Specifications

Dimensions (W)	H x D)		136.8 x 98.5 x 130.7 mm (5.39 x 3.88 x 5.15 inch)
Weight (Approx.)			780 g without Battery and SD Memory Card (1.72 lb) 831 g with Battery and SD Memory Card (1.83 lb)
			20.1 Megapixels
Camera Effective Pixels Sensor Size / Total Pixels / Filter		ilter	1-inch High Sensitivity MOS Sensor / Total Pixel Number 20.9 Megapixels / Primary Color Filter
Aperture			F2.8 - 4.0 / Multistage Iris Diaphragm (Still Image: F2.8 - 8.0 [W], F4.0 - 8.0 [T], Motion Picture: F2.8 - 11.0 [W], F4.0 - 11.0 [T])
Optical Zoom			16x
Focal Length			f = 9.1 - 1.45mm 127 - 4.27mm in 35mm equiv. in 4:3] 125 - 4.00mm in 35mm equiv. in 3:3] 126 - 4.00mm in 35mm equiv. in 3:9] 128 - 4.15mm in 35mm equiv. in 16:9] 128 - 1.15mm in 35mm equiv. in 1:1] 128 - 4.15mm in 35mm equiv. in 1:6, video recording / 0.1.5. Off / Levet Shot function Off) 128 - 4.45mm in 35mm equiv. in 1:6, video recording / 0.1.5. On / Levet Shot function Off) 131 - 4.94mm in 35mm equiv. in 1:6, video recording / 0.1.5. On / Levet Shot function On) 137 - 5.92mm in 35mm equiv. in 1:6, video recording / 0.1.5. On / Levet Shot function On)
Extra Optical Zoom (EZ)			22.4x (3:2 / 10M (M)), 32x (3:2 / 5M (S))
Intelligent Zoom			32x
Lens			LEICA DC VARIO-ELMARIT 15 elements in 11 groups (5 Aspherical Lenses / 8 Aspherical Surfaces / 4 ED Lenses)
Changing of Zoom Speed			5-Speed Zoom
Optical Image Stabilizer			HYBRID O.I.S. + / Five-Axis Correction [Except for the 4K video or high-speed video recording.]
Digital Zoom			Max. 4x
Focusing Area			Normal: Wide 30 cm - infinity / Tele 100 cm - infinity AF Macro / MF / Intelligent Auto / Motion Picture: Wide 3 cm - infinity / Tele 100 cm - infinity
AF Assist Lamp			Yes (On / Off)
Focus			AFS [Single] / AFF [Flexible] / AFC [Continuous] / MF Normal / AF Macro / Macro Zoom, Quick AF On / OH [on in Intelligent Auto], Low Light AF, AF/AE Lock Button, AF Area Select, AF Tracking, Eye Sensor AF, Focus Peaking, One Shot AF [Set the Fn button in custom menu to AF-ON]
AF Metering			Face/Eye Detection / Tracking / 49-area / Custom Multi / 1-area (flexible / scalable) / Pinpoint
Shutter Speed			Still Image: Approx. 61 - 1/4,000 sec [Mechanical Shutter] Approx. 1 - 1/16,000 sec [Electronic Shutter] Bulb [Approx. 120 sec] Motion Picture [NTSC Area]: Approx. 1/20 - 1/16,000 sec Approx. 1/20 - 1/16,000 sec [AVCHD in FHD 24p] Approx. 1/20 - 1/16,000 sec [Creative Video M Mode / MF Mode] Motion Picture [PAL Area]: Approx. 1/2 - 1/16,000 sec [Creative Video M Mode / MF Mode]
Viewfinder			0.39" OLED LVF (Live View Finder) (2359k dots), Field of View: Approx. 100% Magnification: Approx. 1.88x / 0.7x (35mm equiv.), Eye Sensor
File Format			Still Image: JPEG (DCF/Exif2.3) / RAW, DPOF Motion Picture: AVCHD, MP4
Mode Dial			Intelligent Auto, P, A, S, M, Creative Video, C1 (Custom), C2 (Custom), Scene Guide, Creative Control
