

VIRB 360 SPECS

PHYSICAL

Weight	Without Battery: 133g With Battery: 160g
Size (H×W×D)	39.0 × 59.3 × 69.8mm
Water Rating	Waterproof to 33 ft (10m)
Temperature Range	Operating: 0 to 40°C (32 to 104°F) Cold Operation with Warmed Battery: -20 to 40°C (-4 to 104°F); Battery at 25°C (77°F) Charging: 0 to 45°C (32 to 113°F) Storage: -40 to 85°C (-40 to 185°F)
Battery	Replaceable, Rechargeable Lithium-Ion 1250mAh, 3.8V, 4.7Wh Run Time: Stitched 4K 30FPS – 1 hour 5 minutes Unstitched 5K 30FPS – 1 hour 5 minutes
Supported SD Cards	Micro SD Max Capacity: 128GB FAT32 (≤ 32GB) , exFAT (≥ 32GB) Write Speed ≥15MB/s. UHS-I, Class U3 Or Higher Rating Required Click Here For Recommended Card List
Data Interface	Micro USB USB 2.0
Video Output Port	Equirectangular, Stitched Output Resolution up to 4K at 30FPS (3840 × 2160)
Status Display	Sunlight-visible, transfective memory-in-pixel (MIP) 1.00" x 0.42" (25.3 x 10.7 mm)

VIDEO

Lens Modes	360: Capture Stitched-In-Camera, Fully Spherical Videos In Equirectangular Format. Front Only: Capture Videos in Traditional Fixed-Frame Format Using the Front Lens. Rear Only: Capture Videos in Traditional Fixed-Frame Format Using the Rear Lens. RAW: Capture Unstitched, Fully Spherical Videos. Each Video produces 2 high-res files; 1 for each lens.
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VIRB 360 SPECS

Video Modes

5.7K*: 2880×2880 (2 files) / 30fps @ 120Mbps (60Mbps per file) : 360 Unstitched
5K: 2496×2496 (2 files) / 30fps @ 100Mbps (50Mbps per file) : 360 Unstitched
4K: 3840×2160 / 30fps @ 80Mbps : 360 Stitched
3.5K: 1760×1760 (2 files) / 60fps @ 100Mbps (50Mbps per file): 360 Unstitched
FHD: 1920×1080 / 120fps @ 50Mbps: Traditional 16:9
FHD: 1920×1080 / 60fps @ 40Mbps : Traditional 16:9
Timelapse Video: Available in 4K and 5K Resolutions. Interval 2/5/10/30/60s

* Requires Mobile App to enable. Run Times May Be Reduced.

Stabilization Modes*

Stabilize: Smoothes out quick movements and vibrations and levels out the horizon
Lock: Stabilizes and counteracts the camera orientation in full 360, locking the stabilized orientation to a specified direction.
Follow: Stabilizes and counteracts the camera orientation in full 360, the stabilized orientation follows the GPS trajectory.
* Stabilization applied during playback and in videos produced using VIRB mobile app or VIRB Edit desktop software. Available only for videos stitched in camera.

Video Format .MP4 (AVC / H.264 Encoding)

Max Video Bitrate 120 Mbps

ISO Range 100 – 1600 (Automatic)
100 – 6400 (Manual)

Manual Settings*

Color	Vivid or Flat
White Balance	Auto or Manual
Sharpness	Low/Medium/High
ISO Limit	400/800/1600/3200/6400
Exposure Bias	± 2.0 EV Range
Exposure Lock	Enable/Disable
Exposure Balance	Balanced Exposure/Front Lens Bias/Rear Lens Bias/Independent

*Requires Mobile App

PHOTO

Lens Modes

360: Capture Stitched-In-Camera, Fully Spherical Photos In Equirectangular Format.
Front Only: Capture Photos in Traditional Fixed-Frame Format Using the Front Lens.
Rear Only: Capture Photos in Traditional Fixed-Frame Format Using the Rear Lens.
RAW: Capture Unstitched, Fully Spherical Photos. Each Photo produces 2 high-res files; 1 for each lens.

