

TYPE		Type	Digital Single Lens Mirrorless camera
		Recording media	microSD Memory Card, microSDHC Memory Card, microSDXC Memory Card (Compatible with UHS-I UHS Speed Class 3 standard microSDHC / microSDXC)
		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
		Camera effective pixels	16.00 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, MPO (When attaching 3D lens in Micro Four Thirds system)
		4K PHOTO	MP4
		Motion picture	AVCHD (Audio format: Dolby Audio 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 Micro Four Thirds system standard) [3:2] 4592x3064(L) / 3232x2160(M) / 2272x1520(S) / 1824x1216 (When attaching 3D lens in Micro Four Thirds system standard) [16:9] 4592x2584(L) / 3840x2160(M) / 1920x1080(S) / 1824x1024 (When attaching 3D lens in Micro Four Thirds system standard) [1:1] 3424x3424(L) / 2416x2416(M) / 1712x1712(S) / 1712x1712 (When attaching 3D lens in Micro Four Thirds system standard)
		Motion picture** MP4**	[4K] 3840x2160 4K/30p: 100Mbps [4K] 3840x2160 4K/25p: 100Mbps [4K] 3840x2160 4K/24p: 100Mbps [Full HD] 1920x1080 FHD/60p: 28Mbps [Full HD] 1920x1080 FHD/50p: 28Mbps [Full HD] 1920x1080 FHD/30p: 20Mbps [Full HD] 1920x1080 FHD/25p: 20Mbps [HD] 1280x720 HD/30p: 10Mbps [HD] 1280x720 HD/25p: 10Mbps
		Motion picture** AVCHD**	[Full HD] 1920x1080 FHD/50p: 28Mbps, 50p recording [Full HD] 1920x1080 FHD/50i: 17Mbps, 50i recording [Full HD] 1920x1080 FHD/25p: 24Mbps, 50i recording (sensor output is 25fps) [Full HD] 1920x1080 FHD/24p: 24Mbps, 24p recording
		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 stand)
	Color space	sRGB, AdobeRGB
	Continuous recordable time (Motion picture)**	AVCHD [FHD/50p] [FHD/50i]: Approx. 60 min with H-FS12032 / H-FS35100 MP4 [4K/30p, 4K/25p]: Approx. 40 min with H-FS12032 / H-FS35100
	Actual recordable time (Motion picture)**	AVCHD [FHD/50p] [FHD/50i]: Approx. 30 min with H-FS12032 / H-FS35100 MP4 [4K/30p, 4K/25p]: Approx. 20 min with H-FS12032 / H-FS35100
WIRELESS	Wi-Fi	IEEE 802.11b/g/n, 2412 MHz - 2462 MHz (1-11 ch), Wi-Fi / WPA / WPA2, I
	QR code connection / Password-less connection	Yes / Yes (ON / OFF selectable)
FOCUS	Type	Contrast AF system
	DFD technology	Yes
	Post Focus	Yes
	Focus Stacking	Yes
	Focus mode	AFS (Single) / AFF (Flexible) / AFC (Continuous) / MF
	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)
	Starlight AF	Yes
	AF assist lamp	Yes
	AF lock	Set the Fn button in custom menu to AF lock
	Others	AF-ON (One Shot AF), Shutter AF, Half Press Release, Quick AF, Continuous AF+MF, MF Assist, Touch MF Assist, Focus Peaking, Touch AF/AE Function
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 sensitivity (Standard output sensitivity)	Auto / Intelligent ISO / 100 (Extended) / 200 / 400 / 800 / 1600 / 3200 / 6400 / step) (Up to ISO3200 in motion picture recording)
	Exposure compensation	1/3 EV step ± 5 EV (± 3 EV for motion picture)
	AE lock	Set the Fn button in custom menu to AE lock
WHITE BALANCE	White balance	Auto / Daylight / Cloudy / Shade / Incandescent / Flash / White Set 1, 2, 3, 4 /
	White balance adjustment	Blue/Amber bias, Magenta/Green bias
	Color temperature setting	2500 - 10000K in 100K
SHUTTER	AE bracket	Single curtain focal plane shutter / Electronic shutter
	White balance bracket	Still image: Time (Max. 60 second), 1/16,000 - 60 (Shutter type Auto) Motion picture: 1/16,000 - 1/25
	Self timer	10sec, 3 images / 2sec / 10sec
PANORAMA SHOT	PANORAMA SHOT	Yes (Standard / Wide / Self Shot Mode)
BURST SHOOTING	Burst speed	[Mechanical shutter] AFS: H: 5.8 frames/sec, M: 4 frames/sec (with Live View), L: 2 frames/sec (with Live View) AFC: H: 5 frames/sec (in 1-area-focusing AF mode), M: 5 frames/sec (with Live View) [Electronic shutter] AFS: H: 10 frames/sec, M: 4 frames/sec (with Live View), L: 2 frames/sec (with Live View) 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 15 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)
4K PHOTO**	Burst speed	4K Burst: 30 frames/sec 4K Burst (S/S): 30 frames/sec 4K Pre-Burst: 30 frames/sec, approx. 2 seconds 4K Burst (Wide-angle): 15 frames/sec (in Self Shot Mode)
	Exif information	Yes (Each JPEG image cropped out of the 4K burst file complies with EXIF.)
	Marking function	Yes (in 4K Burst (S/S) mode)

