

1)The size of 10 sec 720p video clip without uncompressed:

1. **Resolution:** 720p is 1280 pixels wide by 720 pixels high.
2. **Bit Depth:** Assuming 24 bits per pixel (typical for RGB), this gives us around 2.2 million pixels per frame.
3. **Frame Rate:** Assuming 30 frames per second (fps), for 10 seconds, that's 300 frames.

Now, let's calculate the size:

$$\text{Size} = \text{Resolution} \times \text{Bit Depth} \times \text{Frame Rate} \times \text{Duration}$$

$$\text{Size} = 1280 \times 720 \times 24 \times 30 \times 10$$

$$\text{Size} \approx 595,968,000 \text{ bits}$$

$$\text{Size} \approx 71,245,440 \text{ bytes}$$

$$\text{Size} \approx 67.89 \text{ megabytes (MB)}$$

2)We also have 1 MB photo.

Both 1) and 2) together, the total size would be approximately ~ 70 MB.

Since we will have 6000 repairs per month:

Multiplying 70 MB by 6000:

$$70 \text{ MB} \times 6000 = 420,000 \text{ MB}$$

To convert this to gigabytes (GB), divide by 1024:

$$\frac{420,000 \text{ MB}}{1024} \approx 410.16 \text{ GB}$$

So, 70 MB multiplied by 6000 equals approximately 410.16 GB.

Data storage prices pay-as-you-go	Premium	Hot	Cool	Cold	Archive
First 50 terabyte (TB) / month	\$0.15 per GB	\$0.021 per GB	\$0.015 per GB	\$0.0036 per GB	\$0.00099 per GB
Next 450 TB / month	\$0.15 per GB	\$0.02 per GB	\$0.015 per GB	\$0.0036 per GB	\$0.00099 per GB
Over 500 TB / month	\$0.15 per GB	\$0.0191 per GB	\$0.015 per GB	\$0.0036 per GB	\$0.00099 per GB