

## LUMIX G Compact System Camera DC-GX9 with 12-60mm Lens

		Туре	Digital Single Lens Mirrorless camera
TYPE		Recording media	SD Memory Card, SDHC Memory Card, SDXC Memory Card/(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
		Туре	Live MOS Sensor
		Total pixels	21.77 Megapixels
IMAGE SENSOR		Camera effective pixels	20.30 Megapixels
		Color filter	Primary color filter
		Dust reduction system	Supersonic wave filter
IMAGE STABILIZATION SYSTEM		SYSTEM	Image sensor shift type (5-axis / 4-stop*), Dual I.S. compatible/*Based on the CIPA standard [Yaw/Pitch direction: focusing distance f=60mm (35mm camera equivalent f=120mm), when H-FS12060 is used.]
		Still image	JPEG (DCF, Exif 2.31), RAW
Recordi		4К РНОТО	MP4
	ng file format	Motion picture	AVCHD Progressive, AVCHD (Audio format: Dolby Audio 2ch)/MP4: H.264/MPEG-4 AVC (Audio format: AAC (2ch)
	Aspect ratio		4:3, 3:2, 16:9, 1:1
RECORDING	Image quality		RAW, RAW+Fine, RAW+Standard, Fine, Standard
	Color Space		sRGB, AdobeRGB
	File size(Pix els) - Still Image	4:3	5184x3888(L) / 3712x2784(M) / 2624x1968(S) / 3328x2496(4K PHOTO)
		3:2	5184x3456(L) / 3712x2480(M) / 2624x1752(S) / 3504x2336(4K PHOTO)
		16:9	5184x2920(L) / 3840x2160(M) / 1920x1080(S) / 3840x2160(4K PHOTO)

		1:1	3888x3888(L) / 2784x2784(M) / 1968x1968(S) / 2880x2880(4K PHOTO)
File size	MP4**[HD ] 1280x720	HD/30p: 10Mbps/HD/25p: 10Mbps	
	File size	MP4**[4K] 3840x2160	4K/30p: 100Mbps/4K/25p: 100Mbps/4K/24p: 100Mbps
	(Pixels) -Motion picture* *	MP4**[Ful l HD] 1920x1080	FHD/60p: 28Mbps/FHD/50p: 28Mbps/FHD/30p: 20Mbps/FHD/25p: 20Mbps
		AVCHD** [Full HD] 1920x1080	FHD/50p: 28Mbps, 50p recording/FHD/50i: 17Mbps, 50i recording/FHD/25p: 24Mbps, 50i recording (sensor output is 25fps)/FHD/24p: 24Mbps, 24p recording
Continu recordat (Motion		AVCHD [FHD/50p]/Approx. 90 min (rear monitor), 80 min (LVF) with H-FS12032 / H-FS12060 / H-FS1442A / H-FS35100/Approx. 80 min (rear monitor), 80 min (LVF) with H-FS14140/AVCHD [FHD/50i]/Approx. 90 min (rear monitor), 80 min (LVF) with H-FS12032 / H- FS12060 / H-FS1442A / H-FS14140/Approx. 90 min (rear monitor), 90 min (LVF) with H-FS35100/MP4 [4K/30p, 4K/25p]/Approx. 70 min (rear monitor), 70 min (LVF) with H-FS12032 / H-FS12060 / H-FS1442A / H-FS14140/Approx. 80 min (rear monitor), 70 min (LVF) with H-FS35100	
Actual re time (Me picture)*			AVCHD [FHD/50p]/Approx. 45 min (rear monitor), 40 min (LVF) with H-FS12032 / H-FS12060 / H-FS1442A / H-FS35100/Approx. 40 min (rear monitor), 40 min (LVF) with H-FS14140/AVCHD [FHD/50i]/Approx. 45 min (rear monitor), 40 min (LVF) with H-FS12032 / H- FS12060 / H-FS1442A / H-FS14140/Approx. 45 min (rear monitor), 45 min (LVF) with H-FS35100/MP4 [4K/30p, 4K/25p]/Approx. 35 min (rear monitor), 35 min (LVF) with H-FS12032 / H-FS12060 / H-FS1442A / H-FS14140/Approx. 40 min (rear monitor), 35 min (LVF) with H-FS35100
		WiFi	IEEE 802.11b/g/n, 2412 MHz - 2462 MHz (1-11 ch), Wi-Fi / WPA / WPA2, Infrastructure mode
		Bluetooth	Bluetooth® v4.2 (Bluetooth Low Energy (BLE))
WIRELESS		QR code connection / Password- less connection	Yes / Yes (ON / OFF selectable)
VIEWFINDER		Туре	LCD Live View Finder (2,760k dots equivalent), Tiltable