TIME LAPSE SHOT	TIME LAPSE SHOT	Yes
STOP MOTION ANIMATION	STOP MOTION ANIMATION	Yes
FLASH	Flash type	TTL Built-in-Flash, GN5.6 equivalent (ISO200 • m) / GN4.0 equivalent (ISO
	Flash mode	Auto*, Auto/Red-eye Reduction*, Forced On, Forced On/Red-eye Reduction, Reduction, Forced Off *For iA, iA+ only.
	Synchronization speed	Less than 1/50 second
	Flash output adjustment	1/3EV step ±2EV
	Flash synchronization	1st Curtain Sync., 2nd Curtain Sync.
SILENT MODE	SILENT MODE	Yes
REAR MONITOR	Type	TFT LCD monitor with static touch control, Tilttable monitor
	Monitor size	3.0-inch (7.5cm) / 3:2 aspect
	Pixels	Approx. 1,040k dots
	Field of view	Approx. 100%
	Monitor adjustment	Brightness, Contrast, Saturation, Red Tint, Blue Tint
LIVE VIEW	Digital zoom	2x, 4x
	Extra Tele Conversion	Still image: Max. 2x Motion picture: 2.4x (FHD), 3.6x (HD)
	Other functions	Level Gauge, Real-time Histogram, Guide Lines (3 patterns), Center Marker, F picture), Zebra Pattern (Still image / motion picture)
DIRECTION DETECTION FUNCTION	DIRECTION DETECTION FUNCTION	Yes
SELF SHOT	Self Shot mode	Yes (Single, Self timer: 1, 2, 3 or 4 images, 4K PHOTO, Panorama, Night Self
	Shutter	Shutter Button, Touch, Face Shutter, Buddy Shutter

