

Weight

Camera: 2.9oz (84g)
Camera with housing: 5.2oz (147g)

Video Mode

Video Resolutions

Video Resolution	Frames Per Second (fps) NTSC/PAL	Field of View (FOV)	Screen Resolution
4K	15, 12.5	Ultra Wide	3840x2160
2.7K	30, 25, 24	Ultra Wide, Medium	2704x1520
1440p	48, 30, 25, 24	Ultra Wide	1920x1440
1080p	60, 50, 48, 30, 25, 24	Ultra Wide, Medium, Narrow	1920x1080
1080p SuperView	60, 50, 48, 30, 25, 24	Ultra Wide	1920x1080
960p	100, 60, 50	Ultra Wide	1280x960
720p	120, 60, 50, 30, 25	Ultra Wide, Medium, Narrow	1280x720
720p SuperView	100, 60, 50	Ultra Wide	1280x720
WVGA	240	Ultra Wide	848x480

Video Format

H.264 codec, .mp4 file format

Time Lapse Video¹

Automatically creates video from frames captured at set intervals. Available only in 4K and 2.7K 4:3 resolutions. (2.7K 4:3 is available only for Time Lapse Video.)

Time Lapse Video Intervals

0.5, 1, 2, 5, 10, 30 and 60 seconds

Video + Photo

Record video and capture Time Lapse photos at the same time. Available intervals are 5, 10, 30 and 60 seconds.

Video Resolution	Video Frames per Second (fps)	Video FOV
1440p	24	Ultra Wide
1080p	30, 25, 24	Ultra Wide, Medium, Narrow
720p	60, 50, 30, 25	Ultra Wide, Medium, Narrow ²

Looping

Record a continuous video loop that overwrites itself until you press the shutter button to stop it and save.

Advanced Video Capture Settings

SuperView™

SuperView video mode captures the world's most immersive wide-angle perspective. It allows you to capture more of yourself and your surroundings in the shot, and it provides full widescreen playback.

SuperView Settings

SuperView Mode	Video Resolution
1080p SuperView	1920 x 1080
720p SuperView	1280 x 720

Auto Low Light

Auto Low Light mode automatically adjusts frame rates according to lighting conditions for enhanced low-light performance. Frame rates are adjusted in medium- and low-light conditions. Playback occurs at the selected resolution and frame rate.

Photo Mode

Photo Resolutions

Resolution	Field of View (FOV)	Screen Resolution
12MP (Default)	Wide	4000 x 3000
7MP	Wide, Medium	3000 x 2250
5MP	Medium	2560 x 1920

Continuous Photo (up to 30 seconds)

Hold down the shutter button to continuously capture a series of photos until shutter button is released.

Continuous Interval

3 photos/1 second (Default)

5 photos/1 second

10 photos/1 second

Night Photo

Capture a single photo with a customizable exposure time of up to 30 seconds.

Shutter

Applies only to Night Photo and Night Lapse and determines the amount of time that the shutter is open.

Shutter Setting	Description
Auto (Default)	Up to 2 seconds
Fixed	2, 5, 10, 15, 20 or 30 seconds

Multi-Shot Mode

Photo Resolutions

Resolution	Field of View (FOV)	Screen Resolution
12MP (Default)	Wide	4000 x 3000
7MP	Wide, Medium	3000 x 2250
5MP	Medium	2560 x 1920

Burst

Capture up to 30 photos per second.

Burst Rate

30 photos/1 second (Default), 30 photos/2 seconds, 30 photos/3 seconds, 30 photos/6 seconds¹
10 photos/1 second, 10 photos/2 seconds, 10 photos/3 seconds
5 photos/1 second
3 photos/1 second

Time Lapse

Automatically capture a series of photos at timed intervals.

Time Lapse Photo Intervals

0.5, 1, 2, 5, 10, 30 and 60 seconds

Night Lapse

Capture a series of photos at specific intervals and exposure times.

Night Lapse Photo Intervals

15, 20, 30 and 60 seconds
2, 5, 30 and 60 minutes

Shutter

Applies only to Night Photo and Night Lapse and determines the amount of time that the shutter is open.

Shutter Setting	Description
Auto (Default)	Up to 2 seconds
Fixed	2, 5, 10, 15, 20 or 30 seconds

Advanced Video and Photo Capture Settings

Protune™

Protune unlocks the camera's full potential, delivering minimally compressed, cinema-caliber video optimized for professional productions, and advanced manual controls for photos and video. Flex your creativity with customizable settings for Color, ISO Limit, White Balance, Sharpness and Exposure—and enjoy the greatest degree of manual control available in a GoPro camera.

- Captures images with less compression, giving content creators higher quality for professional productions.
- Protune enables manual control of **White Balance**, **Color**, **ISO Limit**, **Sharpness**, **Shutter** and **Exposure Value Compensation** for advanced control and customization of your videos and photos.
- Protune is available for all video and photo resolutions.

Protune Settings

White Balance

White Balance

Adjusts the overall color tone of videos and photos.

