

MEMRECAM ACS-1 M60 / M40



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

1280 × 896 pixel @150,000 fps (M60)
@120,000 fps (M40)

1 Mpixel Resolution at Ultra-Fast Framing Rates * In Boost4 mode

Ultra High Sensitivity

Color ISO 20,000

Mono ISO 100,000

500% brighter than conventional model * 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 : STOP-READY / VIEW / ARM / REC
SYNC Recording	Fully synchronized with GX-HUB
Frame straddling shooting	Record continuous image pairs for PIV analysis Support minimum 210ns laser pulse
Fan control	Pause control / auto fancontrol / forced cooling mode
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) ISO25,000 — 200,000 (Mono)
Electric Shutter <M60>	1/10 ~ 1/2,500,000 sec. ^{※5} 1/10 ~ 1/909,090 sec. ^{※4}
<M40>	1/10 ~ 1/1,666,666 sec. ^{※5} 1/10 ~ 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) C Mount → EF Mount
Video Output	DisplayPort / 3G-SDI (Level A)
Input Signal	Trigger(TTL/Contact)/ EST/ IIRIG-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) pixel (H) x (V) Time in sec.	(Boost mode) pixel (H) x (V) Time in sec.	(Boost4 mode) pixel (H) x (V) Time in sec.	(Normal mode) pixel (H) x (V) Time in sec.	(Boost mode) pixel (H) x (V) Time in sec.	(Boost4 mode) pixel (H) x (V) Time in sec.	(Normal mode) pixel (H) x (V) Time in sec.	(Boost mode) pixel (H) x (V) Time in sec.
50 ~	1280	1280	1280	1280	1280	1280	1280	1280
25,000	× 896 3.04	—	—	× 896 3.04	—	—	—	—
30,000	↓ 2.53	—	—	↓ 2.53	—	—	—	—
35,000	↓ 2.17	—	—	↓ 2.17	—	—	—	—
40,000	↓ 1.90	—	—	× 800 2.12	× 896 3.80	—	—	—
45,000	↓ 1.69	—	—	× 720 2.10	↓ 3.38	—	—	—
50,000	↓ 1.52	—	—	× 640 2.12	↓ 3.04	—	—	—
60,000	× 800 1.41	× 896 2.53	—	× 528 2.15	↓ 2.53	—	—	—
65,000	× 736 1.42	↓ 2.34	—	× 480 2.18	↓ 2.34	—	—	—
75,000	× 624 1.45	↓ 2.02	—	× 400 2.27	× 800 2.27	× 896 4.05	—	—
100,000	× 448 1.52	↓ 1.52	—	× 288 2.36	× 576 2.36	↓ 3.04	—	3.04
120,000	× 368 1.54	× 704 1.61	× 896 2.53	× 224 2.53	× 448 2.53	↓ 2.53	—	2.53
150,000	× 288 1.57	× 544 1.67	↓ 2.02	× 176 2.58	× 352 2.58	× 704 2.58	—	2.58
200,000	× 192 1.77	× 384 1.77	× 768 1.77	× 112 3.04	× 224 3.04	× 448 3.04	—	3.04
^{※4} 220,000	× 176 1.76	× 352 1.76	× 640 1.93	× 96 3.22	× 192 3.22	× 384 3.22	—	3.22
^{※5} 300,000	× 96 2.36	× 192 2.36	× 384 2.36	× 48 4.73	× 96 4.73	× 192 4.73	—	4.73
400,000	× 48 3.54	× 96 3.54	× 192 3.54	× 32 5.32	× 64 5.32	× 128 5.32	—	5.32
500,000	× 32 4.25	× 64 4.25	× 128 4.25	× 16 8.51	× 32 8.51	× 64 8.51	—	8.51
700,000	× 16 6.08	× 32 6.08	× 64 6.08	× 16 6.08	× 32 6.08	× 64 6.08	—	6.08
1,000,000	× 16 4.25	× 32 4.25	—	—	—	—	—	—

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



V-PAD ^{※1}



^{※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

Specifications described above are subject to change without notice.



Contact Us in the Americas:
nac Americas, Inc.
 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
 D-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
 E-mail: nacinternational@camnac.co.jp