

## Specifications

TYPE	Type	Digital Single Lens Mirrorless camera			
	Recording media	SD Memory Card, SDHC Memory Card, SDXC Memory Card (Compatible with UHS-I standard SDHC / SDXC Memory Cards)			
	Image sensor size	17.3 × 13.0 mm (in 4:3 aspect ratio)			
IMAGE SENSOR	Lens mount	Micro Four Thirds mount			
	Type	Live MOS Sensor			
	Total pixels	17.20 Megapixels			
	Camera effective pixels	16.05 Megapixels			
RECORDING SYSTEM	Color filter	Primary color filter			
	Dust reduction system	Supersonic wave filter			
RECORDING SYSTEM	Recording file format	Still Image: JPEG [DCF, Exif 2.3], RAW, MP4 (When attaching 3D lens in Micro Four Thirds standard) Motion Image: AVCHD [DCF, Exif 2.3], RAW, MP4 (When attaching 3D lens in Micro Four Thirds standard)			
	Aspect ratio	4:3, 3:2, 16:9, 1:1			
	Image quality	RAW, RAW+Fine, RAW+Standard, Fine, Standard, MP4+Fine / MP4+Standard (with 3D lens in Micro Four Thirds System standard)			
	Color space	sRGB, Adobe RGB			
	Still Image	File size (Pixels)	MOV*1	PAL*3	[3:2] 4408 × 3264 (L) / 3264 × 2448 (M) / 2336 × 1752 (S) / 1824 × 1368 (with 3D lens in Micro Four Thirds System standard)
					[3:2] 4408 × 3072 (L) / 3264 × 2176 (M) / 2336 × 1540 (S) / 1824 × 1216 (with 3D lens in Micro Four Thirds System standard)
					[16:9] 4408 × 2592 (L) / 3264 × 1840 (M) / 1920 × 1080 (S) / 1824 × 1024 (with 3D lens in Micro Four Thirds System standard)
					[1:1] 2456 × 2456 (1) / 2448 × 2448 (M) / 1744 × 1744 (S) / 1712 × 1712 (with 3D lens in Micro Four Thirds System standard)
					[Full HD] 1920 × 1080, 30p (sensor output is 30p, 72Mbps [ALL-Intra])
					[Full HD] 1920 × 1080, 24p (sensor output is 24p, 72Mbps [ALL-Intra])
					[HD] 1280 × 720, 60p (sensor output is 60p, 72Mbps [ALL-Intra])
					[Full HD] 1920 × 1080, 60p (sensor output is 60p, 50Mbps [IPB])
					[Full HD] 1920 × 1080, 30p (sensor output is 30p, 50Mbps [IPB])
					[Full HD] 1920 × 1080, 24p (sensor output is 24p, 50Mbps [IPB])
	Motion Image	File size (Pixels)	MP4*2	NTSC	[Full HD] 1920 × 1080, 30fps (sensor output is 30p, 20Mbps)
[Full HD] 1280 × 720, 30fps (sensor output is 30p, 10Mbps)					
[VGA] 640 × 480, 30fps (sensor output is 30p, 4Mbps)					
[Full HD] 1920 × 1080, 25fps (sensor output is 25p, 20Mbps)					
[HD] 1280 × 720, 25fps (sensor output is 25p, 10Mbps)					
[VGA] 640 × 480, 25fps (sensor output is 25p, 4Mbps)					
[Full HD] 1920 × 1080, 60p (sensor output is 60p, 28Mbps)					
[Full HD] 1920 × 1080, 50p (sensor output is 50p, 28Mbps)					
[Full HD] 1920 × 1080, 24p (sensor output is 24p, 24Mbps)					
[Full HD] 1920 × 1080, 60i (sensor output is 30p, 24Mbps)					
Motion Image	File size (Pixels)	AVCHD Progressive*2	NTSC	[Full HD] 1920 × 1080, 60p (sensor output is 60p, 17Mbps)	
				[Full HD] 1920 × 1080, 24p (sensor output is 24p, 24Mbps)	
				[Full HD] 1920 × 1080, 50i (sensor output is 50p, 24Mbps)	
				[Full HD] 1920 × 1080, 50i (sensor output is 50p, 17Mbps)	
				Continuous recordable time (Motion images)	AVCHD with picture quality set to Approx. 240 min with H-HS12035 / Approx. 220 min with H-VS014140
				Actual recordable time (Motion images)	AVCHD with picture quality set to Approx. 120 min with H-HS12035 / Approx. 110 min with H-VS014140
				Flicker reduction (Motion images)	[1/50] / [1/60] / [1/100] / [1/120] / OFF
				Time Code (Motion images) [except MP4]	[ON/OFF] Count Up / Rec Run / Free Run selectable, Time Code Mode : Drop frame / Non-drop frame selectable (NTSC only)
				WiFi	IEEE 802.11b/g/n, 2.412 MHz - 2.462 MHz [11n], Wi-Fi / WPA / WPA2, Infrastructure mode
				VIEWFINDER	Type
Field of view	Approx. 100%				
Magnification	Approx. 1.34x / 0.67x [35mm camera equivalent]				
Eye point	Approx. 21 mm from eyepiece lens				
Dioptr adjustment	+4.0 - -4.0 [dpt]				
Auto eye sensor	Yes				
FOCUS	Type	Contrast AF system			
	Focus mode	AFS [Single] / AFF [Flexible] / AFC [Continuous] / MF			
	AF mode	Face detection / AF Tracking / 23-area-focusing / 1-area-focusing / Pinpoint (Full area touch is available)			
	AF assist lamp	Yes [ON/OFF]			
	AF lock	Yes [AF/AE LOCK button]			
	Others	Quick AF, Continuous AF (during motion image recording), AF + MF, Eye Sensor AF, Touch Pad AF, Touch AF, Touch shutter, Touch MF Assist, Shutter AF, Half Press Release			
	Light metering system	144-zone multi-pattern sensing system			
EXPOSURE CONTROL	Light metering mode	Intelligent Multiple / Center Weighted / Spot			
	Metering range	EV0-18 (f2.0 lens, ISO 100 equivalent)			
	Exposure mode	Program AE, Aperture Priority AE, Shutter Priority AE, Manual			
	ISO sensitivity (Standard Output Sensitivity)	Auto / Intelligent ISO / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 (Changeable to 1/3, 1EV step) [Extended ISO 125 to less under 200, ISO more over 12800 to 25600 Available (Up to ISO 3200 in Auto)]			
	Exposure compensation	1/3 EV Step ±3EV (±3EV for motion image)			
	AE lock	AF/AE LOCK button			
	AE bracket	3, 5, 7 frame in 1/3, 2/3 or 1 EV Step, single/burst			
WHITE BALANCE	White balance	Auto / Daylight / Cloudy / Shade / Incandescent / Flash / White Set 1, 2, 3, 4 / Color temperature setting			
	White balance adjustment	Blue/amber bias, Magenta/green bias			
	Color temperature setting	2500 to 10000K in 100K			
	White balance bracket	3 exposures in blue/amber axis or in magenta/green axis			
SHUTTER	Type	Focal-plane shutter			
	Shutter speed	Still Images: 1/4000-80 and Bulb (Approx. 60 minutes) Motion Image: 1/16000 - 1/20 (NTSC), 1/16000 - 1/25 (PAL)			
	Self timer	10 sec, 3 images after 10 sec, 2 sec			
	Remote control	Remote control with Bulb function by DMW-RSL1 (Optional)			

