# LUMIX GX85 4K Mirrorless Camera, with 12-32mm and 45-150mm Lenses - Black - DMC-GX85WK DMC-GX85WK

#### TYPE

- Type Digital Single Lens Mirrorless camera
- o Recording media SD Memory Card, SDHC Memory Card, SDXC Memory Card
- o Recording media (Compatible with UHS-I UHS Speed Class 3 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
- o Total pixels 16.84 Megapixels
- Camera effective pixels 16.00 Megapixels
- o Color filter Primary color filter
- o Dust reduction system Supersonic wave filter

## RECORDING SYSTEM

- o Aspect ratio 4:3, 3:2, 16:9, 1:1
- o Image quality RAW, RAW+Fine, RAW+Standard, Fine, Standard
- o Image quality MPO+Fine / MPO+Standard (with 3D lens in Micro Four Thirds system standard)
- o Color Space sRGB, AdobeRGB
- Continuous recordable time (Motion picture) AVCHD [FHD/60i]: Approx. 100 min (rear monitor), 90 min (LVF) with H-FS12032
- Continuous recordable time (Motion picture) MP4 [4K/30p]: Approx. 80 min (rear monitor), 70 min (LVF H-FS12032
- Actual recordable time (Motion picture) AVCHD [FHD/60i]: Approx. 50 min (rear monitor), 45 min (LVF H-FS12032
- Actual recordable time (Motion picture) MP4 [4K/30p]: Approx. 40 min (rear monitor), 35 min (LVF) wit FS12032
- o Recording file format
- o Still image JPEG (DCF, Exif 2.3), RAW, MPO (When attaching 3D lens in Micro Four Thirds system stand
- Motion picture AVCHD (Audio format: Dolby Digital 2ch), MP4 (Audio format: AAC 2ch)
- File size(Pixels)
- Still Image [4:3] 4592x3448(L) / 3232x2424(M) / 2272x1704(S) / 1824x1368 (When attaching 3D lens in Mir Four Third system standard)
- Still Image [3:2] 4592x3064(L) / 3232x2160(M) / 2272x1520(S) / 1824x1216 (When attaching 3D lens in MicFour Third system standard)
- Still Image [16:9] 4592x2584(L) / 3840x2160(M) / 1920x1080(S) / 1824x1024 (When attaching 3D lens in M Four Third system standard)
- Still Image [1:1] 3424x3424(L) / 2416x2416(M) / 1712x1712(S) / 1712x1712 (When attaching 3D lens in MicFour Third system standard)

o MP4 N/A o AVCHD N/A o MP4\* [4K] 3840x2160: 4K/30p 100Mbps, 4K/24p 100Mbps o MP4\* [Full HD] 1920x1080: FHD/60p 28Mbps, FHD/60p 28Mbps • MP4\* [HD] 1280x720: HD/30p 10Mbps o MP4\* [VGA] 640x480: VGA/30p 4Mbps o AVCHD\* [Full HD] 1920x1080 FHD/60p: 28Mbps, 60p recording • AVCHD\* [Full HD] 1920x1080 FHD/60i: 17Mbps, 60i recording • AVCHD\* [Full HD] 1920x1080 FHD/30p: 24Mbps, 60i recording (sensor output is 30fps) o AVCHD\* [Full HD] 1920x1080 FHD/24p: 24Mbps, 24p recording o WiFi IEEE 802.11b/g/n, 2412 MHz - 2462 MHz (1-11 ch), Wi-Fi / WPA / WPA2, Infrastructure mode WiFi FUNCTION o NFC No o QR Code Connection Yes • Password-less connection Yes (ON / OFF selectable) • Type LCD Live View Finder (2,764,800 dots equivalent) VIEWFINDER • Field of view Approx. 100% o Magnification Approx. 1.39x / 0.7x (35mm camera equivalent) with 50 mm lens at infinity; -1.0 m-1 • Eye point Approx. 17.5 mm from eyepiece lens o Diopter adjustment -4.0 - +3.0 (dpt) • Eye sensor Yes • Eye sensor adjustment High / Low • Type Contrast AF system • FOCUS o DFD technology Yes Post Focus Yes o Focus Stacking N/A • Focus mode AFS (Single) / AFF (Flexible) / AFC (Continuous) / MF o AF mode Face/Eye Detection / Tracking / 49-Area / Custom Multi / 1-Area / Pinpoint • AF mode (Full area touch is available) o AF detective range EV -4 - 18 (ISO100 equivalent) Starlight AF Yes o AF assist lamp Yes