Creative Control Mode			Expressive, Retro, Old Days, High Key, Low Key, Sepia, Monochrome, Dynamic Monochrome, Rough Monochrome, Impressive Art, High Dynamic, Cross Process, Toy Effect, Toy Pop, Bleach Bypass, Miniature Effect, Soft Focus, Fantasy, Star Filter, One Point Colon, Sunshine 12f. filters]
Scene Guide			Clear Portrait, Silby Skin, Backlit Softness, Clear in Backlight, Relaxing Tone, Sweet Child's Face, Distinct Scenery, Bright Blue Sky, Romantic Suneet Glow, Vivid Suneet Glow, Gistening Water, Clear Nightscape, Col Night Sky, Warm Glowing Nightscape, Artistic Nightscape, Gitterning Hullminiations, Handheld Night Shot, Clear Night Portrait, Soft Image of a Flower, Appetizing Food, Cute Dessert, Freeze Almial Motton, Clear Sports Shot, Monochrome, Panorama
Continuous Shooting Mode (Approx.)		Approx.)	[AFS] SH: 50 frames/sec [Electronic shutter only], H: 12 frames/sec, M: 7 frames/sec (with Live View), L: 2 frames/sec (with Live View) [AFC] H: 7 frames/sec, M: 7 frames/sec (with Live View), L: 2 frames/sec (with Live View)
	NTSC Area	4K	3840 x 2160 pixels, 30p (4K; 100Mbps / MP4) (Sensor Output is 30fps) (AAC)
Motion Picture Recording**		HD	1920 x 1080 pixels, 60p [FHD: 28Mbps / AVCHD] [Sensor Output is 60fps] [Dolby] 1920 x 1080 pixels, 24p [FHD: 24Mbps / AVCHD] [Sensor Output is 24fps] [Dolby] 1920 x 1080 pixels, 24p [FHD: 24Mbps / AVCHD] [Sensor Output is 24fps] [Dolby] 1920 x 1080 pixels, 50l [FHD: 17Mbps / AVCHD] [Sensor Output is 60fps] [Dolby] 1920 x 1080 pixels, 60l [FHD: 28Mbps / MF4] [Sensor Output is 60fps] [AdC] 1920 x 1080 pixels, 50l [FHD: 28Mbps / MF4] [Sensor Output is 30fps] [AdC] 1920 x 1080 pixels, 50l p [HD: 28Mbps / MF4] [Sensor Output is 30fps] [AdC]
		STD	640 x 480, 30p (VGA: 4Mbps / MP4) (Sensor Output is 30fps) (AAC)
		High Speed	1920 x 1080 pixels, 30p (FHD / MP4) (Sensor Output is 120fps)
	PAL Area	HD	3840 x 2160 pixels, 25p [4K: 100Mbps / MP4] [Sensor Output is 25fps] [AAC] 1920 x 1080 pixels, 50p [FHD: 28Mbps / AVCHD] [Sensor Output is 50fps] [Dolby] 1920 x 1080 pixels, 24p [FHD: 24Mbps / AVCHD] [Sensor Output is 24fps] [Dolby] 1920 x 1080 pixels, 25p [FHD: 24Mbps / AVCHD] [Sensor Output is 25fps] [Dolby] 1920 x 1080 pixels, 25p [FHD: 28Mbps / AVCHD] [Sensor Output is 25fps] [Dolby] 1920 x 1080 pixels, 50p [FHD: 100mbps / AVCHD] [Sensor Output is 50fps] [AAC] 1920 x 1080 pixels, 25p [FHD: 20Mbps / MP4] [Sensor Output is 25fps] [AAC] 1280 x 720 pixels, 25p [HD: 10Mbps / MP4] [Sensor Output is 25fps] [AAC]
		STD	640 x 480, 25p (VGA: 4Mbps / MP4) (Sensor Output is 25fps) (AAC)
			1920 x 1080 pixels, 25p (FHD / MP4) (Sensor Output is 100fps)
Continuous Recordable Time (Approx.) ***			AVCHD: 130 min (FHD/60p) / 135 min (FHD/60i), MP4: 110 min (4K/30p) / 130 min (FHD/60p)
Astrol Describle Time (Assess) ***		FOV ***	