SCENE GUIDE	Still image	Clear Portrait / Silky Skin / Backlit Softness / Clear in Backlight / Relaxing Tone / Sweet Child's Face / Distinct Scenery / Bright Blue Sky / Romantic Sunset Glow / Vivid Sunset Glow / Glistening Water / Clear Nightscape / Cool Night Sky / Warm Glowing Nightscape / Artistic Nightscape / Glittering Illuminations / Clear Night Portrait / Soft Image of a Flower / Appetizing Food / Cute Dessert / Freeze Animal Motion / Clear Sports Shot / Monochrome	
	Motion picture	Clear Portrait / Silky Skin / Backlit Softness / Clear in Backlight / Relaxing Tone / Sweet Child's Face / Distinct Scenery / Bright Blue Sky / Romantic Sunset Glow / Vivid Sunset Glow / Clear Nightscape / Cool Night Sky / Warm Glowing Nightscape / Artistic Nightscape / Clear Night Portrait / Appetizing Food / Cute Dessert / Freeze Animal Motion / Clear Sports Shot / Monochrome	
BURST SHOOTING	Burst speed	SH: 20 frames/sec, H: 6 frames/sec, M: 4 frames/sec (with Live View), L: 2 frames/sec (with Live View)	
	Number of recordable images	18 images (when there are RAW files with the particular speed) [Unlimited consecutive shooting (when there are no RAW files) (depending on memory card size, battery power, picture size, and compression)]	
FLASH	Built-in flash type	TTL Built-in flash, GN12 equivalent (ISO 100 •m) / GN17 equivalent (ISO 200 •m) Built-in Pop-up	
	Flash mode	Auto, Auto/Red-eye Reduction (when IA-, IA-), Forced On, Forced On/Red-eye Reduction, Slow Sync., Slow Sync./Red-eye Reduction	
	Synchronization speed	Less than 1/160 second	
	Flash output adjustment	1/3EV Step ±3EV	
	Flash synchronization	1st. Curtain Sync, 2nd Curtain Sync.	
MONITOR	Synchronization for flash dimming and exposure compensation	Yes [ON/OFF]	
	Flash sync socket	Yes	
	Type	OLED Monitor with static touch control	
	Monitor size	Free-angle 3.0 in. / 3:2 Aspect / Wide viewing angle	
LIVE VIEW	Pixels	610K dots	
	Field of view	Approx. 100%	
	Monitor adjustment	Brightness [7 levels], Color [7 levels], Red-Green [11 levels], Blue-Yellow [11 levels]	
	Digital zoom	2x, 4x	
	Extra Tele Conversion	Still image: Max. 2x (Not effective with L size recording, Magnification ratio depends on the recording pixels and aspect ratio.) Motion image: 2.4x, 3.6x, 4.8x (Magnification ratio depends on the recording quality and aspect ratio.)	
Other functions	Real-time Histogram		
LEVEL GAUGE	Yes		
VERTICAL SHOOTING DETECTION	Yes		
PHOTO STYLE	Still image and Video	Standard / Vivid / Natural / Monochrome / Scenery / Portrait / Custom	
CREATIVE CONTROL	Still image	Expressive / Retro / High Key / Low Key / Sepia / Dynamic Monochrome / Impressive Art / High Dynamic / Cross Process / Toy Effect / Miniature Effect / Soft Focus / Star Filter / One Point Color	
	Motion picture	Expressive / Retro / High Key / Low Key / Sepia / Dynamic Monochrome / Impressive Art / High Dynamic / Cross Process / Toy Effect / Miniature Effect / One Point Color	
CREATIVE VIDEO MODE	Exposure Mode	Program AE / Aperture-Priority / Shutter-Priority / Manual Exposure	
	Slow and fast motion	40% / 48% / 80% (Records 0.4 times, 0.48 times, 0.8 times slower) 160% / 200% / 300% (Records 1.6 times, 2.0 times, 3.0 times faster) [1920 × 1080, 24p, 24Mbps in MOV, MP4, AVCHD]	
PLAYBACK	Playback mode	Normal playback, 3D-thumbnail display, 12-thumbnail display, Calendar display, Zoomed playback (Max.16x), Slide Show (All / Picture Only / Video Only / 3D / Category Selection / Favorite, duration & Effect is selectable), Playback Mode (Normal Play / Picture Only / Video Play / 3D Play / Category Play / Favorite Play), Title Edit, Text Stamp, Video Divide, Resize, Cropping, Rotate, Favorite, Print Set, Protect, Face Recognition Edit	
IMAGE PROTECTION / ERASE	Protection	Single / Multi or Cancel	
	Erase	Single / Multi / All / Except Favorite	
PRINT	Direct print	PictBridge compatible	
INTERFACE	USB	USB 2.0 High Speed	
	HDMI	miniHDMI Type C Video: Auto / 1080p / 1080i / 720p / 480p (576p in PAL system) Audio: Dolby® Digital	
	Audio video output	Monaural Type, NTSC/PAL, NTSC only for North America *Check the website of the Panasonic sales company in your country or region for details on the products that are available in your market.	
	Remote input	φ2.5mm for Remote	
	External microphone input	φ3.5mm for External microphone	
	Headphone output	φ3.5mm for Headphone	
	Microphone	Stereo, Wind-cut, Off / Low / Standard / High / AUTO	
	Speaker	Monaural	
	LANGUAGE	OSD language	English, German, French, Italian, Spanish, Polish, Czech, Hungarian, Russian, Chinese (Traditional), Chinese (Simplified), Dutch, Thai, Korean, Turkish, Portuguese, Arabic, Persian, Japanese, Swedish, Danish, Finnish, Greek, Vietnamese* Check the website of Panasonic sales company in your country/region or ask customer support for details of the OSD language available on the products sold in your country / region.
	POWER	Battery	Li-ion Battery Pack [7.2V, 1860mAh] (Included)
Battery life [CIPA standard]		Approx. 540 images with H-HS12035, Approx. 500 images with H-VS014140	
DIMENSIONS / WEIGHT	Dimensions (W × H × D)	132.9 × 93.4 × 82.0 mm / 5.23 × 3.68 × 3.23 in. (excluding protrusions)	
	Weight	Approx. 550 g / 19.40 oz (SD card, Battery, Body) Approx. 470 g / 16.58 oz (Body only) Approx. 855 g / 30.16 oz (SD card, Battery, H-HS12035 lens included) Approx. 1010 g / 35.62 oz (SD card, Battery, H-FS014140 lens included)	
OPERATING ENVIRONMENT	Operating temperature	0°C to 40°C (32°F to 104°F)	
	Operating humidity	10% to 80%	
STANDARD ACCESSORIES	Software	PHOTOfunSTUDIO 8.5 PE SILKYPIX® Developer Studio 3.1 SE LioScope (trial version)	
	Standard accessories	Battery Charger (AC Cable included), Battery Pack, Body Cap, USB Connection Cable, Shoulder Strap, CD-ROM	
OPTIONAL ACCESSORIES	External Flash (optional)	DMW-FL360L (optional), Wireless Channel: 1ch / 2ch / 3ch / 4ch	
	External Microphone (optional)	DMW-MS2 (optional), Gun/Stereo selectable	
	Battery Grip (optional)	DMW-BGGH3 (optional)	