• AF lock Yes (AF/AE LOCK button)

Motion picture\*

• Others One Shot AF, Shutter AF, Half Press Release, Quick AF, Continuous AF (during motion picture recording), Eye Sensor AF, AF+MF, MF Assist, Touch MF Assist, Focus Peaking, Touch AF/AE Function, Touch Pad AF, Touch Shutter

# EXPOSURE CONTROL

- o Light metering system 1728-zone multi-pattern sensing system
- Light metering mode Multiple / Center Weighted / Spot
- o Metering range EV 0 18 (F2.0 lens, ISO100 equivalent)
- Exposure mode Program AE, Aperture Priority AE, Shutter Priority AE, Manual
- ISO sensitivity (Standard Output Sensitivity) Auto / Intelligent ISO / 100 (Extended) / 200 / 400 / 800 / 160
   3200 / 6400 / 12800 / 25600 (Changeable to 1/3 EV step)
- ISO sensitivity (Standard Output Sensitivity) (Up to ISO6400 in motion picture recording) (ISO Auto in M mode)
- Exposure compensation 1/3 EV step ±5EV (±3EV for motion picture)
- AE lock Yes (AF/AE LOCK button)
- o AE bracket N/A

## • WHITE BALANCE

- White balance Auto / Daylight / Cloudy / Shade / incandescent / Flash / White Set 1, 2, 3, 4 / Color tempera setting
- White balance adjustment Blue/Amber bias, Magenta/Green bias
- Color temperature setting 2500-10000K in 100K
- White balance bracket N/A

## SHUTTER

- o Type Focal-plane shutter
- o Shutter speed Still image: Still image: Time (Max. 2 minutes), 1/4,000 60
- Shutter speed Motion picture: 1/16,000 1/25
- o Shutter speed Electronic shutter: 1/16,000 1
- o Self timer 10sec, 3 images / 2sec / 10sec
- Remote control N/A

## SCENE GUIDE

- Still image N/A
- Motion picture N/A

#### BRACKET

- AE bracket 3, 5, 7 frames in 1/3, 2/3 or 1 EV Step, Max. ±3 EV, single/burst
- Aperture Bracket 3, 5 or all positions in 1 EV step
- o Focus Bracket 1 to 999 frames, focus steps can be set in 5 levels
- White balance bracket 3 exposures in blue/amber axis or in magenta/green axis

## PANORAMA SHOT

o Panorama shot Yes (Standard / Wide)

## BURST SHOOTING

- Burst speed [Mechanical shutter] AFS: H: 8 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec Live View)
- Burst speed [Mechanical shutter] AFC: H: 6 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec (with Live View)
- Burst speed [Electronic shutter] SH: 40 frames/sec
- Burst speed [Electronic shutter] AFS: H: 10 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec Live View)
- Burst speed [Electronic shutter] AFC: H: 6 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec (Live View)
- o Number of recordable images More than 13 images (when there are RAW files with the particular speed)
- Number of recordable images More than 100 images (when there are no RAW files)
- Number of recordable images (depending on memory card type, aspect, picture size and compression)

#### 4K PHOTO MODE

- o 4K Photo mode\* 4K Burst: 30 frames/sec
- o 4K Photo mode\* 4K Burst (S/S): 30 frames/sec
- o 4K Photo mode\* 4K Pre-Burst: 30 frames/sec, approx. 2 seconds
- 4K Photo mode\* (depending on memory card size and battery power)
- Exif information Yes
- Selectable aspect ratio Yes (4:3 / 3:2 / 16:9 / 1:1 are selectable)
- o Exposure mode Program AE/ Aperture-Priority / Sutter-Priority / Manual Exposure
- Marking function Yes (in 4K Burst (S/S) mode)
- Loop rec function Yes (in 4K Burst (S/S) mode)