Exposure	Program AE, Aperture Priority AE, Shutter Priority AE, Manual
Exposure Compensation	1/3 EV step, +/-5 EV (+/-3 EV for motion picture)
Auto (AE) Bracketing	3, 5, 7 frames in 1/3, 2/3 or 1 EV Step, Max. +/-3 EV
Light Metering	Intelligent Multiple / Center Weighted / Spot
ISO Sensitivity	Auto / i.ISO / 80* / 100* / 125 / 200 / 400 / 800 / 1600 / 3200/ 6400 / 12800 / 25600* [* Extended ISO] (Changeable to 1/3 EV step)
Still Picture Recording	[4:3] 4864x3648 [17.5M] (L.) / 3456x2592 [9M] (M) / 2432x1824 (4.5M) [S] [3:2] 5472x3648 [20M] (L.) / 3888x2592 [10M] (M) / 2738x1824 [5M] (S] [16:9] 5472x3680 [17M] (L.) / 3248x2161 [8M] (M) / 1797x180 [2M] (S] [1:1] 3648x3648 [13.5M] (L.) / 2592x2592 [6.5M] (M) / 1824x1824 (3.5M] (S)
Image Quality	RAW / RAW+Fine / RAW+Standard / Fine / Standard
White Balance	Auto / Daylight / Cloudy / Shade / Incandescent / Flash / White Set1 / White Set2 / White Set3 / White Set4 / Color Temperature (2-axis Adjustable)
Photo Style	Standard, Vivid, Natural, Monochrome, Scenery, Portrait, Custom, Cinelike D*, Cinelike V* * When Creative Video mode is selected.
Picture Adjustment	Contrast, Sharpness, Noise Reduction, Saturation*, Color Tone**, Filter Effect** * Except for Monochrome mode. ** For Monochrome mode only.
Digital Red Eye Correction (Red-Eye Removal)	Yes (On / Off)
Wi-Fi	IEEE 802.11b/g/n, 2412 MHz - 2462 MHz (1-11 ch), WPA / WPA2, Infrastracture Mode / WPS / Wi-Fi Direct, Wi-Fi Button
NFC	ISO/IEC 18092, NFC-F (Passive Mode)
Zoom in Motion Picture	Yes
Self Timer	2 sec / 10 sec / 10 sec (3 images)
Playback Mode	All, Slideshow, Filtering Play (Picture Only, Video Only, Category Selection, Favorite), Calendar
Playback Functions	Thumbnails (12,30-thumbnails) Playback, Zoomed Playback, Calendar Display, Set Favorites, Rotate Image, Show Histogram, Show Highlights, DPO Print Settling, Set Protection, Resize, Cropping, Title Edit, Text Stamp, Cut Animation, Video Divide, RAW Processing
PictBridge Support	Single / Multi / All / DPOF / Favorites
LCD Monitor	3.0" (7.5cm) Free-Angle TFT Screen LCD Display (921k dots), AR Coating Field of View: Approx. 100%, Wide Viewing-angle
Built- in- Flash	Auto*, Auto/Red-eye Reduction*, Forced On, Forced On/Red-eye Reduction, Slow Sync., Slow Sync./ Red-eye Reduction, Forced Off *For IA, IA+ mode only. Flash Synchron: Ist / Ind Slow Sync. Synchronization for Flash dimming and exposure compensation 0.3 13.5 m (Wide / ISO Auto), 1.0 + 5.m (Flee / ISO Auto)
Recording Media	SD Memory Card, SDHC Memory Card, SDXC Memory Card (Compatible with UHS-I standard)
Microphone / Speaker	Stereo / Mono
Interface	microHDMI, AV Output, USB (AV/USB Multi)
Remote Input	ø2.5mm for Remote
External Microphone Input	ø3.5mm for External Microphone
Power	Li-ion Battery Pack (7.2V, 1200mAh, 8.7 Wh) (Included) AC Adaptor (Input: 110 - 240V AC)
Battery Life (Approx.) ****	360 pictures (CIPA Standard)
Included Software	PHOTOfunSTUDIO 9.5PE, SILKYPIX® Developer Studio, LoiLoScope (trial version), Adobe Reader
Standard Accessories	Battery Charger, Battery Pack, USB Cable, AC Cable, Lens Hood, Lens Cap, Hot Shoe Cover, DVD [Depending on the country or region.]