\*1) Use a card with SD Speed Class with "Class10" \*2) Use a card with SD Speed Class with "Class4" or higher  
\*3) Motion images can be recorded continuously for up to 29 min 59 sec in European PAL areas.

**Partial restrictions on using Panasonic digital video cameras to play AVCHD motion images recorded with the DMC-GH3.**  
 • AVCHD videos recorded onto an SD Memory Card or a DVD disc cannot be played on a device that does not support the AVCHD standard.  
 • AVCHD motion images recorded with the image quality set to 1, 280 × 720 cannot be played on AVCHD-compatible digital video cameras.  
 • AVCHD motion images recorded with AVCHD-compatible digital video cameras cannot be played on the DMC-GH3.  
 • More detailed information is available on our support site: <http://panasonic.jp/support/global/cs/dsc/>

### About the performance of Face Recognition function

Recognition performance varies greatly depending on shooting conditions, i.e., according to factors such as angles, facial expression and lighting, so operation under all conditions cannot be guaranteed. Because the camera searches for faces that are similar to registered faces, there are cases where the faces are not correctly recognized when the registered image and the shooting image varies much. When facial characteristics are similar, particularly between parents and their children or brothers and sisters, the camera may not distinguish the faces.

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**1st**  
since 2008

**MIRRORLESS**  
1st Digital Single Lens Mirrorless

















# For Explorers at Heart

## The All New LUMIX GH3

LUMIX created the world's first\* digital single lens mirrorless (DSLM) camera.

Combining the peerless image quality of the single lens reflex camera with the easy mobility and operation of a compact, lightweight unit, our debut model was a true pioneer.

Now LUMIX is taking the DSLM camera a step further.

Introducing the DMC-GH3.

At the heart of the DMC-GH3 are a re-engineered 16.05-megapixel Live MOS Sensor, new Venus Engine and new Low-Pass Filter.

A rugged magnesium alloy body with a splashproof, dustproof design makes the DMC-GH3 tough enough for active outdoor use.

And its fast, precise auto-focus and response let you capture the beauty in even fleeting moments.

Video performance is outstanding too.

The DMC-GH3 offers smooth high-definition progressive scanning, a host of recording formats, and a heat-dispersing design for extended shooting fun.

The DMC-GH3 is an exceptional creative tool. It's easy to carry anywhere, a joy to use, and powerful enough to take you as far into photography as you want to go.

There's a world of beautiful images out there for you to explore.

And now there's an ideal camera to do it with.

\*The DMC-G1, the world's first Digital Single Lens Mirrorless camera, was introduced on September 12, 2008.

# Superior Image Rendering with the Ultimate Image Quality

## Smoothly flowing gradation New 16.05-megapixel Live MOS Sensor

The DMC-GH3 features a new 16.05-megapixel Live MOS Sensor with a level of sensitivity that produces flowing gradation from shadows to highlights. High resolution and a wide dynamic range create truly stunning images that look like you could reach out and touch them. High-sensitivity ISO 12800 (extended: ISO 25600) and extensive noise reduction give you remarkable images even in dim lighting.

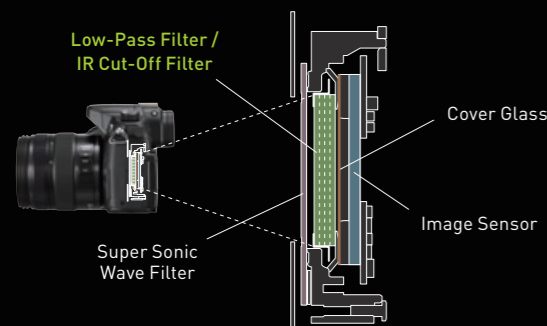


## Silent, vibration-free shooting Electronic Shutter Function

The DMC-GH3's shutter systems are driven electronically for vibration-free operation. This is ideal for when a tripod is required for crisp still-life images and landscapes, and for taking pictures of animals without frightening them off, or to snap away in silence in Silent Shutter mode.

## Maximize the Live MOS Sensor potential Newly Designed Low-Pass Filter

To maximize the resolution of the newly developed Live MOS Sensor, the image sensing block is designed as an integrated unit. The new filter optimizes the conventionally conflicting effects of increasing resolution while suppressing moire. The unwanted data that leads to moire and false color is effectively eliminated while maintaining high resolution.

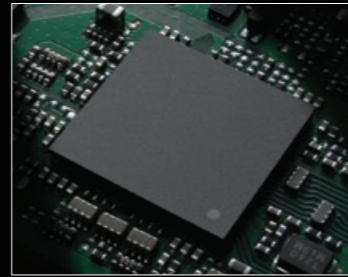


The image sensing block is designed as an integrated unit to maximize the image sensor resolution.

## Fast processing of high-quality images New Venus Engine



The new Venus Engine has an unprecedented ability to process both still and video signals with razor-sharp clarity. 3D Noise Reduction (3DNR) detects the smooth parts and edge parts of a picture, and Multiprocess Noise Reduction (MNR) applies optimum noise reduction according to the brightness of each image part, working together to attain superb noise-reducing performance. Four CPUs process these signals instantly to render images with excellent definition and lifelike ambience.



