

## DMC-GH3

### Compact System Camera

Superb Image Quality with Digital Live MOS Sensor and the Venus Engine

High Quality Full HD Video Recording Featuring Versatile Recording Format

Intuitive Design and the Rugged Body Featuring Double OLED display

The Light Speed AF and the Advanced Focusing System

Full Expandability for Professional Level Flexibility

Various Creative Options for Photo and Video



LUMIX G Compact System Camera GH3 - The All New Highly Evolved Digital Single Lens Mirrorless Camera with Breathtaking Quality in Photo & Video

eShop Price\*: **2,492.99 GBP**

\*Panasonic UK Online Shop (eShop) Price

## 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



### Award

2012-10-25T10:24:15

DMC-GH3, ePhotozine, Highly Recommended, October 2012

## IMAGE SENSOR

Type	Live MOS Sensor
Total pixels	17.20 Megapixels
Camera effective pixels	16.05 Megapixels
Colour filter	Primary color filter
Dust reduction system	Supersonic wave filter

## RECORDING SYSTEM

Recording file format	Still Image: JPEG(DCF, Exif 2.3), RAW, MPO (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, MPO+Fine / MPO+Standard (with 3D lens in Micro Four Thirds System standard)
Color Space	sRGB, Adobe RGB



H-HS35100E



H-F008E

## File size(Pixels)

<b>Still Image</b>	[4:3] 4608x3456(L) / 3264x2448(M) / 2336x1752(S) / 1824x1368 (with 3D lens in Micro Four Thirds System standard)
	[3:2] 4608x3072(L) / 3264x2176(M) / 2336x1560(S) / 1824x1216 (with 3D lens in Micro Four Thirds System standard)
	[16:9] 4608x2592(L) / 3264x1840(M) / 1920x1080(S) / 1824x1024 (with 3D lens in Micro Four Thirds System standard)
	[1:1] 3456x3456(L) / 2448x2448(M) / 1744x1744(S) / 1712x1712 (with 3D lens in Micro Four Thirds System standard)
<b>Motion Image (MOV*1 : NTSC)</b>	[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))
<b>Motion Image (MOV*1 : PAL)</b>	[Full HD]1920×1080, 25p (sensor output is 25p, 72Mbps(ALL-Intra))*3
	[Full HD]1920×1080, 24p (sensor output is 24p, 72Mbps(ALL-Intra))*3
	[HD]1280×720, 50p (sensor output is 50p, 72Mbps(ALL-Intra))*3
	[Full HD]1920×1080, 50p (sensor output is 50p, 50Mbps(IPB))*3
	[Full HD]1920×1080, 25p (sensor output is 25p, 50Mbps(IPB))*3
	[Full HD]1920×1080, 24p (sensor output is 24p, 50Mbps(IPB))*3
<b>Motion Image (MP4*2 : NTSC)</b>	[Full HD]1920×1080, 30fps (sensor output is 30p, 20Mbps)
	[HD]1280×720, 30fps (sensor output is 30p, 10Mbps)
	[VGA] 640x480, 30fps (sensor output is 30p, 4Mbps)
<b>Motion Image (MP4*2 : PAL)</b>	[Full HD]1920×1080, 25fps (sensor output is 25p, 20Mbps)*3
	[HD]1280×720, 25fps (sensor output is 25p, 10Mbps)*3
	[VGA] 640x480, 25fps (sensor output is 25p, 4Mbps) *3
<b>Motion Image (AVCHD Progressive*2:NTSC)</b>	[Full HD]1920×1080, 60p (sensor output is 60p, 28Mbps)
<b>Motion Image (AVCHD*2 : NTSC)</b>	[Full HD] 1920×1080, 24p (sensor output is 24p, 24Mbps)
	[Full HD] 1920×1080, 60i (sensor output is 30p, 24Mbps)
	[Full HD] 1920×1080, 60i (sensor output is 60p, 17Mbps)
<b>Motion Image (AVCHD Progressive*2:PAL)</b>	[Full HD]1920×1080, 50p (sensor output is 50p, 28Mbps)*3
<b>Motion Image (AVCHD*2 : PAL)</b>	[Full HD] 1920×1080, 24p (sensor output is 24p, 24Mbps)*3
	[Full HD] 1920×1080, 50i (sensor output is 25p, 24Mbps)*3
	[Full HD] 1920×1080, 50i (sensor output is 50p, 17Mbps)*3
<b>Continuous recordable time (Motion images)</b>	AVCHD with picture quality set to Approx. 240 min with H-HS12035 / Approx. 220 min with H-VS014140
<b>Actual recordable time (Motion images)</b>	AVCHD with picture quality set to Approx. 120 min with H-HS12035 / Approx. 110 min with H-VS014140
<b>Flicker reduction (Motion images)</b>	[1/50] / [1/60] / [1/100] / [1/120] / OFF
<b>Time Code (Motion images) (except MP4)</b>	ON/OFF, Count Up : Rec Run/Free Run selectable, Time Code Mode : Drop frame/Non-drop frame selectable(NTSC only)
<b>WiFi</b>	IEEE 802.11b/g/n, 2412MHz - 2462MHz (11ch), Wi-Fi / WPA / WPA2, Infrastructure mode