# • FLASH

- Flash type TTL Built-in-Flash, GN6.0 equivalent (ISO200 m) / GN4.2 equivalent (ISO100 m), Built-in up (Reference)
- Flash Mode Auto\*, Auto/Red-eye Reduction\*, Forced On, Forced On/Red-eye Reduction, Slow Sync., Slow Sync./Red-eye Reduction, Forced Off \* For iA, iA+ only.
- Synchronization speed Less than 1/160 second
- Flash output adjustment 1/3EV step ±3EV
- Flash synchronization 1st. Curtain Sync, 2nd Curtain Sync.
- o Synchronization for flash dimming and exposure compensation Yes
- Wireless control N/A

#### REAR MONITOR

- Type TFT LCD monitor with static touch control
- Monitor size Tilt 3.0-inch / 3:2 aspect / Wide viewing angle
- o Pixels Approx. 1,040k dots
- Filed of view Approx. 100%
- Monitor adjustment Brightness, Contrast, Saturation, Red-Green, Blue-Yellow

• LIVE VIEW	• Digital zoom 2x, 4x
	• Extra Tele Conversion Still image: Max. 2x
	• Extra Tele Conversion Motion picture: 2.4x (FHD), 3.6x (HD), 4.8x (VGA)
	<ul> <li>Other functions Level Gauge, Real-time Histogram, Guide Lines (3 patterns), Highlight display (Still image motion picture), Zebra pattern (Still image / motion picture)</li> </ul>
• DIRECTION DET	ECTION FUNCTION
	o Direction Detection Function Yes
• SELF SHOT	Self Shot Mode N/A
	• Shutter N/A
	• Effect N/A
• FUNCTION BUTT	TON
	• Fn1, Fn2, Fn3, Fn4, Fn5, Fn6 N/A
	<ul> <li>Fn1, Fn2, Fn3, Fn4, Fn5, Fn6, Fn7, Fn8, Fn9 4K Photo Mode / Wi-Fi / Q.MENU / LVF/Monitor Switch / A LOCK / AF-ON / Preview / One Push AE / Touch AE / Level Gauge / Focus Area Set / Zoom Control / Cu Button Lock / Dial Operation Switch / Photo Style / Filter Select / Aspect Ratio / Picture Size / Quality / Metering Mode / Bracket / Focus Mode / Highlight Shadow / i. Dynamic / i. Resolution / Post Focus / HDR Shutter Type / Flash Mode / Flash Adjust. / Ex. Tele Conv. / Digital Zoom / Stabilizer / Snap Movie / Motio Set / Picture Mode / Silent Mode / Peaking / Histogram / Guide Line / Zebra Pattern / Monochrome Live V Rec Area / Step Zoom / Zoom Speed / Touch Screen / Sensitivity / White Balance / AF Mode/MF / Drive M Restore to Default</li> </ul>
	<ul> <li>Fn1, Fn2, Fn3, Fn4, Fn5, Fn6, Fn7, Fn8, Fn9, Fn10 N/A</li> </ul>
• PHOTO STYLE	<ul> <li>Still image and motion picture Standard / Vivid / Natural / Monochrome / L. Monochrome / Scenery / Por Custom</li> </ul>
• CREATIVE CONT	TROL
	<ul> <li>Still image Expressive / Retro / Old Days / High Key / Low Key / Sepia / Monochrome / Dynamic Monochrome Rough Monochrome / Silky Monochrome / Impressive Art / High Dynamic / Cross Process / Toy Effect / T Pop / Bleach Bypass / Miniature Effect / Soft Focus / Fantasy / Star Filter / One Point Color / Sunshine</li> </ul>
	<ul> <li>Motion picture Expressive / Retro / Old Days / High Key / Low Key / Sepia / Monochrome / Dynamic Monochrome / Impressive Art / High Dynamic / Cross Process / Toy Effect / Toy Pop / Bleach Bypass / Miniature Effect / Fantasy / One Point Color</li> </ul>
• CREATIVE VIDE	O MODE
	• Exposure mode Program AE / Aperture-Priority / Sutter-Priority / Manual Exposure
• MOTION PICTUR	RE FUNCTION
	• Cinelike gamma N/A
	• Flicker reduction [1/50] / [1/60] / [1/100] / [1/120] / OFF