## Great photos even in backlighting HDR (High Dynamic Range) \*

To cope with the extreme bright and dark contrast that you get, for example, with backlighting, three consecutive photos are taken with different exposure levels and overlapped with the HDR function. Blown highlights and blocked shadows are then deleted and a single photo is composed. The four CPUs of the Venus Engine process it in the background, so you can take your next shot without having to wait, ensuring that you don't miss a photo opportunity.

\* HDR cannot be used with the Creative Control and Scene Guide functions, or in iA mode.

## Improved quality and precision High-Performance LUMIX G Series Lenses

To assure superior image quality, LUMIX G lenses feature advanced coating technologies, such as Nano Surface Coating or Multi Coating, to effectively prevent lens aberration. Their quality is inspected by the UA3P Ultra-High Accuracy 3D Profilometer, an instrument that was originally developed by Panasonic and is now used by optical manufacturers all over the world. Panasonic's collaboration with Leica Camera AG also resulted in stringent quality standards for high-precision, high-quality and high-performance lenses.



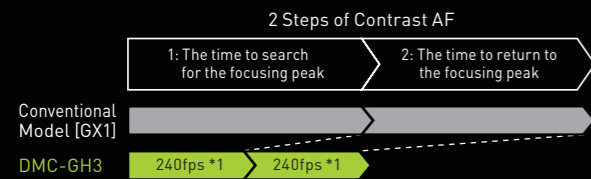
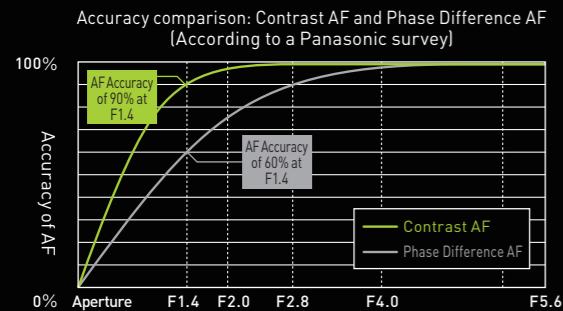
Actual Size

# Nimble Movement, Intuitive Response

## Higher response and greater precision Contrast AF



In the DMC-GH3's Contrast AF system, the image sensor doubles as the AF sensor to resist any mechanical margin of error. Compared with Phase Difference AF, the focusing is precise even at small F-numbers. The DMC-GH3 provides sensor drive and lens control at the speed of 240 fps,\*<sup>1</sup> which is twice as fast as conventional models, to achieve a higher focus detection speed than competitive models even against fast-moving subjects.



\*1 As of September 17, 2012, using a LUMIX G X VARIO 12-35mm / F2.8 ASPH. / POWER O.I.S. or LUMIX G X VARIO 35-100mm / F2.8 / POWER O.I.S. lens.

## Versatile selections for diverse situations Auto Focus Mode (AFS/AFF/AFC/MF)

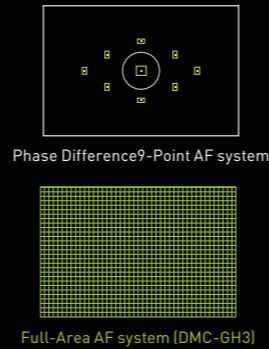
AFS (Single AF) mode gives you the freedom to change framing while locking the focus on a still subject. AFF (Flexible AF) mode locks the focus when your subject is still, then automatically refocuses when the subject moves, to give you the best results. AFC (Continuous AF) mode automatically maintains the focus on a moving subject. And MF (Manual Focus) mode lets you adjust the focus manually. There's an option that's just right for any subject and shooting situation.

## Fine focus point adjustment Pinpoint AF

Pinpoint AF is handy when you want to set the focus point more precisely. Simply touch the rear monitor to expand the surrounding area. This allows detailed adjustment in a small focus area.

## Flexible framing not limited to measurement points Full-area Focusing with Touch AF

With Full-area Focusing, any place you touch on the rear monitor is a focus point. There's no need to have your subject in the center of the frame. DMC-GH3 owners are released from focus point limitations, and free to frame their shots as they please.



## Touch-controlled focusing even for viewfinder shots Touch Pad AF \*2

Touch Pad AF lets you adjust the focus position by touching the rear monitor while watching the results through the viewfinder. You can also change between Absolute Position mode, in which you set the focus position by touching the place you want to focus on directly on the rear monitor, and Relative Position mode, where you set the focus position by moving the cursor across the rear monitor with your finger. You can use the free framing capability of Full-area Focusing for viewfinder shooting as well.

\*2 The Touch Shutter function will not operate while using Touch Pad AF.

## Auto focus when you look into the Live View Finder Eye Sensor AF \*3

Eye Sensor AF automatically starts focusing when you look into the viewfinder to capture spur-of-the-moment shots without having to activate AF by half-pressing the shutter button, for speedier shooting.

\*3 This function may not work in low lighting. It also does not work with lenses that do not have auto focus capability, and lenses with a Four Thirds System mount.

## Enlarge the screen to check focusing MF Assist

When manually focusing, you can enlarge the image by 4x, 5x or 10x, to aid in focusing. Also, in addition to the conventional method of enlarging the image by rotating the focus ring, you can use the newly added AF icon button for more intuitive operation. The 4x enlarged image is displayed in the framing screen, so you can focus while viewing the entire composition.





# An Imaging Tool with Intuitive Operation

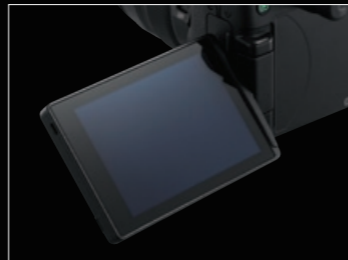
## High definition and lag-free OLED Display

High-quality, high-speed organic EL (OLED) displays are used for both the Live View Finder and the rear monitor. These rapid displays, which feature 100% coverage, exhibit no perceptible time lag, and ensure that your subject is shown with natural coloring. The Eye Sensor automatically switches between the Live View Finder and the rear monitor, for smooth, easy shooting with both.



## For artistic framing Free-angle Rear Monitor

The high-sensitivity, static touch-control display immediately lets you set the focus for your subject by simply touching it on the screen. This sets the aperture and exposure compensation, and even lets you release the shutter. The free-angle monitor also enables artistic framing with high- or low-angle shots.



## Intuitive operation Button Layout

Shooting with the viewfinder has been further enhanced in the DMC-GH3. The Function Button lets you customize the viewfinder with up to 7 functions of your choice. Major controls such as shutter speed, exposure compensation, ISO and white balance settings can be quickly adjusted with the front or rear dial and rear jog dial while looking at the Live View Finder.