	Field of	
	view	Approx. 100%
	Magnificati on	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
	Diopter adjustment	-4.0 - +3.0 (dpt)
	Eye sensor	Yes
	Туре	Contrast AF system
	DFD technology	Yes
	Post Focus	Yes
	Focus Stacking	Yes
	Focus mode	AFS (Single) / AFF (Flexible) / AFC (Continuous) / MF
	Starlight AF	Yes
FOCUS	AF mode	Face/Eye Detection / Tracking / 49-Area / Custom Multi / 1-Area / Pinpoint/(Full area touch is available)
	AF detective range	EV -4 - 18 (ISO100 equivalent)
	AF assist lamp	Yes
	AF lock	Yes (AF/AE LOCK button)
	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	Light metering system	1728-zone multi-pattern sensing system
	Light metering mode	Multiple / Center Weighted / Spot
	Metering range	EV 0 - 18 (F2.0 lens, ISO100 equivalent)
	Exposure mode	Program AE, Aperture Priority AE, Shutter Priority AE, Manual
	ISO	Still image: Auto / Intelligent ISO / 100 (Extended) /

	sensitivity (Standard Output Sensitivity)	200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 / 25600 (Changeable to 1/3 EV step)/Creative Video Mode: Auto / 100 (Extended) / 200 / 400 / 800 / 1600 / 3200 / 6400 (Changeable to 1/3 EV step)
	Exposure compensati on	$1/3 \text{ EV}$ step, $\pm 5\text{EV}$ (when set with the menu) ( $\pm 3 \text{ EV}$ for motion picture), $\pm 3\text{EV}$ (when set with the dial)
	AE lock	Yes (AF/AE LOCK button)
	White balance	AWB / AWBc / Daylight / Cloudy / Shade / Incandescent / Flash / White Set 1, 2, 3, 4 / Color temperature setting 1, 2, 3, 4
WHITE BALANCE	White balance adjustment	Blue/Amber bias, Magenta/Green bias
	Color temperature setting	2500-10000K in 100K
	Туре	Focal-plane shutter
SHUTTER	Shutter speed	Still image: Time* (Max. 30 minutes), 1/4,000 - 60 *Bulb mode is possible with the "Image App" remote control via Bluetooth./Electronic shutter: 1/16,000 - 1/Motion picture: 1/16,000 - 1/25
	Self timer	10sec, 3 images / 2sec / 10sec
	AE bracket	3, 5, 7 images in 1/3, 2/3 or 1 EV step, max. $\pm$ 3 EV, single/burst
	Aperture Bracket	3, 5 or all positions in 1 EV step
BRACKET	Focus Bracket	1 to 999 images, focus steps can be set in 10 levels
	White balance bracket	3 images in blue/amber axis or in magenta/green axis
PANORAMA SHOT	Panorama Shot	Yes (Standard / Wide)
	Burst speed	30 frames/sec
4K PHOTO**	Exif information	Yes (Each JPEG image cropped out of the 4K burst file complies with EXIF.)
	Marking function	Auto / Face Priority / Motion Priority / Off (Manual) (in 4K Burst mode and 4K Burst (S/S) mode)
	Loop rec function	Yes (in 4K Burst (S/S) mode)
BURST SHOOTING	Burst speed	[Mechanical shutter]/AFS/MF: H: 9 frames/sec, M: 6

		frames/sec (with Live View), L: 2 frames/sec (with Live View) *When H-FS12032 is used./AFF/AFC: H: 6 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec (with Live View) *When H-FS12032 is used./[Electronic shutter]/AFS/MF: H: 9 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec (with Live View)/AFF/AFC: H: 6 frames/sec, M: 6 frames/sec (with Live View), L: 2 frames/sec (with Live View)
	Number of recordable images	More than 30 images (when there are RAW files with the particular speed)/More than 100 images (when there are no RAW files)/(depending on memory card type, aspect, picture size and compression)
TIME LAPSE SHOT	Time Lapse Shot	Yes
STOP MOTION ANIMAT	TION	Yes
	Flash type	TTL Built-in-Flash, GN6.0 equivalent (ISO200 • m) / GN4.2 equivalent (ISO100 • m) (Reference), Built-in Pop-up
	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.
	Synchroniz ation speed	Less than 1/200 second
	Flash output adjustment	1/3EV step ±3EV
FLASH	Flash synchroniza tion	1st. Curtain Sync., 2nd Curtain Sync.
	Synchroniz ation for flash dimming and exposure compensati on	Yes
	Wireless control	Yes (When using DMW-FL200L / FL360L / FL580L (sold separately)), Wireless Channel: 1ch/2ch/3ch/4ch
SILENT MODE		Yes
REAR MONITOR	Туре	TFT LCD monitor with static touch control, Tiltable monitor

