SD Card Memory Usage

ATLI EON camera supports a micro-SD card up to 128 GB. Memory usage depends on the time lapse output setting. You can either select Video only or Video + Photo Sequence. Photo Sequence takes up more memory since all frames taken will be stored separately in jpg format. For long duration time lapse shooting, it would be important for you to estimate how much memory is required and decide whether a larger capacity SD card is required or adjusting the shooting interval to accommodate the capacity of the SD card.

1. For time lapse video, the frame rate is preset to 25 fps and a typical frame size is around 50KB. The actual frame size varies from 20KB to 100KB depending on the target scene, camera settings, and lighting conditions. For estimation, you can use 50KB.

If you know what shooting interval you want, you can start to calculate the memory usage. Let's take 1s shooting interval as example. This gives 60 frames each minute and 3600 frames an hour. The estimated memory usage per hour is 180 MB = 3600 x 50KB. For a 128GB SD card, you will get ~29 days = 711 hours = 128GB/0.18GB/hr. In order to cover 3 months, you can change the shooting interval to at least 4s or use an SD card with 64 GB or bigger.

If you don't need to shoot 24 hours a day continuously, you can use "Schedule" to define the time slot(s) you want to shoot. This will reduce the memory usage significantly.

Note: The maximum number of frames per time lapse video is 15,000 (Default 25fps and 10 minutes playback). If the limit is reached, frames from the existing task will then be saved to another video file. Rather saving a time lapse video in one big file, you can save it by "Per Time Slot" or "Per Day" using the "Schedule" feature. This offers an easy way to manage and view the recorded time lapse footages.

2. Photo Sequence output enables the camera to save all photos taken in a separate folder. This is required for creating a time slice photo. The photo size may vary from 0.5 to 2MB depending on the target scene, camera settings and lighting condition. For memory usage estimation, we recommend using 1MB per photo. Let's use the same example with shooting interval of 1s for 1 hr, the estimated memory usage for all photos taken is 3600 x 1MB = 3.6GB. This is approximately 20 times more than the corresponding time lapse video. If you want to do some post processing and time slicing, you will need to select and save the photo sequence.

A 30% safety margin is recommended on the above estimations as it may vary from the real-life memory usage.