#### PLAYBACK

Playback function 30-thumbnail display, 12-thumbnail display, Calendar display, Zoomed playback (Max. Slideshow (All / Picture Only / Video Only / 4K PHOTO / Post Focus / 3D / Category Selection / Favorite, duration & effect is selectable), Playback Mode (Normal / Picture Only / Video Only / 4K PHOTO / Post F 3D Play / Category / Favorite), Location Logging, RAW Processing, Light Composition, Clear Retouch, Ti Edit, Text Stamp, Video Divide, Time Lapse Video, Stop Motion Video, Resize, Cropping, Rotate, Rotation Display, Favorite, DPOF Print Set, Protect, Face Recognition Edit, Picture Sort, Creating Still Pictures fro Motion Picture

## IMAGE PROTECTION / ERASE

- o Protection Single / Multi
- Erase Single / Multi / All / Except Favorite

PRINT

- Direct Print PictBridge compatible
- INTERFACE
- USB USB 2.0 High Speed Multi
- o HDMI N/A
- HDMI\*\* microHDMI TypeD / VIERA Link
- HDMI\*\* Video: Auto / 4K / 1080p / 1080i / 720p / 480p
- HDMI\*\* Audio: Stereo
- o Audio video output No
- o Remote input N/A
- External microphone input N/A
- o Microphone Stereo, Wind-cut: OFF / Standard / High
- o Speaker Monaural
- LANGUAGE
- o OSD language Japanese, English, German, French, Italian, Spanish, Portuguese, Chinese (Traditional)
- GENERAL
- POWER
- Battery Li-ion Battery Pack (7.2V, 1025mAh, 7.4Wh) (Included)
- Battery AC Adaptor (Input: 110 240V AC) (Included, connect with USB cable)
- o Battery life (CIPA standard) Approx. 290 images (rear monitor), 270 images (LVF) with H-FS12032
- Battery life (CIPA standard) Approx. 290 images (rear monitor), 270 images (LVF) with H-FS12032 / H-FS35100
- Battery grip N/A
- o DIMENSIONS / WEIGHT
- o Dimensions (W x H x D) 122 x 70.6 x 43.9 mm / 4.80 x 2.78 x 1.73 inch (excluding protrusions)
- Weight Approx. 426g / 0.94 lb (SD card, Battery, Body)
- Weight Approx. 383g / 0.84 lb (Body only)
- o Weight Approx. 493g / 1.09 lb (SD card, Battery, H-FS12032 lens included)
- Weight Approx. 628g / 1.39 lb (SD card, Battery, H-FS12032 + H-FS35100 lenses included)

- OPERATING ENVIRONMENT
- o Operating temperature 0°C to 40°C (32°F to 104°F)
- o Operating humidity 10%RH to 80%RH
- STANDARD ACCESSORIES
- Software The software to edit and playback images on computer is not bundled with DMC-GX85. To de PHOTOfunSTUDIO is available for download at Panasonic website using computer connected to the Inter-
- http://panasonic.jp/support/global/cs/soft/download/d\_pfs99pe.html (For Windows)

0

- The software to process RAW file on computer is not bundled with DMC-GX85. To do this, SILKYPIX
  Developer Studio is available for download at Ichikawa Soft Laboratory's website using computer connect
  the Internet.
- http://www.isl.co.jp/SILKYPIX/english/p/ (For Windows / Mac)
- Standard accessories DMC-GX85W Kit
- Standard accessories Hot Shoe Cover, Battery Pack, AC Adaptor, USB Connection Cable, Shoulder Strap Cap x 2, Lens Hood, Lens Rear Cap
- Standard accessories The DMC-GX85 Operating Instructions for advanced features is available for downloaded at Panasonic LUMIX Customer Support Site using PC, smartphone or tablet connected to the Internet.