White Balance Setting	Recommended Lighting Conditions
Auto (Default)	Automatically adjusts the color tone based on the environmental conditions
3000K	Warm light (incandescent or sunrise/sunset lighting)
5500K	Slightly cool light (cool fluorescent, average daylight)
6500K	Cool light (overcast conditions)
Native	Industry standardized optimized color

Color

Color

Allows you to adjust the color profile of your video footage or photos.

Color Setting	Resulting Color Profile
GoPro Color (Default)	GoPro color-corrected profile (same great color as when Protune is turned off)
Flat	Flat, neutral color profile that can be color-corrected to better match footage captured with other equipment, offering more flexibility in post-production

ISO Limit

ISO Limit

Adjusts the camera's sensitivity in low-light environments, and creates a balance between brightness and resulting image noise. Image noise refers to the degree of graininess in the image.

Protune for Video ISO Limit

Setting	Resulting Video Quality
6400	Brighter video in low light, increased image noise
1600 (Default ¹)	Moderately bright video in low light, moderate image noise
400	Darker video in low light, reduced image noise

Protune for Photo ISO Limit

Setting	Resulting Photo Quality
800 (Default)	Darker photo in very low light, increased image noise
400	Darker photo in low light, moderate image noise
200	Bright photo in indoor lighting, marginal image noise
100	Bright photo in outdoor daylight, minimal image noise

Sharpness

Sharpness

Controls the sharpness of your video footage or photos.

Sharpness Setting	Resulting Quality
High (Default)	Ultra sharp video or photo
Medium	Moderately sharp video or photo
Low	Softer video or photo that allows for more flexibility in post-production

Exposure Value Compensation (EV COMP)

Exposure Value Compensation

Affects the brightness of your video. Adjusting this setting can improve image quality when shooting in environments with contrasting lighting conditions.

EV COMP Settings
-2.0
-1.5
-1.0
-0.5
0 (Default)
+0.5
+1.0
+1.5
+2.0

Spot Meter

Spot Meter is ideal for filming within a dark space with the camera pointed towards a brighter setting (such as filming the outdoors from within a car).

QuikCapture

With the press of a button, the camera automatically turns on and begins recording video or capturing Time Lapse photos.

Image Quality + Optics

- Ultra sharp image quality with all-glass lens
- Ultra wide-angle field of view with reduced distortion

Battery + Charging

- Rechargeable lithium-ion battery
- Rated at 1160mAh, 3.8V, 4.4Wh

Battery Life

The chart below indicates the approximate continuous recording time (hr:min) you can expect when shooting in various video modes using a fully charged battery.³

	With Wi-Fi Off	With Wi-Fi On + Using Wi-Fi Remote	With Wi-Fi On + Using GoPro App	With Wi-Fi Off + Using Battery BacPac™
Video Mode	Estimated Time	Estimated Time	Estimated Time	Estimated Time
4K 15fps	2:00	1:50	1:40	3:05
2.7K 30fps	1:50	1:40	1:30	3:00
1440p 48fps	1:50	1:40	1:30	3:05
1080p 60fps	1:40	1:30	1:20	3:00
1080p 30fps SuperView	1:50	1:40	1:30	3:05
720p 120fps	1:55	1:45	1:35	3:05

Audio

- Format: 48kHz sampling rate, AAC compression
- Advanced AGC (automatic gain control) with multi-band compressor
- Internal Microphone:
 - Mono
 - Approximately 2x greater dynamic range (compared to the HERO3+ Black Edition)
- External Microphone: Stereo supported with 3.5mm microphone adapter (sold separately). See [list of supported microphones](#).

Ports

Mini USB

- Charging
- Connecting to a computer for playback/file transfer/charging
- Supports 3.5mm stereo microphone via optional adapter (sold separately)
- Supports playback to composite TV via optional cable (sold separately)

Micro HDMI

- Supports playback to HDTV via optional cable (sold separately)

microSD

- Memory card

Storage

- microSD memory card with a Class 10 or UHS-1 rating required. See [list of recommended microSD cards](#)
- Up to 64GB capacity supported
- Record times vary with resolutions and frame rates

Photo + Video Playback

Camera

Preview and play back videos and photos on your camera's touch display.

HDTV

Micro HDMI to HDMI cable required (sold separately)

Note: HDMI playback depends on the resolution of the device and is certified up to 1080p.

TV

Mini USB to composite cable required (sold separately)

GoPro App

Use your phone or tablet to preview and play back videos and photos.

Computer

Connect via mini USB to USB cable (included), or copy files from the microSD card to your computer.

Minimum system requirements for best playback on Mac® and Windows® computers

- Mac OS® X 10.8 and later / Microsoft Windows 7, 8.x
- Intel® Core 2 Duo™ or Intel® Dual Core™
- 4GB RAM
- Mac: Graphics card shipped with Intel® Dual Core™ Macs or better / Windows: Graphics card that supports OpenGL1.2 or later
- 5400 RPM internal hard drive (7200 RPM drive or SSD recommended)
- See minimum system requirements for 4k editing and playback [here](#)

¹May require a camera software update. [Learn more.](#)

²Ultra Wide is not available for 60 fps.

³Based on GoPro engineering testing. Actual performance may vary based on settings, environmental conditions and other factors. Maximum battery capacity will normally decrease with time and use.