Main Optional Accessories

External Flash

DMW-FL220 / FL360L / FL580L



LED Video Light

VW-LED1



Microphone









Remote Shutter



Battery



AC Power



AV Cable / USB Connection Cable

Filter / Protector



Panasonic

DMC-FZ1000



LUMIX



^{*} AC Adaptor DMW-AC10 requires DC Coupler DMW-DCC8. DMW-DCC8 requires AC Adaptor DMW-AC10.



Photo by Adam Barker

2



F2.8-4.0 / 25-400 mm

Great Lenses Make Great Cameras

Matches virtually all shooting situations F2.8-4.0 LEICA DC Lens with 25-400mm

F2.8-4.0 LEICA DC VARIO-ELMARIT Lens

The new 25-400mm* LEICA DC VARIO-ELMARIT lens was created especially for the DMC-FZ1000. It has an F2.8-4.0 brightness that resists blurring even for telephoto shots. Passing Leica's stringent standards, this lens achieves high descriptiveness in detail and resolution to corners.

Flexible Angle of View from 25mm to 400mm

Superb optical performance from 25mm wide-angle to 16x optical zoom* gives you high versatility and mobility. It lets you capture a large variety of shooting situations, from scenery to portraits or telephoto shots of tiny birds on tree branches and animals crossing the distant horizon.

- * 35mm camera equivalent: 25-400mm.

 Leica is a registered trademark of Leica Microsystems IR GmbH. Leica DC lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards.

LEICA DC LENS

Smooth, Beautiful Defocusing Effect

The new lens features 5 aspherical glass lenses, which are made possible by Panasonic's unique aspherical lens mold technology. Combined with the large MOS sensor, it gives your photos a shallow depth of field with an impressive defocusing effect featuring invisible edge lines.







Without edge line (FZ1000)

High MTF Value

Comprising 15 elements in 11 groups, including 4 ED lenses and 5 aspherical lenses with 8 aspherical surfaces, this advanced lens unit achieves a high MTF value. The first lens group located at the front consists of 4 lenses to minimize chromatic aberration especially at the tele-end.

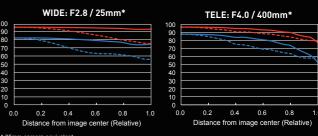




Photo by Adam Barker

35mm camera equivalent: 25mm, 60 sec, F3.7, ISO250

1-inch MOS Sensor

Ultimate Picture Quality with a Flagship Bridge Camera

The largest sensor on LUMIX compact cameras* 20.1-megapixel 1-inch MOS Sensor

The newly incorporated 1-inch 20.1-megapixel High Sensitivity MOS Sensor improves the S/N ratio, making it possible to capture clear images with minimum noise even when shooting at ISO12800 / Extended ISO25600.

A rich amount of light helps to produce impressive defocusing with shallow depth of field.

* As of June 12, 2014.



Dramatically improved picture quality Newly Developed Venus Engine

The new Venus Engine features Multi-process NR, Three Dimensional Color Control and Aperture Filter to achieve high color reproduction and high resolution images with natural description.