H-FS045200E



H-FS100300E



H-FS014045E



H-H020E



H-H014E



H-FT012E



H-ES045E



H-VS014140E



H-F007014E

## VIEWFINDER

<b>Type</b>	OLED Live View Finder (1,744K dots equivalent)
<b>Field of view</b>	Approx. 100%

<b>Magnification</b>	Approx. 1.34x / 0.67x (35mm camera equivalent)
<b>Eye point</b>	Approx. 21 mm from eyepiece lens
<b>Diopter adjustment</b>	-4.0~+4.0(dpt)
<b>Auto eye sensor</b>	Yes



H-FS45150E-K

## FOCUS

<b>Type</b>	Contrast AF system
<b>Focus mode</b>	AFS (Single) / AFF (Flexible) / AFC (Continuous) / MF
<b>AF assist lamp</b>	Yes (ON / OFF)
<b>AF lock</b>	Yes (AF/AE LOCK button)
<b>Others</b>	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
<b>AF mode</b>	Face detection / AF Tracking / 23-area-focusing / 1-area-focusing / Pin-point (Full area touch is available)



H-FS45150E-S



H-FS014042E

## EXPOSURE CONTROL

<b>Light metering system</b>	144-zone multi-pattern sensing system
<b>Light metering mode</b>	Intelligent Multiple / Center Weighted / Spot
<b>Metering range</b>	EV0-18 (F2.0 lens, ISO100 equivalent)
<b>Exposure mode</b>	Program AE, Aperture Priority AE, Shutter Priority AE, Manual
<b>ISO sensitivity (Standard Output Sensitivity)</b>	Auto / Intelligent ISO / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 (Changeable to 1/3, 1EV step) (Extended ISO125-less under 200, ISO more over 12800-25600 Available) (Up to ISO3200 in Auto)
<b>Exposure compensation</b>	1/3 EV Step $\pm 5$ EV ( $\pm 3$ EV for motion image)
<b>AE lock</b>	AF/AE LOCK button
<b>AE bracket</b>	3,5,7 frame in 1/3, 2/3 or 1 EV Step, single/burst



H-PS14042E-K



H-PS45175E-K



H-HS12035E

## WHITE BALANCE

<b>White balance</b>	Auto / Daylight / Cloudy / Shade / incandescent / Flash / White Set 1, 2, 3, 4 / Color temperature setting
<b>White balance adjustment</b>	Blue/amber bias, Magenta/green bias
<b>Color temperature setting</b>	2500-10000K in 100K
<b>White balance bracket</b>	3 exposures in blue/amber axis or in magenta/green axis



DMW-MA1E

## SHUTTER

<b>Remote control</b>	Remote control with Bulb function by DMW-RSL1 (Optional)
<b>Type</b>	Focal-plane shutter
<b>Shutter speed</b>	Still Images: 1/4000-60 and Bulb (Approx. 60 minutes), Motion image: 1/16,000 ~ 1/30 (NTSC), 1/16,000 ~ 1/25 (PAL)
<b>Self timer</b>	10sec, 3 images after 10sec, 2sec



DMW-MA2ME



DMW-MA3RE

## BURST SHOOTING

<b>Burst speed</b>	SH: 20 frames/sec, H: 6 frames/sec, M: 4 frames/sec (with Live View), L: 2 frames/sec (with Live View)
<b>Number of recordable images</b>	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)



DMW-FL500E



DMW-FL360LE



DMW-FL360E



DMW-FL220E

## SCENE GUIDE

<b>Still image</b>	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
<b>Motion Picture</b>	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

## FLASH

<b>Flash Mode</b>	Auto, Auto/Red-eye Reduction (when iA, iA+), Forced On, Forced On/Red-eye Reduction, Slow Sync., Slow Sync./Red-eye Reduction
<b>Synchronization speed</b>	Less than 1/160 second
<b>Flash synchronization</b>	1st. Curtain Sync, 2nd Curtain Sync.
<b>Flash output adjustment</b>	1/3EV Step ±3EV
<b>Synchronization for flash dimming and exposure compensation</b>	Yes (ON/OFF)
<b>Flash sync socket</b>	Yes



DMW-RSL1E



DMW-BLF19E

## MONITOR

<b>Type</b>	OLED Monitor with static touch control
<b>Monitor size</b>	Free-angle 3.0inch / 3:2 Aspect / Wide viewing angle
<b>Pixels</b>	614K dots
<b>Filed of view</b>	Approx. 100%
<b>Monitor adjustment</b>	Brightness (7 levels), Color (7 levels), Red-Green(11 levels), Blue-Yellow(11 levels)



