

## Specifications

Main Unit Specs	
Standard Definition or High Definition	High Definition
Television System	NTSC
Video Recording System	AVCHD standard, MPEG-4 AVC/H.264
Image Sensor	1/5.8-inch CMOS, back-illuminated
Total Pixels	Approx. 2.51 Megapixels
Effective Pixels	Video: Approx. 2.29 Megapixels (1920x1080) Photo: Approx. 2.29 Megapixels (1920x1080)
Maximum Recording Time	<b>8GB Internal Flash Drive in AVCHD*:</b> <ul style="list-style-type: none"> <li>• 4.8 Mbps (1920x1080)**: 1 hr. 20 min.</li> <li>• 17 Mbps (1920x1080)**: 20 min.</li> <li>• 24 Mbps (1920x1080)**: 15 min.</li> </ul> <i>*Variable bit rate.</i> <i>**When recording has continued for approximately 12 hours, it will automatically stop.</i>
Duration of Built-in Battery	Actual Recording Time: Approx. 2 hrs. 40 min. Continuous Recording Time (Maximum Recording Time): Approx. 4 hrs. 50 min.
Lens	<b>Zoom Ratio:</b> 40x Optical / 60x Dynamic* / 200x Digital <i>*When Image Stabilization set to OFF.</i> <b>Focal Length:</b> 2.9–116.0mm <b>35mm Film Equivalent:</b> <ul style="list-style-type: none"> <li>• Video: Approx. 40.5–1620mm (image stabilizer: Off)</li> <li>• Photo: 40.5–1620mm (16:9), 49.5–1980mm (4:3)</li> </ul> <b>Max. F/Stop:</b> f/1.8–6.3
Manual Exposure	Available
White Balance	Auto, MWB, Fine, Cloud, Halogen, Marine: Blue, Marine: Green
Frame Rate	60P/60i
Minimum Illumination	3 lux
Image Stabilization	Intelligent IS settings: <ul style="list-style-type: none"> <li>• <b>OFF:</b> Deactivates image stabilizer.</li> <li>• <b>ON:</b> Reduces camera shake under normal shooting conditions.</li> <li>• <b>ON (AIS):</b> Reduces camera shake more effectively when shooting bright scenes on the wide-angle end. Only on the wide-angle end (approx. 5x).</li> <li>• <b>Enhanced AIS:</b> The area of correction in the enhanced AIS-mode is greater than that in the AIS mode. Camera shake can be reduced more effectively even when recording is performed by zooming from wide-angle to telephoto.</li> </ul> <p>It is recommended to set the image stabilizer to "OFF" when shooting a subject of little movement with the unit on a tripod. Complete stabilization may not be possible if camera shake is excessive. This setting is effective for video recording only. Using the image stabilizer will narrow the angle of view. Dynamic zoom is not available in the enhanced AIS mode.</p>

<b>Filter Diameter</b>	37mm diameter* <i>*When a lens filter or conversion lens is attached, vignetting may occur</i>
<b>LCD Screen</b>	3.0-inch (7.51cm) panel, widescreen color LCD (approx. 230,000 dots)
<b>Recording Media</b>	Built-in 8GB memory and 1 additional SD/SDHC/SDXC memory card slot
<b>USB Terminal</b>	Micro USB Type AB, USB 2.0 compliant
<b>Video Terminal</b>	<b>Signal configuration:</b> NTSC standard color video signals <b>Impedance:</b> 75 $\Omega$ <b>Signal level:</b> 1.0 V (p-p)
<b>Audio</b>	<b>Types of signals:</b> Stereo audio signal <b>Impedance:</b> 1 k $\Omega$ <b>Frequency characteristic:</b> 48kHz, 256 kbps
<b>HDMI Terminal</b>	HDMI mini connector
<b>Operating Temperature Range</b>	14–104°F (-10–40°C) 35–80% relative humidity (operation) -4–122°F (-20–50°C) 35–80% relative humidity (storage) 50–95°F (10–35°C) 35–80% relative humidity (charging)
<b>Dimensions (W x H x D)</b>	2.4 x 2.3 x 5.0 in. / 60 x 59.5 x 128mm (excluding grip belt)
<b>Weight</b>	Approx. 10.62 oz. / 301g (camera only)