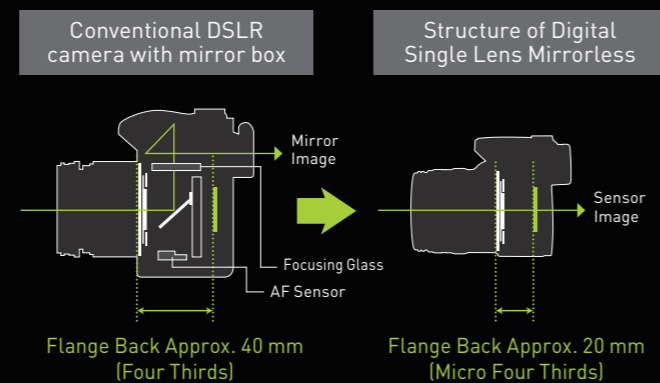
## DSLR-level image quality and mobility Mirrorless Structure

The Micro Four Thirds system is adopted for the LUMIX G Series. It further enhances the balance between portability and high image quality, and further advances Live View usability by letting you "shoot what you see." The Micro Four Thirds system was developed to provide the freedom and enjoyment of the DSLR camera's expandability and to enable the user to freely change lenses. The flange back length is shortened about 50% and the lens mount diameter is reduced approximately 6 mm without compromising image quality. This new system makes it possible to achieve compactness and slimness in both the camera body and the lens. In order to maintain the excellent optical performance that is essential to the DSLR, an image sensor with the same size as the Four Thirds standard is used, to give you easy, comfortable shooting in almost any situation.

## 24mm viewing coverage (35mm camera equivalent) Built-in Flash

The DMC-GH3 features a built-in flash [GN12] that covers a lens with a wide 12mm angle of view (35mm camera equivalent: 24mm).

- GN12.0 equivalent (ISO 100) / GN17.0 equivalent (ISO 200)





# Shooting Opportunities Demand Tough Durability

## Lightweight and rugged for field use Magnesium Alloy Full Diecast Frame

The DMC-GH3 is the first in the LUMIX G Series to use a magnesium alloy frame. Its lightweight yet durable body brings ruggedness to the compact size of the digital single lens mirrorless camera to provide flexible shooting virtually anywhere.



## Splash/Dustproof \*2 Battery Grip



Mounting the optional battery grip allows the DMC-GH3 to shoot 1,000 or more photos when using the Live View Finder (with two batteries, one in the battery grip and one in the camera). The integrated grip design includes the same level of sealing as that of the body, and the button layout makes it easy to shoot in portrait orientation.



\*2 When used on a Panasonic splash/dustproof camera.

## Keeping the sensor constantly clean SSWF (Super Sonic Wave Filter)

To eliminate dust and other foreign matter that might otherwise enter the camera when changing lenses, SSWF(Super Sonic Wave Filter) that vibrates approximately 80,000 times/second is mounted between the low-pass filter and the shutter. Each time the power is turned on, the filter oscillates the sensor surface to automatically remove dust and other particles.



Flow of the Dust Reduction System

## Ready for shooting in tough conditions Splash/Dustproof Design \*1



A splash/dustproof design is achieved by tightly sealing the joints and control components of the DMC-GH3 body for shooting in tough conditions.

\*1 When using a Panasonic splash/dustproof lens.



## Splash/Dustproof \*2 G Lens Series



The DMC-GH3 is rugged enough to use in even the harshest environments. And this is also true for the lens, which has the same splash/dustproof design as the DMC-GH3 body.

\*2 When used on a Panasonic splash/dustproof camera.



LUMIX G X VARIO  
12-35mm / F2.8 ASPH. / POWER O.I.S.

LUMIX G X VARIO  
35-100mm / F2.8 / POWER O.I.S.

## High-speed data transfer SD Card — UHS-I

The DMC-GH3 uses a variety of advanced recording media, including the SDXC, SDHC, and SD Memory Cards. Topping them all is the maximum speed of the UHS-I high-speed data transfer standard. It lets you transfer your valuable shooting data at lightning fast speeds.





# Simply Awesome Video Quality

Stunning images for a wide range of uses **Versatile Video Formats**

	Recording format	Number of pixels	Frame rate / NTSC [PAL]		Bit rate	Time code	Seamless file generation
			Recording	Sensor output			
For editing	MOV [H.264]*1	1920 × 1080	60p [50p]	60p [50p]	50Mbps [IPB]	Yes	
			30p [25p]	30p [25p]	72Mbps [ALL-Intra]		
			24p [24p]	24p [24p]	72Mbps [ALL-Intra]		
				50Mbps [IPB]			
		1280 × 720	60p [50p]	60p [50p]	72Mbps [ALL-Intra]		
For ornamental	MP4 [H.264]*2	1920 × 1080			20Mbps	-	
		1280 × 720	30p [25p]	30p [25p]	10Mbps		
		640 × 480			4Mbps		
	AVCHD Progressive*2	1920 × 1080	60p [50p]	60p [50p]	28Mbps	Yes	
			60i [50i]	60p [50p]	17Mbps		
			60i [50i]	30p [25p]	24Mbps		
AVCHD*2	1920 × 1080	60i [50i]	30p [25p]	24Mbps			
		24p [24p]	24p [24p]	24Mbps			

\*1 Use a card with SD Speed Class with "Class10". \*2 Use a card with SD Speed Class with "Class4" or higher.

## High-definition recording of every frame AVCHD Progressive 60p Full-HD Recording



The DMC-GH3 gives you 1920 × 1080 60p (NTSC)/50p (PAL) Full-HD recording. Progressive scanning records every frame, so the images have extremely high definition compared to interlaced scanning.

## Videos just the way you want them Creative Video Mode

Select either of four manual video modes: Program AE, Aperture-Priority, Shutter-Priority, or Manual Exposure. They will faithfully reflect your shooting intent, and give you a wide range of video images. In addition, 24p recording also includes slow- and quick-motion images. You can shoot quick-motion at 160%, 200% or 300% normal speed, and slow-motion at 40%, 48% or 80%, all with Full-HD quality.

## AF Tracking, Face Detection AF, and Full-area Touch AF Versatile AF Functions for Video Shooting

AF Tracking, which automatically tracks moving subjects, Face Detection AF, and Full-area Touch AF can be used for shooting videos just as they are or for shooting still images. They bring the same great ease and comfort to your video work.

