

# AZ Instrument Corp.

No.3-2, Chien-Kuo Road, TEPZ Tantz, Taichung 427, Taiwan  
Web site: <http://www.az-instrument.com.tw>  
E-mail: info@az-instrument.com.tw

衡欣實業股份有限公司

台中縣潭子鄉建國路 3-2 號  
Tel: 886-4-25326668 (rep.)  
Fax: 886-4-25326593

Question:

Edit: Mari Weng, 30 Jan. 2024

I want to use 240FPS speed to film 3 minutes, how big my computer memory must have? (GB)

Answer:

**On theory**, below is the step by step procedure to calculate the image size.

1. First look at the resolution of the image to calculate the size of an image.

→ For example: If the resolution of an image is 1280\*1024, then an image requires  
 $1280*1024=1,310,720$  bytes (that is, 1.25 MB)

2. Let's look at how many sheets we need to take in total?

→ According to the customer's request, 240 pictures are taken per second, and it takes 3 minutes  
( $3*60=180$  seconds), then  $3*60*240=43,200$  pictures

3. In summary, one image requires 1.25 MB, and a total of 43,200 images are required, so a total of  
approximately  $1.25*43200=54,000$  MB= $52.734375$  GB is required.

4. Due to the requirements of the file format, the actual required storage capacity will be slightly larger  
than 52.734375 GB, but the relative amount is too small and can be ignored.

However, in fact, it depends on the memory capacity that **can be used on the PC**, because the images  
acquired by the "high-speed camera" can only be stored in the memory first. After the image acquisition  
is completed, they are transferred from the memory to the hard disk. So, **even you have a 53GB  
memory, it doesn't mean you can film the whole 3 minutes video successfully**

The correct method is using The "High-Speed Camera" software to display the current maximum time of  
images you can take. Here is the location in software that you could find this information:

