

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 x 13.0 mm (in 4:3 aspect ratio)			
	Lens mount		Micro Four Thirds mount			
IMAGE SENSOR	Type		Live MOS Sensor			
	Total pixels		17.20 Megapixels			
	Camera effective pixels		16.05 Megapixels			
	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 Ver2.0 compliant (AVCHD Progressive), MPEG4- AVC(H.264), (MOV, MP4)			
	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		NTSC	[4:3] 4,608 x 3,456 (L) / 3,264 x 2,448 (M) / 2,336 x 1,752 (S) / 1,824 x 1,368 (with 3D lens in Micro Four Thirds System standard) [3:2] 4,608 x 3,072 (L) / 3,264 x 2,475 (M) / 2,336 x 1,640 (S) / 1,824 x 1,216 (with 3D lens in Micro Four Thirds System standard) [16:9] 4,608 x 2,592 (L) / 3,264 x 1,840 (M) / 1,920 x 1,080 (S) / 1,824 x 1,024 (with 3D lens in Micro Four Thirds System standard) [1:1] 3,456 x 3,456 (L) / 2,448 x 2,448 (M) / 1,744 x 1,744 (S) / 1,712 x 1,712 (with 3D lens in Micro Four Thirds System standard)		
				MOV*1	[Full HD] 1,920 x 1,080, 30p (sensor output is 30p, 72Mbps[ALL-Intra]) [Full HD] 1,920 x 1,080, 24p (sensor output is 24p, 72Mbps[ALL-Intra]) [HD] 1,280 x 720, 60p (sensor output is 60p, 72Mbps[ALL-L-Intra]) [Full HD] 1,920 x 1,080, 60p (sensor output is 60p, 50Mbps[IPB]) [Full HD] 1,920 x 1,080, 30p (sensor output is 30p, 50Mbps[IPB]) [Full HD] 1,920 x 1,080, 24p (sensor output is 24p, 50Mbps[IPB])	
					PAL*3	[Full HD] 1,920 x 1,080, 25p (sensor output is 25p, 72Mbps[ALL-Intra]) [Full HD] 1,920 x 1,080, 24p (sensor output is 24p, 72Mbps[ALL-Intra]) [Full HD] 1,280 x 720, 50p (sensor output is 50p, 72Mbps[ALL-Intra]) [Full HD] 1,920 x 1,080, 50p (sensor output is 50p, 50Mbps[IPB]) [Full HD] 1,920 x 1,080, 25p (sensor output is 25p, 50Mbps[IPB]) [Full HD] 1,920 x 1,080, 24p (sensor output is 24p, 50Mbps[IPB])
						MP4*2
	AVCHD Progressive*2	NTSC [Full HD] 1,920 x 1,080, 60p (sensor output is 60p, 28Mbps) PAL*3 [Full HD] 1,920 x 1,080, 50p (sensor output is 50p, 28Mbps)				
		AVCHD*2	NTSC [Full HD] 1,920 x 1,080, 60p (sensor output is 24p, 24Mbps) [Full HD] 1,920 x 1,080, 60p (sensor output is 30p, 24Mbps) [Full HD] 1,920 x 1,080, 60p (sensor output is 60p, 17Mbps) PAL*3 [Full HD] 1,920 x 1,080, 24p (sensor output is 24p, 24Mbps) [Full HD] 1,920 x 1,080, 50p (sensor output is 25p, 24Mbps) [Full HD] 1,920 x 1,080, 50p (sensor output is 50p, 17Mbps)			
Continuous recordable time (Motion images)			AVCHD with picture quality set to Approx. 230 min with H-HS12035 / Approx. 210 min with H-VS014140			
Actual recordable time (Motion images)		AVCHD with picture quality set to Approx. 115 min with H-HS12035 / Approx. 105 min with H-VS014140				
Fllicker reduction (Motion images)		[1/500] / [1/600] / [1/1000] / [1/1200] / 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]				
VIEWFINDER	WiFi		IEEE 802.11b/g/n, 2412 MHz - 2462 MHz [11ch], Wi-Fi / WPA / WPA2, Infrastructure mode			
	Type		OLED Live View Finder (1,744K dots equivalent)			
	Field of view		Approx. 100%			
	Magnification		Approx. 1.34x / 0.67x (35mm camera equivalent)			
	Eye point		Approx. 21 mm from eyepiece lens			
	Dioptric 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				
EXPOSURE CONTROL	Light metering system		144-zone multi-pattern sensing system			
	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-less under 200, ISO more over 12800-25600 Available) (Up to ISO3200 in Auto)			
	Exposure compensation		1/3 Step ±5EV (±3EV for motion image)			
WHITE BALANCE	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		Auto / Daylight / Cloudy / Shade / Incandescent / Flash / White Set 1, 2 / Color temperature setting			
	White balance adjustment		Blue/amber bias, Magenta/green bias			
	Color temperature setting		2,500-10,000K in 100K			
SHUTTER	White balance bracket		3 exposures in blue/amber axis or in magenta/green axis			
	Type		Focal-plane shutter			
	Shutter speed		Still Images: 1/4000-40 and Bulb, Motion image: 1/16,000 ~ 1/30 (NTSC), 1/16,000 ~ 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)				

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.

"AVCHD Progressive", "AVCHD", the "AVCHD Progressive" Logo and the "AVCHD" Logo are trademarks of Panasonic Corporation and Sony Corporation. The release date may differ depending on the country. Check the website of the Panasonic sales company in your country or region for details on the optional accessories that are available in your market. • The DMW-BLF19 comes 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> [English] • 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] • 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. • Microsoft® and Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. • Four Thirds™ and Micro Four Thirds™ and Four Thirds and Micro Four Thirds Logo marks are trademarks or registered trademarks of Olympus Imaging Corporation, in Japan, the United States, the European Union and other countries. • Other names of systems and products mentioned in this brochure are generally the registered trademarks or trademarks of the manufacturers who developed the system or product concerned. • Some accessories are not available in some countries. • Weight and dimensions shown are approximate. • Overall length of lens is from the tip of the lens to the base side of the lens mount. • Some functions may not work when lenses other than the included lens are used. Please refer to Panasonic's website, etc., for the latest information. • Available of OSD languages may vary depending on the sales area. • Some sample images are simulated. • The use of recorded or printed materials that are protected by copyright for any purpose other than personal enjoyment is prohibited, as it would infringe upon the rights of the copyright holder. • The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance.

The contents of this catalog are tentative and subject to change. It is a preliminary version, and not complete.

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)
	Built-in flash type	TTL Built-in Flash, GN12 equivalent (ISO 100 •m)/GN17 equivalent (ISO 200 •m) Built-in Pop-up [Reference]
FLASH	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	1/2EV Step ±3EV
	Flash synchronization	1st. Curtain Sync, 2nd Curtain Sync.
	Synchronization for flash dimming and exposure compensation	Yes. [ON/OFF]
MONITOR	Flash sync socket	Yes
	Type	OLED Monitor with static touch control
	Monitor size	Free-angle 3.0 inch / 3:2 Aspect / Wide viewing angle
	Pixels	610K dots
	Field of view	Approx. 100%
LIVE VIEW	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	Guide Lines (3 patterns)
		Real-time Histogram
LEVEL GAUGE		Yes
VERTICAL SHOOTING DETECTION		Yes
PROTO 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 motionv	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) [1,720 × 1,080, 24p, 24Mbps in MOV, MP4, AVCHD]
PLAYBACK		Normal playback, 30 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
	Playback mode	
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 TypeC Video: Auto / 1080p / 1080i / 720p / 480p [576p in PAL system] Audio: Dolby® Digital Stereo Creator
	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	ø2.5mm for Remote
	External microphone input	ø3.5mm for External microphone
	Headphone output	ø3.5mm 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 x H x D]	132.9 × 93.4 × 82.0 mm / 5.23 × 3.68 × 3.23 inch [excluding protrusions]
	Weight	Approx. 550 g / 19.40 oz [SD card, Battery, Body] Approx. 470 g / 16.58 oz [Body only] Approx. 885 g / 30.16 oz [SD card, Battery, H-HS12035 lens included] Approx. 1,010 g / 35.62 oz [SD card, Battery, H-VS014140 lens included]
OPERATING ENVIRONMENT	Operating temperature	0°C to 40°C [32°F to 104°F]
	Operating humidity	10% to 80%
STANDARD ACCESSORIES	Software	PHOTO-STUDIO 8.5 SE SILKYPIX® Developer Studio 3.1 SE LoiloScope (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-BGGH2 [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.









For Explorers at Heart

The All New LUMIX GH3

Meet the DMC-GH3, a new and highly evolved model from LUMIX, creator of the world's first* digital single lens mirrorless (DSLM) camera.

The body has been totally re-engineered to incorporate a 16.05-megapixel Digital Live MOS Sensor, a 4-CPU Venus Engine, and a newly designed low-pass filter.

The creative expression made possible by these innovations, which render even the finest textures in intricate detail, breaks new ground in photographic realism.

The new model also features Contrast AF with an unprecedented level of response. And its magnesium alloy frame is tightly sealed to form a splash/dustproof design, making the DMC-GH3 rugged enough to withstand the rigors of professional use.

Incredible advances have been made in video performance as well. In addition to supporting a wide range of recording formats, the DMC-GH3 features a special heat-dispersing design for extended high-quality recording. Its specifications match those of many professional cameras, ensuring that it meets the demands of video field work.

The LUMIX GH3 was designed from the ground up to provide seamless performance for both stills and videos. It may well be the world's first camera to please professional photographers by offering them the best of both.

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

Reach Out and Feel the Beauty

Smoothly flowing gradation

New 16.05-megapixel Digital Live MOS Sensor

The DMC-GH3 features a 16.05-megapixel Digital 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.



Moire suppression and high resolution

Newly Designed Low-Pass Filter

New technology has also been applied to the low-pass filter on the surface of the Digital Live MOS Sensor. 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.

Great shots even in backlighting

HDR (High Dynamic Range)

To cope with the extreme bright and dark contrast that you get, for example, with backlighting, consecutive photos are taken with different exposure levels and overlapped. Blown highlights and blocked shadows are then deleted and a single photo is composed. All processing is done in the background, so you can take your next shot without having to wait, ensuring that you don't miss a photo opportunity.

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) and Multiprocess Noise Reduction (MNR) work together to attain superb noise-reducing performance. Four CPUs process these signals instantly to render images with excellent definition and lifelike ambience.



Still-life images and landscapes without pixel shifting

Electronic Shutter Function

Both the front and rear curtains in the DMC-GH3's shutter system are driven electronically for vibration-free operation. This ensures crisp still-life images and landscapes with no pixel shifting.

High acclaim for accuracy and quality

Top-Class Aspherical Lenses

Lumix G lenses are all developed in-house. 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 these advanced lenses and a system in which each and every lens is inspected.

• LEICA is a registered trademark of Leica Microsystems IR GmbH.



Actual Size

Nimble Movement, Intuitive Response

Higher response and greater precision

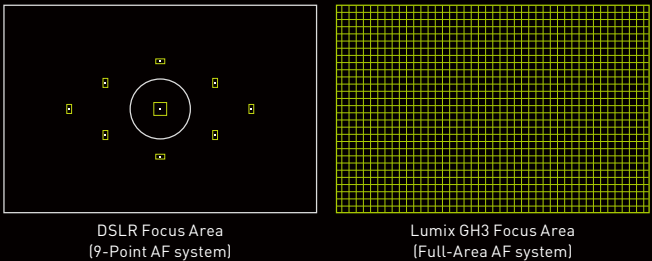
Contrast AF

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. A faster sensor and engine also achieve a higher focus detection speed than competitive models.

Flexible framing not limited to measurement points

Full-area Focusing

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.



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. Then drag the screen to move the cross-shaped marker in the center to the exact place you want to focus. This allows detailed adjustment in a small focus area.

Enlarge the screen to check focusing

MF Assist

When manually focusing, simply touch a part of the rear monitor to enlarge the image by 4x, 5x or 10x, to aid in focusing. The 4x enlarged image is displayed in the framing screen, so you can focus while viewing the entire composition.

Easy, intuitive operation

Button Layout

Shooting with the viewfinder has been further enhanced in the DMC-GH3. Exposure compensation, ISO sensitivity, and white balance controls are positioned around the shutter button to make operation fast and easy while looking at the viewfinder.

Camera tilt displayed on the monitor

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. The camera's portrait/landscape orientation is also detected, and photos are automatically displayed in the correct orientation whatever lens is used.

Natural color, high definition and a lag-free display

Double OLED Display

High-quality, high-speed organic EL 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.



Extended shooting ability

New Tough Battery

The newly developed Tough Battery allows reliable, extended shooting of both photos and videos. You can shoot approx. 540 images with H-HS12035 (CIPA Standard).



Field Tough

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.



Ready for shooting worldwide Splash/Dustproof Design

A splash/dustproof design is achieved by tightly sealing the joints and control components of the DMC-GH3 body. This heavyduty design meets the needs of active outdoor photographers everywhere.



Go-anywhere ruggedness Splash/Dustproof Lenses

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. You're covered with a tough design and rugged protection throughout.

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

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

Full support for the industry's recording formats — Versatile Recording Formats

The DMC-GH3 handles the wide variety of recording formats, frame rates, and bit rates that are used by broadcasting stations and production studios.

	Recording format	Number of pixels	Recording frame rate NTSC [PAL]	Sensor output frame rate NTSC [PAL]	Bit rate	Time code	Seamless file generation
for Editing	MOV (H.264)	1,920 x 1,080	60p [50p]	60p [50p]	50Mbps [IPB]	Yes	Yes
			30p [25p]	30p [25p]	72Mbps [ALL-Intra]	Yes	Yes
					50Mbps [IPB]	Yes	Yes
			24p [24p]	24p [24p]	72Mbps [ALL-Intra]	Yes	Yes
					50Mbps [IPB]	Yes	Yes
		1,280 x 720	60p [50p]	60p [50p]	72Mbps [ALL-Intra]	Yes	Yes
for Ornamental	MP4 (H.264)	1,920 x 1,080	30p [25p]	30p [25p]	20Mbps	No	No
		1,280 x 720			10Mbps	No	No
		640 x 480			4Mbps	No	No
	AVCHD Progressive	1,920 x 1,080	60p [50p]	60p [50p]	28Mbps	Yes	Yes
	AVCHD	1,920 x 1,080	60i [50i]	60p [50p]	17Mbps	Yes	Yes
			60i [50i]	30p [25p]	24Mbps	Yes	Yes
			24p [24p]	24p [24p]	24Mbps	Yes	Yes

High-definition recording of every frame

Full-HD Progressive



The DMC-GH3 gives you 1920 x 1080 60p [NTSC] / 50p [PAL] Full-HD recording. Progressive scanning records every frame, so the amount of data contained is twice that of interlace scanning, and the images have extremely high definition.

Face Detection AF, Full-area Touch AF, and AF Tracking

Versatile AF Functions for Video Shooting

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

Videos Just the Way You Want Them

Creative Video Mode

Exposure Mode

Select either of four manual video modes: Program AE / Aperture-Priority / Sutter-Priority / Manual Exposure. They will faithfully reflect your shooting intent, and give you a wide range of video images.

40%, 48%, 80% Slow Motion Video

Quick-motion and slow-motion video let you apply a variety of effects to the video timeline. In addition to three types of quickmotion and 80% slow-motion video, the DMC-GH3 includes 48% and 40% slow-motion in response to demands from many video shooting enthusiasts, all in Full-HD.



Time codes recorded for video editing use

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. In addition to aiding image expression, these time code functions meet professional needs for post-production work.

Audio recording with an external mic and image sync

Mic Input Jack

The DMC-GH3 has a 3.5-mm-diameter, general-purpose mic jack. Simply plug in an external mic to record high-quality sound synchronized to the image.

Monitor the sound as you record

Headphone Output Terminal

The DMC-GH3 also features a 3.5-mm-diameter, generalpurpose, headphone output terminal. It comes in handy for TV program or other production applications by letting you monitor the sound through headphones while shooting.

Check Live View images on a large screen

HDMI Monitor-Through

HDMI The HDMI terminal on the DMC-GH3 connects easily to a large-screen monitor for real-time image checking. It also makes it possible to save data onto an SD card as it is output, for a more efficient workflow.

Continuous Recording

Seamless File Generation

When recording the video in MOV, AVCHD Progressive and AVCHD, the DMC-GH3 automatically generates multiple seamless files for continuous recording. During playback, the files are reproduced with seamless, interruption-free continuity.

Extended-time recording of high-quality images

Original Heat-Dispersing 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.



Professional-Level Flexibility

Wireless function for a whole new shooting style

Smartphone or Tablet Linking

The Wi-Fi® function lets you use your smartphone to make settings and press the shutter button remotely, a short distance from the camera. The auto transfer function is handy for automatically backing up photos onto a tablet. This lets you monitor them on the tablet without having to upload them to a PC. You can also start timer interval video recordings from your smartphone. And you can use GPS data to simultaneously record the shooting location onto your images.

- The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance.

Versatile shooting of both still and video images

Flash with LED [DMW-FL360L] [Optional]

A wireless capability is handy for multiple-flash shooting. The LED light is especially useful for video shooting. Charging is fast at only about 2 seconds, to provide comfortable and easy flash shots.

Extended shooting and palm-fitting operation

Integrated Battery Grip [Optional]

Mounting the optional battery grip allows the GH3 to shoot 1,000 or more photos when using the Live Viewfinder (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.



Strong support for full-fledged video shooting

Stereo/Shotgun Microphone [DMW-MS2] [Optional]

This advanced external mic suppresses the camera's motor noise and handling noise, to capture the sound that you're aiming for. Stereo and shotgun mic switching is done from the menu.

Optional Accessories

PL Filter (Circular Type)

67mm DMW-LPL67
62mm DMW-LPL62
58mm DMW-LPL58
52mm DMW-LPL52
46mm DMW-LPL46
37mm DMW-LPL37
37mm DMW-LPLA37



ND (Neutral Density) Filter (ND8)

62mm DMW-LND62
58mm DMW-LND58
52mm DMW-LND52
46mm DMW-LND46
37mm DMW-LND37



MC Protector

67mm DMW-LMCH67
62mm DMW-LMCH62
58mm DMW-LMCH58
52mm DMW-LMC52
46mm DMW-LMC46
37mm DMW-LMCH37



External TTL Flash (Wireless compatible)

GN36 DMW-FL360L



External TTL Flash

GN22 DMW-FL220
GN36 DMW-FL360
GN50 DMW-FL500



Mount Adaptor

DMW-MA1 for the Four Thirds System standard
DMW-MA2M for M mount lens of Leica Camera AG
DMW-MA3R for R mount lens of Leica Camera AG



Battery Grip

DMW-BGGH3



Stereo Shotgun Microphone

DMW-MS2



Remote Shutter

DMW-RSL1



Battery

DMW-BLF19



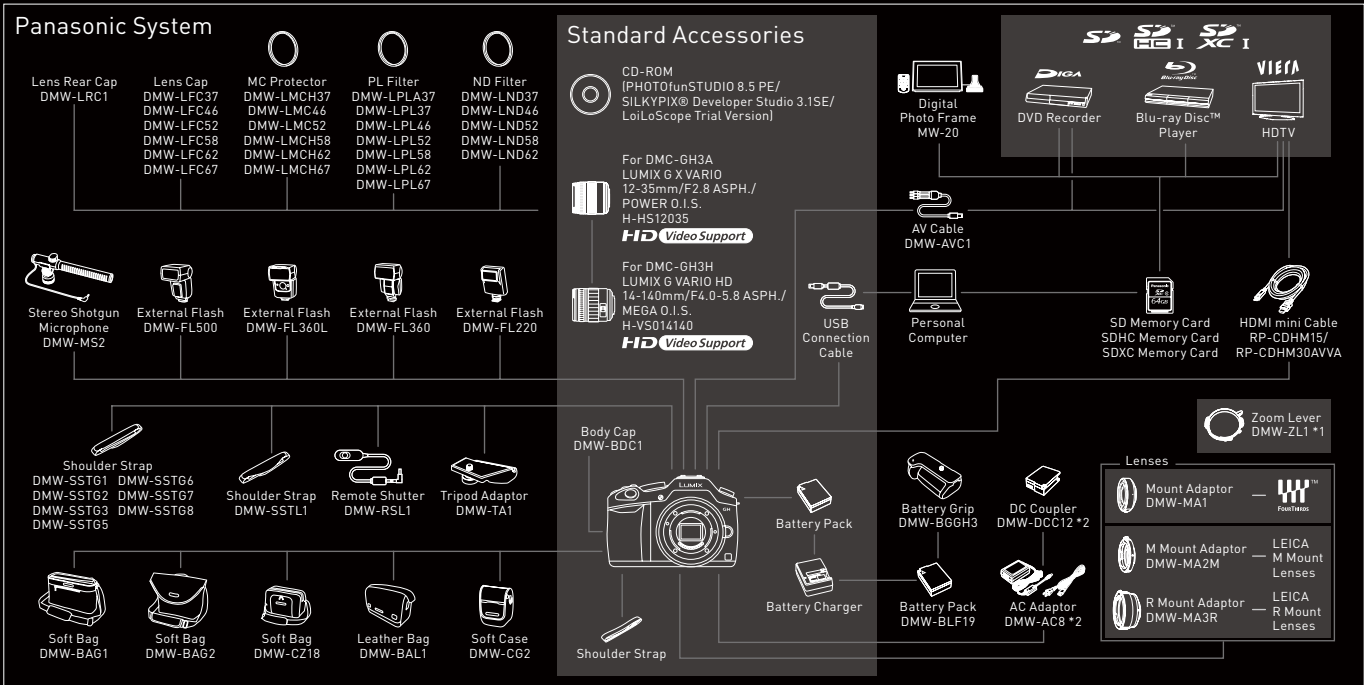
Zoom Lever

DMW-ZL1



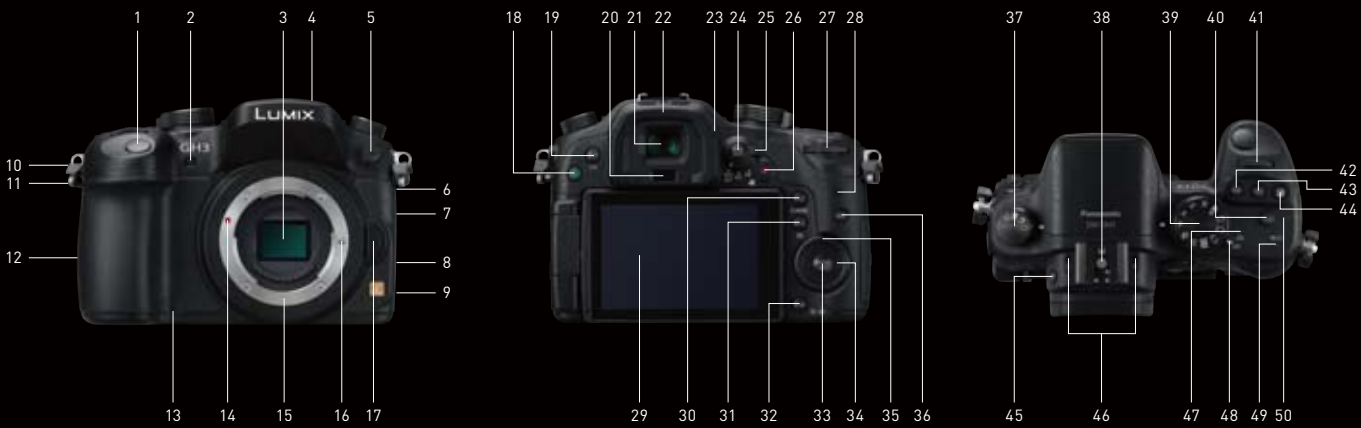
•LUMIX G system cameras come with a function to check whether the battery and unit can be safely used together. •Batteries made by other companies which have been certified by Panasonic may be used with these units, but we offer no guarantee as to the quality, performance or safety of such batteries. •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.]

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. •The SDXC/SDHC Memory Card can be used only if the 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. •Four Thirds™ and Micro Four Thirds™, and Four Thirds and Micro Four Thirds Logo marks are trademarks or registered trademarks of Olympus Imaging Corporation, in Japan, the United States, the European Union and other countries.

Main Parts and Controls



- | | | | | |
|--|---------------------------|---|---|-----------------------------------|
| 1. Shutter button | 11. Remote socket | 22. Eye Cup | 32. Delete/Cancel button/
Fn4 button | 42. White Balance button |
| 2. Self-timer indicator/
AF assist lamp | 12. Card door | 23. Diopter adjustment dial | 33. MENU/SET button | 43. ISO sensitivity button |
| 3. Sensor | 13. DC coupler cover | 24. AF/AE LOCK button | 34. Control dial | 44. Exposure Compensation button |
| 4. Flash | 14. Lens fitting mark | 25. Focus mode lever | 35. Cursor buttons | 45. Flash open button |
| 5. Flash synchro socket | 15. Mount | 26. Motion picture button | 36. DISP. button | 46. Stereo microphone |
| 6. MIC socket | 16. Lens lock pin | 27. Rear dial | 37. Drive mode dial | 47. Status indicator |
| 7. Headphone socket | 17. Lens release button | 28. Speaker | 38. Hot shoe | 48. Camera ON/OFF switch |
| 8. HDMI socket | 18. Playback button | 29. Touch screen/OLED monitor | 39. Mode dial | 49. Wi-Fi connection lamp |
| 9. AV OUT/DIGITAL socket | 19. LVF button/Fn5 button | 30. Q.MENU button/Fn2 button | 40. Wi-Fi button/Fn1 button | 50. Focus distance reference mark |
| 10. Shoulder strap eyelet | 20. Eye sensor | 31. Auto Focus Mode button/
Fn3 button | 41. Front dial | |