

# THE FUTURE HAS ARRIVED WITH THE NAC MEMRECAM ACS

## The World's First 40 Gigapixel Per Second, High-Speed Digital Video Camera!



Over the past decade, nac has made a name for itself with its MEMRECAM series of high-speed video cameras for research and development and the defense and aerospace industry. However, nothing has come close to achieving the performance or results now available with ACS: the world's first 40 gigapixel (GPX) frames per second, high-speed digital video camera. Entirely versatile in its compact but powerful format, the ACS has reached an entirely new stratosphere in the world of high-speed, video camera systems.

Weighing just sixteen pounds, the ACS exceeds all currently known products on the market with its faster speed, superior sensitivity, compact housing, efficient workflow, clarity of resolution, and its never-before reached on-board memory capability – allowing for a much longer timeframe in the field without reaching maximum storage capacity. In addition to all those attributes, the ACS is also user-friendly.

Summarizing the ACS's technological advances, nac Americas General Manager Steve Soltis states, "The ACS is capable of capturing everything from biological events at the molecular level, to precise moments of material deviation, given the technology of ballistics. In short, it allows users to stretch the boundaries of that which was previously unseen."

The ACS's capabilities derive from the technological advances nac has been exploring across the computer imaging and high-speed photo industry. The ACS has incorporated many of these new technologies, resulting in a whole new level of high resolution and high frame-rate. Paramount to this are nine important and game-changing attributes that you'll find in the ACS:

- 1. Resolution of 40 GPX frames per second:** The quality of the image is far superior to what high-speed video cameras have previously been able to capture and allows for a much broader capability of uses.
- 2. Speed at which the camera operates:** The ACS offers one megapixel resolution at up to 40,000 frames per second (FPS). This 40K FPS allows people in the research sector to see intricate details in all of their events which could lead to greater advancements in science. This FPS is 65% greater than the performance of competing offerings.
- 3. Light sensitivity:** Up to 50,000 ISO with no gain/amplification.
- 4. Greater portability:** As the most compact and lightweight of all the high-end cameras, the ACS is 60% smaller than its closest competitor.
- 5. Offers a PC-less operation:** If out in the field or in a restricted area where one cannot



bring a computer, no problem: The ACS has an easily attachable viewfinder (V-pad) that will allow you to perform your work. The V-pad provides a full HD touchpad that controls the screen and is easy to use allowing for completely intact computer-less operation.

**6. Exceptional memory/longevity:** When out in the field, the last thing the user wants is to have to stop recording because the memory is full. With the ACS, you won't have this problem because it comes with a 256GB dram onboard memory AND an optional one terabyte (1TB) capability via built-in solid state memory drive. In addition, a high speed connection to an external drive is available as well.

**7. Improved workflow:** The ACS is designed to utilize the non-proprietary, commercial off-the-shelf (COTS) accessories that come with a high-speed digital video camera. While other high-end cameras require proprietary hardware, and connections to download and process digital footage, an ACS user can transfer to the optional 1TB internal memory or swiftly download files to their computer's hard drive – at their convenience.

**8. Superfast download speed:** Using a USB 3.0 Micro-B connection, the ACS's download speed may surprise you. Its accelerated data transfer utilizing the ACS's internal DMA controller is industry leading and can download and utilize the speed capability of today's fast commercially available Solid State storage media. Sustained data transfer rates of up to 355MB/sec are easily achievable over copper and fiber cabling infrastructures as well as to internal storage.

**9. ACS Structure:** High speed cameras can be susceptible to heat. The ACS construction utilizes a sealed heat exchanger design. This unique design keeps the ACS's internal temperature stable while maintaining maximum performance and image quality.

Whether the application involves combustion studies, spray analysis, ballistics profiles, fluid mechanics, material destruction, mechanical dynamics, fuel injection, academic studies or some other aspect of research and development, you'll find the ACS to be a real workhorse that will give your team greater dexterity to complete your mission with exceptional results.

The nac MEMRECAM systems are on the edge of science, and with the new ACS high-speed digital video camera, there's really no limit to what you can achieve.

Interested in seeing a demonstration of the MEMRECAM ACS?

Please contact, [sales@www.nacinc.com](mailto:sales@www.nacinc.com) for a demonstration.

For more information, please visit: [www.nacinc.com](http://www.nacinc.com)