	Monitor	
	size	7.5cm (3.0-inch) / 3:2 aspect
	Pixels	Approx. 1,240k dots
	Filed of view	Approx. 100%
	Monitor adjustment	Brightness, Contrast, Saturation, Red Tint, Blue Tint
	Digital zoom	2x, 4x
LIVE VIEW	Extra Tele Conversion	Still image: Max. 2x/Motion picture: 2.7x (FHD), 4.0x (HD)
	Other functions	Level Gauge, Real-time Histogram, Guide Lines (3 patterns), Center Marker, Highlight display (Still image / motion picture), Zebra Pattern (Still image / motion picture)
DIRECTION DETECTION FUNCTION	N	Yes
FUNCTION BUTTON	REC	4K Photo Mode / Post Focus / Wi-Fi / Q.MENU / Video Record / LVF/Monitor Switch / LVF/Monitor Disp. Style / AF/AE LOCK / AF-ON / Preview / One Push AE / Touch AE / Level Gauge / Focus Area Set / Zoom Control / Operation Lock / Dial Operation Switch / Photo Style / Filter Select / Aspect Ratio / Picture Size / Quality / AFS/AFF / Metering Mode / Bracket / Highlight Shadow / i. Dynamic / i. Resolution / Min. Shtr Speed / HDR / Shutter Type / Flash Mode / Flash Adjust. / Wireless Flash Setup / Ex. Tele Conv. / Digital Zoom / Stabilizer / I.S. Lock (Video) / 4K Live Cropping / Snap Movie / Motion Pic. Set / Picture Mode in Rec. / Sound Rec Level Adj. / Silent Mode / Peaking / Histogram / Guide Line / Zebra Pattern / Monochrome Live View / Constant Preview / Live View Boost / Rec Area / Step Zoom / Zoom Speed / Sensitivity / White Balance / AF Mode/MF / Drive Mode / Rec/Playback Switch / Off / Restore to Default Wi-Fi / LVF/Monitor Switch / Rec/Playback Switch / 4K PHOTO Play / Delete Single / Protect / Rating 1, 2, 3, 4, 5 / RAW Processing / 4K PHOTO Bulk Saving / Off / Restore to Default
IMAGE PROTECTION / DELETE	Protection Delete	Single / Multi or Cancel Single / Multi / All / Except Rating
PHOTO STYLE		Standard / Vivid / Natural / Monochrome / L. Monochrome / L. Monochrome D / Scenery / Portrait / Custom

CREATIVE CONTROL		Expressive / Retro / Old Days / High Key / Low Key / Sepia / Monochrome / Dynamic Monochrome / Rough Monochrome* / Silky Monochrome* / Impressive Art / High Dynamic / Cross Process / Toy Effect / Toy Pop / Bleach Bypass / Miniature Effect / Soft Focus* / Fantasy / Star Filter* / One Point Color / Sunshine*/*For photos only.
PLAYBACK	Playback function	30-thumbnail display, 12-thumbnail display, Calendar display, Zoomed playback (Max. 16x), Slideshow (All / Picture Only / Video Only, duration & effect is selectable), Playback Mode (Normal / Picture Only / Video Only), Protect, Rating, Title Edit, Face Recognition Edit, RAW Processing, 4K PHOTO Bulk Saving, Light Composition, Sequence Composition, Clear Retouch, Text Stamp, Resize, Cropping, Rotate, Video Divide, Time Lapse Video, Stop Motion Video, Rotation Display, Picture Sort, Delete Confirmation, Creating Still Pictures from a Motion Picture
PRINT		PictBridge compatible
	USB	USB 2.0 Micro-B
	HDMI***	microHDMI TypeD / VIERA Link/Video: Auto / 4K / 1080p / 1080i / 720p / 576p/Audio: Stereo
INTERFACE	Audio video output	No
	Microphon e	Stereo, Wind Noise Canceller: OFF / Standard / High
	Speaker	Monaural
LANGUAGE	OSD language	Japanese, English, German, French, Italian, Spanish
POWER	Battery	Li-ion Battery Pack (7.2V, 1025mAh, 7.4Wh) (Included)/USB power charging
	Dimensions (W x H x D)	124 x 72.1 x 46.8 mm / 4.88 x 2.83 x 1.84 inch (excluding protrusions)
DIMENSIONS / WEIGHT		Approx. 407g / 0.90 lb (SD card, Battery, Body)/Approx. 450g / 0.99 lb (Body only)/Approx. 517g / 1.14 lb (SD card, Battery, H-FS12032 lens included)/Approx. 585g / 1.29 lb (SD card, Battery, H- FS35100 lens included)/Approx. 652g / 1.44 lb (SD card, Battery, H-FS12032 + H-FS35100 lenses included)/Approx. 560g / 1.23 lb (SD card, Battery, H- FS1442A lens included)/Approx. 660g / 1.46 lb (SD card, Battery, H-FS12060 lens included)/Approx. 715g /