The combination of the High Sensitivity MOS Sensor and the Venus Engine achieves stunning picture quality well beyond the limit of digital compact cameras.

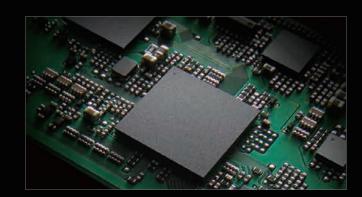
Advanced NR (Noise Reduction) System

The new Multi-process NR applies effective noise reduction according to each frequency component to make the image clearer even in high-sensitivity shooting.

In addition, the new Random Filter granulates chromatic noise in order to blend it into the image more naturally.

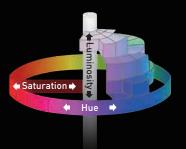
Natural Edge Processing

The newly adopted Aperture Filter is capable of controlling a wider frequency range. It adjusts the amount of sharpness according to the frequency level, resulting in a faithful stereoscopic effect.



Freer Color Adjustment

Color reproduction is improved by accurately evaluating each color and luminance level. This provides greater freedom in color adjustment, to produce flesh tones and skies that appear just as they do in nature.

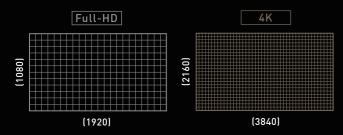


Advanced Video Recording Performance

Opening the door to the age of 4K

The World's First 4K Video Recording*

The DMC-FZ1000 is also an advanced photographic tool for recording videos**. In addition to full-HD 60p (NTSC area) / 50p (PAL area) videos, the DMC-FZ1000 can record 4K video in MP4 (3840 x 2160, 30p (NTSC area) / 25p (PAL area)).



4K Photo — Capturing Magical Moments

It ushers in a new form of photo creativity by letting you cut out 3840 x 2160 8-megapixel equivalent images from 4K video footage to capture spur-of-the-moment shots that are often missed with ordinary still photos.

High-Performance Data Processing

To process large volumes of high-resolution 4K video data, both speed and performance are required for the imaging engine. The DMC-FZ1000 complies with UHS Speed Class 3 (U3) which is a new speed class standard for the SD Memory Card. It guarantees a constant minimum write speed of 30MB/s to respond to the market demand for 4K video.

64GB: RP-SDUC64 GAK 32GB: RP-SDUC32 GAK 16GB: RP-SDUC16 GAM









- * For a compact camera as of June 12, 2014.
 ** Motion picture with [AVCHD] or [MP4] in [4K] can be recorded up to 29 minutes
- which picture with (MP4) in (FHD) (HD) (VGA) can be recorded up to 29 minutes 59 seconds. Motion picture with (MP4) in (FHD) (HD) (VGA) can be recorded up to 29 minutes 59 seconds or up to 4 GB.

 *** The recording format is 30p (NTSC area) / 25p (PAL area).

 Use a card with 5D Speed Class with "Class 4" or higher when recording motion pictures.

 Use a card with SD Speed Class with "UHS Speed Class 3 (U3)" when recording motion pictures in (AK)
- The UHS Speed Class3 (U3) mode write speed is only possible when using with the
- MB/s = 1,000,000 byte/s
 SDHC, SDXC Logos are trademarks of SD-3C,LLC.



An actual image extracted from 4K video

Dramatic, beautiful slow-motion videos High-Speed Video in Full-HD

You can record high-speed videos at 120 fps (NTSC area) / 100 fps (PAL area) in full-HD quality***. You can capture scenes that can't be seen with the naked eye, and play them back in dramatic slow motion.



5-Step Smooth Zooming

You can control the zoom operation to match the shooting situation in 5 speeds from low to fast, for smoother zooming.

HYBRID O.I.S. (Optical Image Stabilizer) +

This detects and compensates for the camera's 5 types of movement to suppress blurring. • Except for 4K video or high-speed video recording.