## Better-quality sound as well Audio Recording

The DMC-GH3 simultaneously records uncompressed linear PCM audio with MOV video files, and Dolby Digital audio with AVCHD video files. A mic level indication lets you adjust the sound in 19 steps and a Wind Cut function reduces wind noise. All of these features work together to give you truly high-quality sound.



## Continuous recording Seamless File Generation \*3

When recording video in MOV, AVCHD Progressive and AVCHD, the DMC-GH3 automatically generates multiple seamless files for continuous recording.

\*3 When the file size in MOV format exceeds 4 GB, video recording continues uninterrupted, but separate video files are used for playback.

## Essential function for video editing Time Code

Time codes are essential for video editing, as they provide the information needed to specify scenes along the video timeline. The DMC-GH3 includes a count-up system with Rec Run and Free Run codes and a recording system with Drop Frame and Non Drop Frame codes. These time code functions meet professional needs for postproduction work.

## Check live view images on a larger screen HDMI Monitor-Through



The HDMI terminal on the DMC-GH3 connects to a large-screen monitor for real-time image checking. It can also be switched to show the on-screen display (OSD) data from the GH3's rear monitor, or OSD data from only the HDMI output image. This lets you check the video images on a large screen as you record them.

- "AVCHD Progressive", "AVCHD", the "AVCHD Progressive" Logo and the "AVCHD" Logo are trademarks of Panasonic Corporation and Sony Corporation.
- Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

## Extended-time recording of high-quality images Original Heat-Dispensing Design

Right from the design stage, the DMC-GH3 pursued a hybrid structure for still and video images. A heat-dispersing design was used to enhance video shooting and enable extended recording of high-quality images.



## Monitor the sound as you record Headphone Output Terminal

The DMC-GH3 also features a 3.5-mm-diameter, general-purpose, stereo microphone input terminal and headphone output terminal to monitor the sound through headphones while shooting.





# Wi-Fi® Changes Your Shooting Style



The DMC-GH3 features a built-in Wi-Fi® (IEEE 802.11 b/g/n) function. By installing LUMIX LINK 2.1 or newer, a dedicated application compatible with iOS and Android for smartphones and tablets, you can enjoy a new shooting style using Wi-Fi.

\*Connection to a PC may fail if the firewall of the OS or the security software in the PC is enabled.

## Versatile smartphone control

### Remote Shooting

The DMC-GH3 lets you use your smartphone or tablet to operate the shutter and other controls. For video shooting, you can remotely start timer interval video recordings from your smartphone or tablet. It is also possible to remotely make detailed settings while viewing the live image, such as aperture, ISO, shutter speed, white balance and zooming. For outdoor fixed-position shooting, you can adjust settings from a distant location while viewing the image.

## Location information from a smartphone

### Geotagging

Using a smartphone, users can geotag photos to provide location-specific information. This also helps organize photos.

\* To continue recording location information data in an iOS device such as iPhone or iPad, the LUMIX LINK application must be running on the device.

\* Since this function refers to the smartphone's GPS information (date/time and location information), certain restrictions apply. For example, the smartphone must be at the site of shooting and its GPS function must be in operation.

## Save images to a smartphone

### Auto Backup

The Auto Backup function is handy for automatically backing up photos for instant enjoyment on supported smartphones or tablets.

- The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance.
- Facebook is a registered trademark or trademark of Facebook, Inc.
- Picasa is a registered trademark or trademark of Google Inc.
- YouTube is a registered trademark or trademark of Google Inc.
- Flickr is a registered trademark or trademark of Yahoo! Inc.
- The Twitter name and logos are trademarks of Twitter, Inc.
- Android and Google Play are trademarks or registered trademarks of Google Inc.
- iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.
- App Store is a service mark of Apple Inc.
- IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

## Uploading from smartphone to SNS

### Uploading and Sharing Images

High-quality images and video clips can be easily uploaded to SNS, such as Twitter, Facebook, mixi, Flickr, Picasa™ and YouTube™, from a compatible smartphone or tablet. You can also add a comment when uploading images, so you can easily share images and comments with family and friends.

## Connecting LUMIX to a network

### LUMIX LINK 2.1

To use the Wi-Fi function for remote camera operation, it is necessary to install LUMIX LINK 2.1 or newer, a smartphone application available from Panasonic Corporation. This application enables remote shooting, playback and uploading of images from a LUMIX camera equipped with a wireless communication function to SNS via a smartphone or a tablet. LUMIX LINK 2.1 (distributed free of charge) can be downloaded from Google Play™ and the App Store.

Supported OS (As of October 2012)	LUMIX LINK 2.1 for Android: Android 2.2 to 4.0
	LUMIX LINK 2.1 for iPhone: iOS 4.3 to 6.0

# Support Functions that Expand Your Expression

## Fixed-position and time lapse shooting

### Interval Shooting

Time lapse shooting is possible with the interval timing of your choice. You can take frame-by-frame shots of cloud movements or flowers blooming. You can preset the shooting time from 1 second up to 99 minutes and 59 seconds, and intervals can be set by the second. PHOTOfunSTUDIO 8.5PE lets you play back time lapse shots as time-lapse motion pictures.

## Up to 60 minutes of shooting

### Long-Exposure Photography

The DMC-GH3 offers bulb mode photography of up to 60 minutes for long-exposure photography. This is useful for taking star trail photos or night photography.

## More unique expression

### Creative Control

You can choose from up to 14 filters. You can also preview the effect with Live View.



Retro, High Key, Low Key, Sepia, High Dynamic, Toy Effect\*1, Miniature Effect\*2, Soft Focus\*3, Star Filter\*3, One Point Color.

\*1 When Toy Effect is selected, digital zooming and EX TELE CONV cannot be used.

\*2 When Miniature Effect is selected, burst shooting, auto bracket, blur control and digital zooming cannot be used.

\*3 When Soft Focus or Star Filter is selected, burst shooting and auto bracket cannot be used. In addition, those effects cannot be used in video shooting.

## Step-by-step shooting instructions

### Scene Guide

Choose from among 23 image samples to get the one that is closest to the picture you want to take. The camera automatically sets the most suitable settings for the scene and lets you capture the image exactly as you want.

- SDXC/SDHC/SD Logo marks are trademarks of SD-3C, LLC.
- The pictures and illustrations are images intended only to explain the effects.
- Screen displays may change without advance notice due to changes in specifications.

## Create composite pictures from up to four images

### Multiple-Exposure

The DMC-GH3 is equipped with a multiple-exposure function that combines up to four images to create one composite picture. Since you can confirm shot images on the screen, you can easily create the exact picture you want. If you have RAW data, you can superimpose images after shooting.