		1.58 lb (SD card, Battery, H-FS14140 lens included)
OPERATING	Operating temperature	0°C to 40°C (32°F to 104°F)
ENVIRONMEN	C Operating humidity	10%RH to 80%RH
STANDARD ACCESSORIES	Software	• The software to edit and playback images on computer is not bundled with this camera. To do this, PHOTOfunSTUDIO is available for download at Panasonic website using computer connected to the Internet./http://panasonic.jp/support/global/cs/soft/down load/d_pfs10ae.html (For Windows)/ • The software to process RAW file on computer is not bundled with this camera. To do this, SILKYPIX Developer Studio is available for download at Ichikawa Soft Laboratory's website using computer connected to the Internet./http://www.isl.co.jp/SILKYPIX/english/p/ (For Windows / Mac)
	Standard accessories	DC-GX9M Kit/Battery Pack, AC Adaptor, USB Connection Cable, Hot Shoe Cover, Shoulder Strap, Body Cap, Lens Cap, Lens Hood, Lens Rear Cap/ • The DC-GX9 Operating Instructions for advanced features is available for downloaded at Panasonic LUMIX Customer Support Site using PC, smartphone or tablet connected to the Internet.
	Lens Name	LEICA DG VARIO-ELMARIT 12-60mm / F2.8-4.0 ASPH. / POWER O.I.S.
	Lens Construction	14 elements in 12 groups (4 aspherical lenses, 2 ED lenses)
	Nano Surface Coating	Yes
	Mount	Micro Four Thirds mount
INTERCHANGE	Optical Image Stabilizer	Yes (POWER O.I.S.)
ABLE LENS-1	Focal Length	f=12-60mm (35mm camera equivalent 24-120mm)
	Aperture Type	9 diaphragm blades / Circular aperture diaphragm
	Maximum Aperture	F2.8 (Wide) - F4.0 (Tele)
	Minimum Aperture	F22
	Closest Focusing Distance	0.20m/0.66ft (at focal length 12mm) / 0.24m/0.79ft (at focal length 60mm)
	Maximum magnification	Approx. 0.3x / 0.6x (35mm camera equivalent)
	Diagonal Angle of	84°(Wide) - 20°(Tele)

	View		
	Weatherproof		Splash/Dust/Freezeproof
		Filter Size	φ62mm / 2.44inch
		Max. Diameter	φ68.4mm / 2.69inch
	General	Overall Length	Approx. 86mm / 3.39inch (from the tip of the lens to the base side of the lens mount)
	General	Weight [g]	Approx. 320g (excluding lens cap, lens rear cap and lens hood)
		Weight [oz]	Approx. 11.29oz (excluding lens cap, lens rear cap and lens hood)
		Others	Lens cap, Lens rear cap, Lens hood, Lens storage bag
NOTE			** About motion picture recording / 4K PHOTO recording
NOTE			- Use a card with SD Speed Class with "Class 4" or higher when recording motion pictures in [AVCHD] or [MP4 (under 28Mbps)].
NOTE			- Use a card with SD Speed Class with "UHS-I UHS Speed Class 3 (U3)" when recording motion pictures with [MP4] in [4K] or [4K PHOTO].
NOTE			(SD speed class is the speed standard regarding continuous writing.)
NOTE			- Recording stops when the continuous recording time exceeds 29 minutes and 59 seconds with [AVCHD] in Europe.
NOTE			- Recording stops when the continuous recording time exceeds 29 minutes and 59 seconds or the file size exceeds 4GB with [MP4] in [FHD] [HD].
NOTE			- Recording stops when the continuous recording time exceeds 29 minutes and 59 seconds with [MP4] in [4K].
NOTE			- MP4 motion pictures with [MP4] in [4K]:
NOTE			- When using a 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.
NOTE			- When using a SDXC memory card: You can record a motion picture in a single file.
NOTE			- MP4 motion pictures with [MP4] in [FHD] [HD]:
NOTE			- You can continue recording without interruption even if the file size exceeds 4 GB or 30 minutes, but the motion picture file will be divided and recorded/played back separately.

NOTE	- 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.
NOTE	*** For [4K] video output, use an HDMI cable that has the HDMI logo on it, and that is described as"4K compatible".