Cinelike Gamma

"CINELIKE D" and "CINELIKE V" are newly available for expressive cinema-like tones. • When Creative Video mode is selected.

Stereo Shotgun Microphone (DMW-MS2)

In addition to the internal stereo zoom microphone, the external DMW-MS2* lets you adjust the sound gathering characteristics to better match the shooting situation.



DMW-MS2

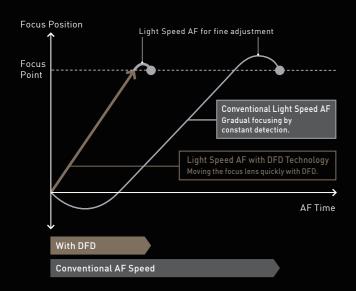
Agile Mobility and Intuitive Control

Ultra-high speed and precision Light Speed AF with DFD Technology

A dedicated linear motor in the focus system and newly combined DFD (Depth From Defocus) technology* achieve ultra-high-speed AF of approx. 0.09 sec** (wide-end) / approx. 0.17 sec*** (tele-end).

DFD technology instantaneously calculates the distance to the subject by evaluating 2 images with different sharpness levels.

* Works for photo shooting only. ** CIPA standard. When using Live View Finder. *** Panasonic in-house examination (Infinity to 2m shooting time lag).





Quick start-up **High Speed Response**

The DMC-FZ1000 boasts the quick start-up time of approx. 0.66 sec to catch even the most fleeting shooting opportunities.

12 fps Burst Shooting in Full Resolution

The DMC-FZ1000 achieves high-speed burst shooting at 12 fps in 20.1-megapixel resolution with a mechanical shutter.

1/4000 sec Shutter Speed

A high shutter speed of max. 1/4000 sec (wide-end) / 1/3200 sec (tele-end) / 1/16000 sec (electronic shutter) enables you to capture spur-of-the-moment, fast-moving subjects.

High-speed, high-resolution display 2,359k-dot OLED LVF (Live View Finder)

The LVF assures stable framing and superb visibility even at high magnification and under strong sunlight. The OLED for the DMC-FZ1000's LVF achieves high-speed response with minimum time lag while enhancing the resolution, as well as high, 10,000:1 contrast for superior color reproduction. A free-angle 921k-dot LCD also enables artistic framing.





Pursuing mobility and pleasure of use **Uncompromising Design Work**

The DMC-FZ1000 operation is smooth and easy. Professional photographers and camera experts collaborated on the grip, operability, and design details.







Manual Ring

Drive Mode Dial

Unwire your creativity

Wi-Fi® with NFC / QR Code Connection

With Wi-Fi® connectivity using the "Panasonic Image App", a smartphone / tablet can be used as a remote controller.



- The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance
- The N Mark is a trademark or registered trademark of NFC Forum. Inc. in the United States

Focus Peaking



For more practical control over manual focusing, Focus Peaking is available even while remote-controlling the camera via Wi-Fi®.

Low Light AF



The Low Light AF makes it possible to set focus on the subject more precisely in such as moonlight even without AF assist lamp.

3cm Macro



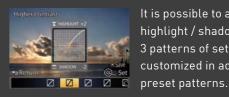
You can take dynamic close-up shots of flowers and insects, or render handicrafts in spectacular

Level Gauge



The Level Gauge lets the camera detect the horizontal / vertical angle of view, which is convenient for leveling the

Highlight Shadow Control



It is possible to adjust highlight / shadow separately. 3 patterns of settings can be customized in addition to 3

RAW Data Development in the Camera



You can convert a picture taken in the RAW format into the JPEG format right on the camera

Included Software



PHOTOfunSTUDIO 9.5 PE efficiently sorts and organizes your pictures. SILKYPIX Developer Studio 4.1 SE allows dramatically higher quality image development from RAW to JPEG.