## Keep the camera level and frame your image

### Level Gauge

Acceleration sensors inside the camera detect the horizontal condition. A level gauge indicating the two directions of horizontal lean and front/rear tilt is displayed. This helps you check whether you are holding the camera horizontally, for example, when shooting scenery.



## Easy to see and use

### High-Definition Control Panel

You can easily view and make camera settings with the control panel. Black coloring makes it easy to view and use and provides a sophisticated design image.



## Extended shooting ability

### Tough New Battery

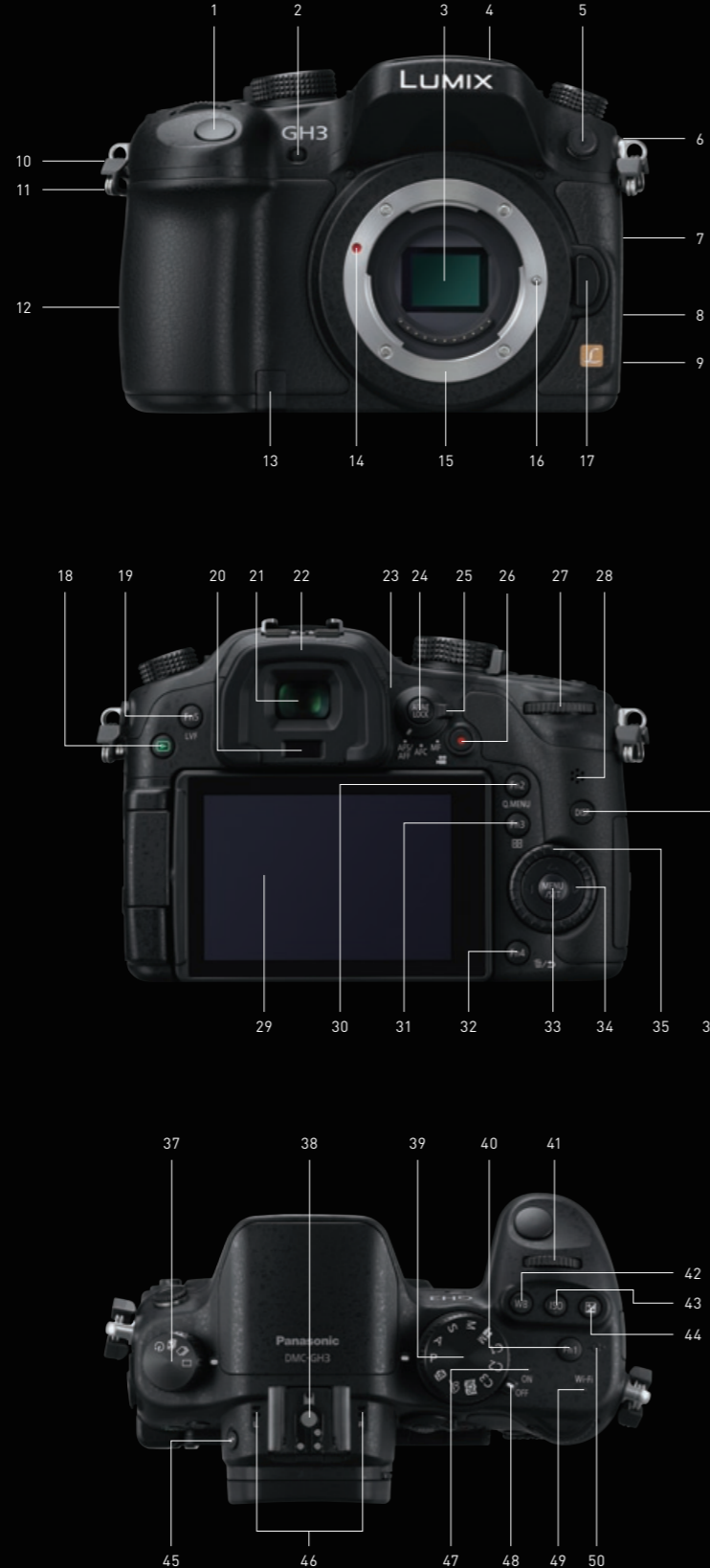
The newly developed Tough Battery allows reliable, extended shooting of both photos and videos. You can shoot approximately 540 images with the LUMIX G X VARIO 12-35mm / F2.8 ASPH. / POWER O.I.S. lens (CIPA Standard).