VIRB 360 SPECS

Photo Resolution	15MP: 5640 × 2816 (Stitched 360) 2 × 9MP: 2 × 3008 × 3000 (Unstitched 360, 2 Files) 3MP: 1920 × 1440 (Traditional, Single Lens)
Photo Modes	Single Shot Capture Burst Shooting: 20 frames / sec Auto Exposure Bracketing (AEB): 3 bracketed frames at ±1.0 EV Bias. Adjustable with App. Time Lapse: Interval 2/5/10/30/60 s Travelapse: Interval 0.01 miles and up. Requires Mobile App.
Photo Format	.JPEG
ISO Range	100 – 800 (Automatic) 100 – 800 (Manual)
Timer Delay	2, 5, 10, 30 or 60 seconds. Only applies to first photo captured when set to Time Lapse.
Manual Settings*	Color Vivid or Flat White Balance Auto or Manual Sharpness Low/Medium/High ISO Limit 100/200/400/800 Exposure Bias ± 2.0 EV Range Exposure Balance Balanced Exposure/Front Lens Bias/Rear Lens Bias/Independent *Requires Mobile App

AUDIO

Format	48 kHz Sampling, AAC Compression, 4-Channel Ambisonic
Spatial Output	Planar, 4-Channel First-Order Ambisonic (ACN Ordering, SN3D Normalization)
Gain Control	AGC (Automatic Gain Control)
Internal Microphones	MEMS - Waterproof, Rugged, Exposed for sensitive audio capture
Wireless Microphone	Bluetooth - Mono, upsampled to 48kHz Mixed Output: Combined omnidirectional (mono) Bluetooth mic with ambisonic/environmental audio

OPTICS

Sensor	1/2.3" Backside-Illuminated CMOS Sensor Count: 2 Pixel Count: 12MP per Sensor Pixel Size: 1.55 um
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VIRB 360 SPECS

Lens
8-Elements, Replaceable Strengthened Glass Cover Lens
Lens Count: 2
FOV (Unstitched): 201.8° per Lens
FOV (Traditional 16:9): 141° Horizontal
Depth of Focus: 40cm to ∞
Effective Focal Length: 1.036mm
35mm Equivalent Focal Length: 6mm
Fixed Aperture: f/2.0

Electronic Shutter Speed 30 – 1/8000s

SENSORS AND AUGMENTED REALITY (A/R)

On-Board Sensors
GPS + GLONASS: 10 Hz location capture
Barometer: Elevation capture
Accelerometer: Force and Motion capture
Gyroscope: Rotation capture
Compass: Bearing capture

A/R Data Overlay Settings
Vehicle Mode: Lock Overlays to the mounted subject, even when stabilization is enabled
Fine Adjustment Tools: Scale, Tilt, Rotate, Color

A/R Data (Camera Collected)
Speed
Distance
Altitude
Relative Elevation
G-Force
Jump Metrics: Hang Time, Jump Height, Jump Distance, Rotations in Air, Jump Count
Grade
Vertical Speed
Pace
Pitch
Roll
Course
Bearing
GPS Coordinates
Track Shape and Position
Lap Times (Automatic/CC, Manual)
Lap Count (Automatic/CC, Manual)

VIRB 360 SPECS

Accessory: Pulse

Heart Rate: Instantaneous, Average, Minimum, Maximum and Graphing

Compatible Products:

[vivosmart HR /](#)

[vivosmart HR+](#)

[vivoactive HR](#)

[fenix 5](#)

[fenix 3HR](#)

[HRM-RUN](#)

[HRM-TRI](#)

Accessory: Running Metrics

Heart Rate: Instantaneous, Average, Minimum, Maximum and Graphing

Vertical Oscillation: Instantaneous, Average, Minimum, Maximum and Graphing

Ground Contact: Instantaneous, Average, Minimum, Maximum and Graphing

Compatible Products:

[HRM-RUN](#)

[HRM-TRI](#)

Accessory: Ambient Temp

Temperature: Instantaneous, Average, Minimum, Maximum and Graphing

Compatible Products:

[tempe](#)

Accessory: Cycling Metrics

Power: Instantaneous, Average, Minimum, Maximum and Graphing

Speed: Instantaneous, Average, Minimum, Maximum and Graphing

Cadence: Instantaneous, Average, Minimum, Maximum and Graphing

Compatible Products:

[Vector](#)

[Bike Speed Sensor](#)

[Bike Cadence](#)

[Sensor](#)

Accessory: Vehicle Metrics

Vehicle Speed

Engine RPM

Engine Load

Engine Torque

Engine Fuel Rate

Engine Coolant Temperature

Throttle Position

Intake Air Temperature

Mass Air Flow Rate

Compatible Products:

VIRB 360 SPECS

OBDLink LX
Other ELM-327 Compatible Sensors

Accessory: Flight Metrics

Position
Altitude
Course Over Ground
Pitch
Roll
Lateral Acceleration
Normal Acceleration
Turn Rate
Compatible Products:
[G3X Touch](#)
[FlightStream](#)
[110/210](#)

Accessory: Boating Metrics

Engine Data: Engine Speed, RPM
Wind Data: Apparent Wind Angle, Apparent Wind Speed, True Wind Angle, True Wind Speed
Water Data: Water Depth, Water Temperature, Speed Through Water
Compatible Products:
[GPSMAP 74XX / 76XX](#)
[GPSMAP 84XX / 86XX](#)
Engine Data: Requires NMEA 2000 accessory
[Wind Data: Wind Sensors](#)
[Water Data: Transducer](#)

WIRELESS

Wi-Fi

802.11 b/g/n
Mobile App Connection
Local Area Network Connection

NFC

Passive
Location: Top, Center of Camera, Under the Display

ANT+

Garmin Remote and Sensor Connectivity
Compatible Remotes:
VIRB Remote
Fenix 5 Series
Fenix 3 Series

VIRB 360 SPECS

vivoactive HR / HR+
vivosmart
Forerunner 935
Edge

Bluetooth

Bluetooth 4.0
Sensor Connectivity
Wireless Headset Microphone Connection
Recommended Headsets:
Jabra Extreme 2
BlueAnt Q3
BlueParrott B250-XT
Plantronics M55

Voice Control

OK Garmin	Activation Phrase
Start Recording	Begin recording video in the currently selected mode
Stop Recording	Stop recording video
Take a Picture	Capture a photo or set of photos in the currently selected mode
Remember That	Tag the video at that point in time for fast recall later (Only While Recording)
Enable/Disable Wi-Fi	Turn Wi-Fi On or Off

Supported Languages: English(US, UK), French, Italian, German, Spanish, Swedish, Japanese, Mandarin

APP

Mobile App

VIRB Mobile

Streaming Playback

Equirectangular, Stitched Up to 1280 × 720 at 30FPS

Live Stream

Supported Devices: iOS 10.0 or Later
Format: Equirectangular, Stitched
YouTube: Up to 1280 × 720 at 30FPS at up to 5Mbps
Facebook: Up to 1280 × 720 at 30FPS at up to 5Mbps

Required Operating System

iOS 10.0 or Later
Android 5.0 or Later

Recommended for 4K sharing

iPhone SE
iPhone 6 / 6 Plus

VIRB 360 SPECS

iPhone 7 / 7 Plus
iPad Air 2
Samsung S7 / S7 Edge
Google Pixel / Pixel XL
Sony Z5

DESKTOP SOFTWARE

Application Name	VIRB Edit
Minimum Requirements	Operating System (PC) Windows 7 SP1 (64-bit) + Platform Update Operating System (Mac) Mac OSX 10.10 Yosemite Processor 2.5GHz Quad-Core Intel Core i7 or AMD FX Memory (RAM) 8 GB Graphics Card Intel HD 5000 / nVidia GeForce GT 630 / AMD Radeon 8570 Graphics Memory (RAM) 2 GB Display Resolution 1920 × 1080 Storage 20GB Free Space
Recommended Configuration	Operating System (PC) Windows 10 (64-bit) Operating System (Mac) Mac OSX 10.12 Sierra Processor 3.0GHz Quad-Core Intel Core i7 or AMD FX Memory (RAM) 16 GB Graphics Card Intel HD 530 / nVidia GeForce GTX 960 / AMD Radeon R9 380 Graphics Memory (RAM) 4GB Display Resolution 3840 × 2160 Storage 20GB Free Space