DMW-BGGH3E

## LIVE VIEW

<b>Digital zoom</b>	2x, 4x
<b>Extra Tele Conversion</b>	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.)
<b>Other functions</b>	Guide Lines (3 patterns) Real-time Histogram



DMW-LMCH62E



DMW-LND62E

## LEVEL GAUGE

Level Gauge	Yes
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DMW-LPL62E

## VERTICAL SHOOTING DETECTION

VERTICAL SHOOTING DETECTION	Yes
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## PHOTO STYLE

Still image and Video	Standard / Vivid / Natural / Monochrome / Scenery / Portrait / Custom
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DMW-DCC12E

## CREATIVE CONTROL

Motion Picture	Expressive / Retro / High Key / Low Key / Sepia / Dynamic Monochrome / Impressive Art / High Dynamic / Cross Process / Toy Effect / Miniature Effect / One Point Color
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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
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DMW-MS2E

## 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) (1920x1080, 24p, 24Mbps in MOV, MP4, AVCHD)

## PLAYBACK

Playback mode	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
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## IMAGE PROTECTION / ERASE

Protection	Single / Multi or Cancel
Erase	Single / Multi / All / Except Favorite

## PRINT

Direct Print	PictBridge compatible
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## INTERFACE

USB	USB 2.0 High Speed
HDMI	miniHDMI TypeC 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.
Microphone	Stereo, Wind-cut: Off / Low / Standard / High / AUTO

<b>Speaker</b>	Monaural
<b>Remote input</b>	φ2.5mm for Remote
<b>External microphone input</b>	φ3.5mm for External microphone
<b>Headphone output</b>	φ3.5mm for Headphone

## LANGUAGE

<b>OSD language</b>	Japanese, English, German, French, Italian, Spanish(English)
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## POWER

<b>Battery</b>	Li-ion Battery Pack (7.2V, 1860mAh) (Included)
<b>Battery life (CIPA standard)</b>	Approx. 540 images with H-HS12035 Approx. 500 images with H-VS014140

## Dimensions/ Weight

<b>Dimensions (W x H x D)</b>	132.9 x 93.4 x 82.0mm / 5.23 x 3.68 x 3.23 in (excluding protrusions)
<b>Weight</b>	Approx. 550g/ 19.40 oz (SD card, Battery, Body) Approx. 470g / 16.58 oz (Body only) Approx. 855g / 30.16 oz (SD card, Battery, H-HS12035 lens included)

## OPERATING ENVIRONMENT

<b>Operating temperature</b>	0 to 40 (32°F to 104°F)
<b>Operating humidity</b>	10% to 80%

## STANDARD ACCESSORIES

<b>Software</b>	PHOTOfunSTUDIO 8.5 PE SILKYPIX® Developer Studio 3.1 SE LoiloScope (trial version)
<b>Standard accessories</b>	Body, Body Cap, LUMIX G X VARIO 12-35mm / F2.8 ASPH. / POWER O.I.S. (H-HS12035), Lens Cap, Lens Hood, Lens Rear Cap, Battery Charger (AC Cable included), Battery Pack, USB Connection Cable, Shoulder Strap, CD-ROM

## INTERCHANGEABLE LENS-1

<b>Maximum Aperture</b>	F2.8
<b>Lens Name</b>	LUMIX G X VARIO 12-35mm / F2.8 ASPH. / POWER O.I.S.
<b>Lens Construction</b>	14 elements in 9 groups (4 aspherical lenses , 1 UED lens, 1 UHR lens)
<b>Nano Surface Coating</b>	Yes
<b>Mount</b>	Micro Four Thirds mount

<b>Optical Image Stabilizer</b>	Yes (POWER O.I.S.)
<b>Focal Length</b>	f=12-35mm (35mm camera equivalent 24-70mm)
<b>Aperture Type</b>	7 diaphragm blades / Circular aperture diaphragm
<b>Minimum Aperture</b>	F22
<b>Closest Focusing Distance</b>	0.25m / 0.82ft
<b>Maximum magnification</b>	Approx. 0.17x / 0.34x (35mm camera equivalent)
<b>Diagonal Angle of View</b>	84°(Wide) to 34°(TELE)

## General

<b>Filter Size</b>	φ58mm / 2.3in
<b>Max. Diameter</b>	φ67.6mm / 2.7in
<b>Overall Length</b>	Approx. 73.8mm / 2.9in (from the tip of the lens to the base side of the lens mount)
<b>Weight [g]</b>	Approx. 305g (excluding lens cap and lens rear cap)
<b>Weight [oz]</b>	Approx. 10.8oz (excluding lens cap and lens rear cap)

## OPTIONAL ACCESSORIES

<b>External Flash (optional)</b>	DMW-FL360L (optional), Wireless Channel: 1ch/2ch/3ch/4ch
<b>External Microphone (optional)</b>	DMW-MS2 (optional), Gun/Stereo selectable
<b>Battery Grip (optional)</b>	DMW-BGGH3 (optional)

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