GB RAM allocated (full @ 166 fps)	Recording time HPD* (full @ 166 fps)
<b>Basic</b>	Up to 12 sec	–
<b>PC800</b>	Up to 12 sec	Up to 6.4 min
<b>PC1600</b>	Up to 12 sec	Up to 12.8 min
<b>PC3200</b>	Up to 12 sec	Up to 25.4 min

\* High performance drive, inquire about OEM configurations

## Scope of Supply

Camera with cable lock
CoaXpress cable 5 m
PC-System with Win7 64 Bit multilingual
Dongle for PROMON Studio Software
Optional Add-ons:
– Motion Analysis Software
– Other cable lengths

