IMAGE TECHNOLOGY

Providing quality and reliability since 1958

# MEMRECAM ACS-1M60, ACS-1M40

## The Worlds first 60 Gigapixel Per Second High Speed Camera

1280 x 800 @ 60,000 fps (colour)
1280 x 896 @ 100,000 fps (monochrome)


| Features | |
|---|---|
| Boost Mode monochrome only | Increases resolution in highest speed |
| Auto black Balance | Mechanical Shutter |
| Memory Segment | up to 64 Segments |
| Built in SSD Option | Fast Auto Storage to built in SSD |
| Faster Download | Download via USB3.0B to PC<br>Download via GigE |
| Download Rec | Download a memory segment while recording another segment |
| Image Trigger | Triggered in a minimum area of 21 x 16 pixels |
| Dual Framing rate | 1x and 1/2 - 1/100x |
| CAM Mode LED | Status LED READY/VIEW/ARM/REC |
| Frame Straddle mode | Record continuous image pairs for PIV Applications |
| Fan Control | Pause Control / auto control / forced cooling |
| EST Sync | Sync with an External Signal |

| Specifications | |
|---|---|
| Sensor | 1.14M Pixel, CMOS<br>28.16mm x 19.71mm |
| Active Pixels | 1280 x 896 |
| Pixel Size | 22µm square |
| ISO (REI) | 100,000 (monochrome)<br>20,000 (colour) |
| Memory | 64GB / 128GB / 256GB |
| Memory Segment | up to 64 segments |
| Bit Depth | 8bit / 10bit / 12bit |
| Electronic Shutter | M60 - Open to 400ns<br>M40 - Open to 600ns |
| Video Output | DisplayPort / HDMI / 3G-SDI |
| Input Signal | Trigger / EST / IRIG-B |
| Output Signal | STATUS / Exp. Pulse / Trigger Out |
| Control | PC (GigE)<br>V-PAD (11.6" Touch Panel - Option) |
| Power | 20-32V DC |
| Dimensions | 175w x 175h x 206d mm |
| Weight | 7.3Kg |


High Speed Camera for Sophisticated Applications

# MEMRECAM ACS-1/M60, ACS-1/M40

## High Speed Camera System

| Resolution Chart / Recording time (128GB 12 bit) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Frame Rate FPS | M60 | | | | M40 | | | |
| | Normal Mode {i - interpolated} {s - Sensor resolution} | | Boost Mode {monochrome Only} | | Normal Mode {i - interpolated} {s - Sensor resolution} | | Boost Mode {monochrome Only} | |
| | 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 - 35,000 | 2560 x 1796(i) 1280 x 896 (s) | - | - | - | 2560 x 1796(i) 1280 x 896 (s) | - | - | - |
| 35,000 | 2560 x 1796(i) 1280 x 896 (s) | 2.17 | - | - | 2560 x 1796(i) 1280 x 896 (s) | 2.17 | - | - |
| 40,000 | 2560 x 1796(i) 1280 x 896 (s) | 1.90 | - | - | 2560 x 1600(i) 1280 x 800 (s) | 2.13 | 1280 x 896 | 3.80 |
| 45,000 | 2560 x 1796(i) 1280 x 896 (s) | 1.69 | - | - | 2560 x 1480(i) 1280 x 720 (s) | 2.10 | 1280 x 896 | 3.38 |
| 50,000 | 2560 x 1796(i) 1280 x 896 (s) | 1.52 | - | - | 2560 x 1280(i) 1280 x 640 (s) | 2.13 | 1280 x 896 | 3.04 |
| 60,000 | 2560 x 1600(i) 1280 x 800 (s) | 1.42 | 1280 x 896 | 2.54 | 2560 x 1056(i) 1280 x 528 (s) | 2.15 | 1280 x 896 | 2.54 |
| 65,000 | 2560 x 1472(i) 1280 x 736 (s) | 1.42 | 1280 x 896 | 2.27 | 2560 x 960(i) 1280 x 480 (s) | 2.18 | 1280 x 896 | 2.34 |
| 75,000 | 2560 x 1248(i) 1280 x 624 (s) | 1.46 | 1280 x 896 | 2.03 | 2560 x 800(i) 1280 x 400 (s) | 2.27 | 1280 x 800 | 2.27 |
| 100,000 | 2560 x 896(i) 1280 x 448 (s) | 1.52 | 1280 x 896 | 1.52 | 2560 x 576(i) 1280 x 288 (s) | 2.37 | 1280 x 576 | 2.27 |
| 120,000 | 2560 x 736(i) 1280 x 368 (s) | 1.54 | 1280 x 704 | 1.61 | 2560 x 448(i) 1280 x 224 (s) | 2.54 | 1280 x 448 | 2.54 |
| 150,000 | 2560 x 576(i) 1280 x 288 (s) | 1.58 | 1280 x 544 | 1.67 | 2560 x 352(i) 1280 x 176 (s) | 2.58 | 1280 x 352 | 2.58 |
| 200,000 | 2560 x 384(i) 1280 x 192 (s) | 1.77 | 1280 x 384 | 1.77 | 2560 x 224(i) 1280 x 112 (s) | 3.04 | 1280 x 224 | 3.04 |
| 220,000 | 2560 x 352(i) 1280 x 176 (s) | 1.76 | 1280 x 352 | 1.76 | 2560 x 192(i) 1280 x 96 (s) | 3.23 | 1280 x 192 | 3.23 |
| 300,000 | 2560 x192(i) 1280 x 96 (s) | 2.37 | 1280 x 192 | 2.37 | 2560 x 96(i) 1280 x 48 (s) | 4.73 | 1280 x 96 | 4.73 |
| 400,000 | 2560 x96(i) 1280 x 48 (s) | 3.55 | 1280 x 96 | 3.55 | 2560 x 64(i) 1280 x 32 (s) | 5.32 | 1280 x 64 | 5.32 |
| 500,000 | 2560 x64(i) 1280 x 32 (s) | 4.26 | 1280 x 64 | 4.26 | 2560 x 32(i) 1280 x 16 (s) | 8.52 | 1280 x 32 | 8.52 |
| 700,000 | 2560 x32(i) 1280 x 16 (s) | 6.09 | 1280 x 32 | 6.09 | 2560 x 32(i) 1280 x 16 (s) | 6.09 | 1280 x 32 | 6.09 |
| 1,000,000 | 2560 x32(i) 1280 x 16 (s) | 4.26 | 1280 x 32 | 4.26 | N/A | N/A | N/A | N/A |

| Options |
|---|
| C-Mount Lens Adapter |
| Canon EF Lens Adapter |
| V-Pad (11.6” Touch Screen Controler) |
| Carry Case |
| Analogue Wave Inserter |
| Built in SSD |
| AUX Cable |

### Camera Status of All ACS Cameras displayed with LED Strip


VIEW


ARM


REC


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