#### INTERCHANGEABLE LENS-1

- Lens Name LUMIX G VARIO 12-32mm / F3.5-5.6 ASPH. / MEGA O.I.S.
- Lens Construction 8 elements in 7 groups (3 aspherical lenses, 1 ED lens)
- o Nano Surface Coating -
- o Mount Micro Four Thirds mount
- Optical Image Stabilizer Yes (MEGA O.I.S.)
- Focal Length f=12-32mm (35mm camera equivalent 24-64mm)
- Aperture Type 7 diaphragm blades / Circular aperture diaphragm
- o Aperture range N/A
- o Aperture N/A
- Maximum Aperture F3.5(Wide) F5.6(Tele)
- o Minimum Aperture F22
- Closest Focusing Distance 0.20m/0.66ft (at focal lenghts 12-20mm) / 0.30m/0.98ft (at focal lenghts 21-32mm
- o Maximum magnification Approx. 0.13x / 0.26x (35mm camera equivalent)
- o Diagonal Angle of View 84°(Wide) to 37°(TELE)
- o Weatherproof N/A
- o General
- o Filter Size 37mm / 1.5in
- Max. Diameter φ55.5mm / 2.2in

- o Overall Length Approx. 24mm / 0.94in (from the tip of the lens to the base side of the lens mount)
- Weight [g] Approx. 70g (excluding lens cap, lens rear cap)
- Weight [oz] Approx. 2.47oz (excluding lens cap, lens rear cap)
- o Others N/A

## INTERCHANGEABLE LENS-2

- o Lens Name LUMIX G VARIO 45-100mm / F4.0-5.6 ASPH. / MEGA O.I.S.
- Lens Construction 12 elements in 9 groups (1 aspherical lens, 2 ED lenses)
- Nano Surface Coating -
- o Mount Micro Four Thirds mount
- Optical Image Stabilizer Yes (MEGA O.I.S.)
- Focal Length f=35-100mm (35mm camera equivalent 70-200mm)
- o Aperture Type 7 diaphragm blades / Circular aperture diaphragm
- o Aperture range N/A
- o Aperture N/A
- Maximum Aperture F4.0 (Wide) F5.6 (Tele)
- Minimum Aperture F22
- Closest Focusing Distance 0.90m / 3.00ft
- o Maximum magnification Approx. 0.11x / 0.22x (35mm camera equivalent)
- o Diagonal Angle of View 34°(Wide) to 12°(TELE)
- Weatherproof N/A
- General
- Filter Size 46mm / 1.8in
- o Max. Diameter φ55.5mm / 2.2in
- o Overall Length Approx. 50mm / 1.97in (from the tip of the lens to the base side of the lens mount)
- Weight [g] Approx. 135g (excluding lens cap, lens rear cap and lens hood)
- Weight [oz] Approx. 4.76oz (excluding lens cap, lens rear cap and lens hood)
- o Others N/A

#### NOTES

- Image Stabilization System Image Sensor Shift Type (5-axis)
- TIME LAPSE SHOT Yes
- STOP MOTION ANIMATION Yes
- SILENT MODE Yes
- NOTE \* About motion picture recording / 4K Photo recording
- - Use a card with SD Speed Class with "Class 4" or higher when recording motion pictures.

- - Use a card with SD Speed Class with "UHS-I UHS Speed Class 3 (U3)" when recording motion pictures [MP4] in [4K] or [4K PHOTO].
- (SD speed class is the speed standard regarding continuous writing.)
- Recording stops when the continuous recording time exceeds 29 minutes and 59 seconds or the file size er 4GB with [MP4] in [FHD] [HD] [VGA].
- - MP4 motion pictures with [MP4] in [4K]:

0

- - When using an SDHC memory card: You can continue recording without interruption even if the file size exceeds 4 GB, but the motion picture file will be divided and recorded/played back separately.
- - When using an SDXC memory card: You can record a motion picture in a single file.
- - When the ambient temperature is high or continuous recording is performed, the camera may stop the recording to protect itself. Wait until the camera cools down.
- \*\* For [4K] video output, use an HDMI cable that has the HDMI logo on it, and that is described as"4K compatible".
- • UPC885170338524