	Effect	Soft Skin: 10 levels, Filter Select: Expressive / Retro / High Key / Monochrome / Defocus / Clear, Slimming Mode: 10 levels
FUNCTION BUTTON	REC	4K Photo Mode / Post Focus / Wi-Fi / Q.MENU / AF/AE LOCK / AF-ON / Pr Level Gauge / Zoom Control / Cursor Button Lock / Photo Style / Filter Select Sensitivity / Metering Mode / Bracket / Focus Mode / i. Dynamic / i. Resolution Flash Adjust. / Ex. Tele Conv. / Digital Zoom / Stabilizer / Snap Movie / Motio / Peaking / Histogram / Guide Line / Zebra Pattern / Monochrome Live View / Touch Screen / Restore to Default
	PLAY	Wi-Fi / Favorite / Print Set / Protect / Delete Single / Off / Restore to Default
PHOTO STYLE	PHOTO STYLE	Standard / Vivid / Natural / Monochrome / L. Monochrome / Scenery / Portrait
CREATIVE CONTROL	CREATIVE CONTROL	Expressive / Retro / Old Days / High Key / Low Key / Sepia / Monochrome / D Monochrome* / Silky Monochrome* / Impressive Art / High Dynamic / Cross Bypass / Miniature Effect / Soft Focus* / Fantasy / Star Filter* / One Point Col *For photos only.
PLAYBACK	Playback function	30-thumbnail display, 12-thumbnail display, Calendar display, Zoomed playba Only / Video Only, duration & effect is selectable), Playback Mode (Normal / Logging, Beauty Retouch (Aesthetic Retouch / Foundation / Make Up Retouch PHOTO Bulk Saving, Light Composition, Clear Retouch, Title Edit, Text Stan Stop Motion Video, Resize, Cropping, Rotate, Rotation Display, Favorite, DPC Edit, Picture Sort, Creating Still Pictures from a Motion Picture
IMAGE PROTECTION / DELETE	Protection	Single / Multi or Cancel
	Delete	Single / Multi / All / Except Favorite
PRINT	Direct print	PictBridge compatible
INTERFACE	USB	USB 2.0 Micro-B
	HDMI****	microHDMI TypeD / VIERA Link Video: Auto / 4K / 1080p / 1080i / 720p / 576p Audio: Stereo
	Audio video output	No
	Microphone	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, 680mAh, 4.9Wh) (included) USB power charging

	Battery life (CIPA standard)	Approx. 210 images with H-FS12032 / H-FS35100
DIMENSIONS / WEIGHT	Dimensions (W x H x D)	106.5 x 64.6 x 33.3 mm / 4.2 x 2.55 x 1.32 inch (excluding protrusions)
	Weight	Approx. 270g / 0.60 lb (microSD card, Battery, Body) Approx. 240g / 0.53 lb (Body only) Approx. 337g / 0.75 lb (microSD card, Battery, H-FS12032 lens included) Approx. 405g / 0.90 lb (microSD card, Battery, H-FS35100 lens included) Approx. 472g / 1.04 lb (microSD card, Battery, H-FS12032 + H-FS35100 lens)
OPERATING ENVIRONMENT	Operating temperature	0°C to 40°C (32°F to 104°F)
	Operating humidity	10%RH to 80%RH
STANDARD ACCESSORIES	Software	<ul style="list-style-type: none"> The software to edit and playback images on computer is not bundled with this camera. PHOTOfunSTUDIO is available for download at Panasonic website using computer. http://panasonic.jp/support/global/cs/soft/download/d_pfs99pe.html (For Windows / Mac) The software to process RAW file on computer is not bundled with this camera. Studio is available for download at Ichikawa Soft Laboratory's website using computer. http://www.isl.co.jp/SILKYPIX/english/p/ (For Windows / Mac)
	Standard accessories	DC-GX880K Kit Battery Charger (AC Adaptor, USB connection Cable included), Battery Pack, Strap, Lens Cap <ul style="list-style-type: none"> The DC-GX880 Operating Instructions for advanced features is available for download at 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)
	Nano Surface Coating	-
	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
	Maximum Aperture	F3.5(Wide) - F5.6(Tele)

	Minimum Aperture	F22
	Closest Focusing Distance	0.20m/0.66ft (at focal lengths 12-20mm) / 0.30m/0.98ft (at focal lengths 21-32mm)
	Maximum magnification	Approx. 0.13x / 0.26x (35mm camera equivalent)
	Diagonal Angle of View	84°(Wide) to 37°(TELE)
GENERAL	Filter Size	37mm / 1.5in
	Max. Diameter	φ55.5mm / 2.2in
	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)
	Others	Lens cap, Lens rear cap