

MEMRECAM ACS-1 **M60/ M40**



World's First 60 GPixel/sec High Speed Camera System

**1280×896 pixels @ 100,000 fps (M60)
@ 65,000 fps (M40)**

1 Mpixel Resolution at Ultra-Fast Framing Rates ※ In boost mode

Ultra High Sensitivity
Color ISO 20,000
Mono ISO 100,000

500% brighter than conventional models ※ Compare to MEMRECAM GX-8F

USB 3.0B Fast download

400% faster data transfer ※ vs LAN connection

Up to 256GB Built-in memory

For longer recording time & memory segmentation for repetitive events

Features

Boost mode ^{※3}	For increased FPS or Vertical Resolution
Auto Black Balance	Mechanical Calibration Shutter
Memory Segment	Up to 64 Segments
Built-in SSD ^{※1}	Faster Auto Storage into Built-in SSD Backup image data while recording
Faster Download	Download via USB3.0B (to PC)
DOWNLOAD REC	Recording to a memory segment in parallel with downloading to another memory segment
Image Trigger	Triggered by intensity shifts detected in a minimum area of 21x16 pixel
Dual Framing Rate	1x and 1/2 ~ 1/100x
CAM MODE LED	Status LED : READY / VIEW / ARM / REC
SYNC Recording	Fully synchronized with GX-HUB
Frame straddling shooting	Record continuous image pairs for PIV analysis Support minimum 500ns laser pulse <M60/M40>
Fan control mode	Pause control / auto fancontrol / forced cooling
Auto pilot	Read sequence and execute automatically
EST SYNC	Sync with an external signal

Specifications

Sensor	1.14M Pixel, CMOS
Active Pixel	1280x896
ISO (REI)	ISO 5,000 - 40,000 (color) ISO 25,000 - 200,000 (Mono)
Electric Shutter	<M60>1/100 ~ 1/2,500,000 sec. 1/100 ~ 1/909,090 sec. ^{※4} <M40>1/100 ~ 1/1,666,666 sec. 1/100 ~ 1/909,090 sec. ^{※4}
Memory	64GB / 128GB / 256GB
Memory Segment	Up to 64 Segments
Bit Depth	8bit / 10bit / 12bit
Lens Mount ^{※1}	F Mount (Support to Iris ring-less Lens) ^{※1} C Mount ^{※1} EF Mount ^{※1}
Video Output	DisplayPort/ 3G-SDI (Level A)
Input Signal	Trigger (TTL/Contact)/ EST/ IRIG-B/ ARM CMD/ PWR CTL
Output Signal	Status (ARM/FAULT)/ Exp. Pulse/ EPO/ Trigger OUT/ VD OUT
Trigger Mode	NORMAL/ EVENT/ BURST/ MULTI/ LINEAR
Interface	1000BASE-T / USB3.0B / 3.0 / 2.0
Control ^{※1}	PC, V-PAD (11.6" Touch Panel Monitor)
Power	20-32VDC
Dimensions	Approx. 175Wx175Hx206D mm (without handle)
Weight	Approx. 7.3kg

Recording Time ^{※2}

fps	M60				M40			
	(Normal mode)		(Boost mode)		(Normal mode)		(Boost mode)	
	pixel (H) x (V)	Time in sec.	pixel (H) x (V)	Time in sec.	pixel (H) x (V)	Time in sec.	pixel (H) x (V)	Time in sec.
50~25,000	1280 x 896	3.04	—	—	1280 x 896	3.04	—	—
30,000	↓	2.54	—	—	↓	2.54	—	—
35,000	↓	2.17	—	—	↓	2.17	—	—
40,000	↓	1.90	—	—	1280 x 800	2.13	1280 x 896	3.80
45,000	↓	1.69	—	—	1280 x 720	2.10	↓	3.38
50,000	↓	1.52	—	—	1280 x 640	2.13	↓	3.04
60,000	1280 x 800	1.42	1280 x 896	2.54	1280 x 528	2.15	↓	2.54
65,000	1280 x 736	1.42	↓	2.27	1280 x 480	2.18	↓	2.34
75,000	1280 x 624	1.46	↓	2.03	1280 x 400	2.27	1280 x 800	2.27
100,000	1280 x 448	1.52	↓	1.52	1280 x 288	2.37	1280 x 576	2.27
120,000	1280 x 368	1.54	1280 x 704	1.61	1280 x 224	2.54	1280 x 448	2.54
150,000	1280 x 288	1.58	1280 x 544	1.67	1280 x 176	2.58	1280 x 352	2.58
200,000	1280 x 192	1.77	1280 x 384	1.77	1280 x 112	3.04	1280 x 224	3.04
220,000	1280 x 176	1.76	1280 x 352	1.76	1280 x 96	3.23	1280 x 192	3.23*
^{※5} 300,000	1280 x 96	2.37	1280 x 192	2.37	1280 x 48	4.73	1280 x 96	4.73
^{※5} 400,000	1280 x 48	3.55	1280 x 96	3.55	1280 x 32	5.32	1280 x 64	5.32
^{※5} 500,000	1280 x 32	4.26	1280 x 64	4.26	1280 x 16	8.52	1280 x 32	8.52
^{※5} 700,000	1280 x 16	6.09	1280 x 32	6.09	1280 x 16	6.09	1280 x 32	6.09
^{※5} 1,000,000	1280 x 16	4.26	1280 x 32	4.26				



V-PAD*1



Configurations

Standard

- ACS Camera
- Tripod Plate
- Standard Comm. Cable
- NAC Control Software MLink
- Operation Manual

Options

- AC Adapter (Power Supply)
- F-Mount Adapter
- C-Mount Adapter
- EF-Mount Adapter
- V-PAD
- Analog Wave Inserter
- Built-in SSD 1TB
- AUX Cable
- SYNC Cable
- Carrying Case

*1 Option

*2 Recording Time is 128GB model at 12-bit recording

*3 Only monochrome

*4 Export Control Model

*5 Required Export License

Visit our website at www.nacinc.com

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

Contact Us in the Americas:

nac Image Technology
193 Jefferson Ave, Suite 102
Salem, MA 01970 U.S.A.
Tel: (833) 600-0280
E-mail: sales@nacinc.com

Contact Us in Europe:

nac Deutschland GmbH
Hedelfingerstr. 54-70
70327 Stuttgart, Germany
Tel: +49(0)711 2201 885
E-mail: rwestphal@nacinc.de

Contact Us in Asia:

nac Image Technology Inc.
2-11-3 Kita-Aoama, Minato-ku
Tokyo 107-0061 Japan
Tel: +81 3 3796 7903
Email: nacinternational@camnac.co.jp