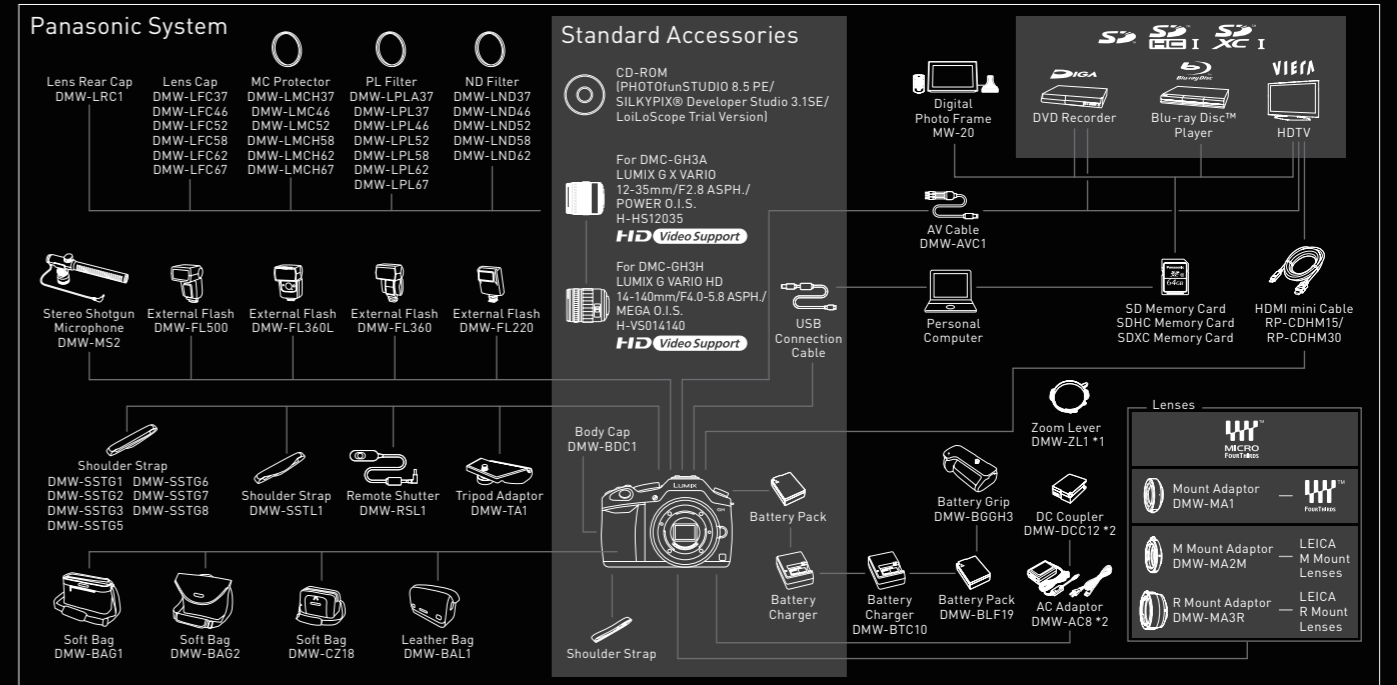
# Expandability Sparks Creativity

## Main Parts and Controls

- Shutter button
- Self-timer indicator/AF assist lamp
- Sensor
- Flash
- Flash synchro socket
- MIC socket
- Headphone socket
- HDMI socket
- AV OUT/DIGITAL socket
- Shoulder strap eyelet
- Remote socket
- Card door
- DC coupler cover
- Lens fitting mark
- Mount
- Lens lock pin
- Lens release button
- Playback button
- LVF button/Fn5 button
- Eye sensor
- Live View Finder
- Eye cup
- Diopter adjustment dial
- AF/AE LOCK button
- Focus mode lever
- Motion picture button
- Rear dial
- Speaker
- Touch screen/OLED monitor
- Q.MENU button/Fn2 button
- Auto Focus Mode button/Fn3 button
- Delete/Cancel button/Fn4 button
- MENU/SET button
- Control dial
- Cursor buttons
- DISP. button
- Drive mode dial
- Hot shoe
- Mode dial
- Wi-Fi button/Fn1 button
- Front dial
- White Balance button
- ISO sensitivity button
- Exposure Compensation button
- Flash open button
- Stereo microphone
- Status indicator
- Camera ON/OFF switch
- Wi-Fi connection lamp
- Focus distance reference mark









## System Chart



\*1 The DMW-ZL1 is compatible with the following Micro Four Thirds lenses (As of September 2012). H-F007014 / H-HS12035 / H-FS014042 / H-FS014045 / H-VS014140 / H-HS35100 / H-FS45150 / H-FS045200 / H-FS100300.  
 \*2 The AC Adaptor DMW-AC8 requires the DC coupler DMW-DCC8 / DCC9 / DCC11 / DCC12. The DC coupler DMW-DCC8 / DCC9 / DCC11 / DCC12 require the AC Adaptor DMW-AC8. •Some functions of LUMIX-GH3 / G5 / GX1 / GF5 cannot be used when mounting the Four Thirds lenses with the Mount Adaptor DMW-MA1, the LEICA M or R lenses with the Mount Adaptor DMW-MA2M or DMW-MA3R. •Leica is a registered trademark of Leica Microsystems IR GmbH. •When a lens that does not support the Contrast AF function is mounted, operation will automatically switch to manual focus. •Confirm the operation information of compatible lenses at Customer Support <http://panasonic.jp/support/global/cs/dsc> (English). •For detailed information about the lenses made by SIGMA, OLYMPUS, LEICA, COSINA and KENKO TOKINA, please see each company's website. •Batteries made by other companies which have been certified by Panasonic may be used with these units, but we offer no guarantee as to the quality, performance or safety of such batteries. •Exercise care when purchasing batteries. Many fake or imitation batteries have been found among those sold at unusually low prices and those which customers cannot check for themselves before purchasing. •Please confirm the latest information about batteries on the following website. <http://panasonic.jp/support/global/cs/info/battery.html> (English). •The SDXC/SDHC Memory Card can be used only if their logos are indicated on the equipment or in the operation manual. It cannot be used with equipment that supports only the SD Memory Card.

## Optional Accessories

<p><b>External TTL Flash (Wireless compatible) NEW</b></p> <p><b>GN36 DMW-FL360L</b></p> <p>This external flash is equipped with an automatic light control function and allows wireless remote operation. It emits light up to GN36. The LED light offers added convenience for video shooting.</p> 	<p><b>Battery Grip NEW</b></p> <p><b>DMW-BGGH3</b></p> <p>Splash/Dustproof Design* The grip is easy and comfortable to hold, and ensures stable shooting even when taking pictures in portrait orientation. The battery pack provides many hours of shooting. •The battery pack (DMW-BLF19) is sold separately. *When used on a Panasonic splash/dustproof camera.</p> 	<p><b>Stereo Shotgun Microphone NEW</b></p> <p><b>DMW-MS2</b></p> <p>This microphone records voices and sounds with high quality to complement the beautiful, true-to-life images in HD videos.</p> 
<p><b>Mount Adaptor</b></p>  <p><b>DMW-MA1 for the Four Thirds System standard</b>  <b>DMW-MA2M for the M mount lens of Leica Camera AG</b>  <b>DMW-MA3R for the R mount lens of Leica Camera AG</b></p>	<p><b>PL Filter (Circular Type)</b></p> <p>67mm DMW-LPL67          62mm DMW-LPL62          58mm DMW-LPL58          52mm DMW-LPL52          46mm DMW-LPL46          37mm DMW-LPL37</p> <p><b>ND (Neutral Density) Filter (ND8)</b></p> <p>62mm DMW-LND62          58mm DMW-LND58          52mm DMW-LND52          46mm DMW-LND46          37mm DMW-LND37</p> <p><b>MC Protector</b></p> <p>67mm DMW-LMCH67          62mm DMW-LMCH62          58mm DMW-LMCH58          52mm DMW-LMC52          46mm DMW-LMC46          37mm DMW-LMCH37</p>	<p><b>External TTL Flash</b></p> <p><b>GN22 DMW-FL220</b>    <b>GN36 DMW-FL360</b>    <b>GN50 DMW-FL500</b></p>  <p><b>Remote Shutter</b>    <b>Battery</b>    <b>Zoom Lever</b></p> <p>DMW-RSL1    DMW-BLF19    DMW-ZL1</p> 

•LUMIX G system cameras come with a function to check whether the battery and unit can be safely used together. •Batteries made by other companies which have been certified by Panasonic may be used with these units, but we offer no guarantee as to the quality, performance or safety of such batteries. •Exercise care when purchasing batteries. Many fake or imitation batteries have been found among those sold at unusually low prices and those which customers cannot check for themselves before purchasing. •Please confirm the latest information about batteries on the following website. <http://panasonic.jp/support/global/cs/info/battery.html> (This website is in English only.)