**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, transflective 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.
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

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 x 2816 (Stitched 360)
- 2 x 9MP: 2 x 3008 x 3000 (Unstitched 360, 2 Files)
- 3MP: 1920 x 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
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)
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

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 x 720 at 30FPS

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

<table>
<thead>
<tr>
<th>Application Name</th>
<th>VIRB Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>Operating System (PC)</td>
<td>Windows 7 SP1 (64-bit) + Platform Update</td>
</tr>
<tr>
<td>Operating System (Mac)</td>
<td>Mac OS X 10.10 Yosemite</td>
</tr>
<tr>
<td>Processor</td>
<td>2.5GHz Quad-Core Intel Core i7 or AMD FX</td>
</tr>
<tr>
<td>Memory (RAM)</td>
<td>8 GB</td>
</tr>
<tr>
<td>Graphics Card</td>
<td>Intel HD 5000 / nVidia GeForce GT 630 / AMD Radeon 8570</td>
</tr>
<tr>
<td>Graphics Memory (RAM)</td>
<td>2 GB</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>1920 × 1080</td>
</tr>
<tr>
<td>Storage</td>
<td>20GB Free Space</td>
</tr>
</tbody>
</table>

| Recommended Configuration | | |
| Operating System (PC) | Windows 10 (64-bit) |
| Operating System (Mac) | Mac OS X 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 |