

LUMIX Digital Underwater Camera DMC-FT30

Metrics		Dimensions (W x H x D)	103.7 x 58.3 x 19.7 mm
		Dimensions (W x H x D)	(4.08 x 2.30 x 0.77 inch)
		Weight	Approx. 125g without Battery and SD Memory Card (0.28 lb)
		Weight	Approx. 144g with Battery and SD Memory Card (0.32 lb)
Optics	Pixels	Camera Effective Pixels	16.1 Megapixels
	Sensor	Sensor Size / Total Pixels / Filter	1/2.33-inch CCD Sensor / 16.6 Total Megapixels / Primary Color Filter
	Lens	Aperture	F3.9 - 5.7 / 2-step (F3.9 / 9.0(W), F5.7 / 13.0(T))
		Optical Zoom	4x
		Focal Length	f=4.5 - 18.0mm (25 - 100mm in 35mm equiv.)
		Focal Length	(29-108mm in 35mm equiv. in video recording)
		Extra Optical Zoom (EZ)	5.1x (4:3 / 10M), 7.2x (4:3 / 5M), 9.0x (under 3M)
		Intelligent Zoom	8x
		Lens	LUMIX DC VARIO
		Lens	11 elements in 10 groups
		Lens	(5 Aspherical Lenses / 9 Aspherical surfaces / 1 ED Lens)
		2- Speed Zoom	-
		Optical Image Stabilizer/Five Axis Correction	MEGA O.I.S. (On with Active Mode (Only for Motion Picture) /Off) / No
		Digital Zoom	Max. 4x
		Conversion Lens Compatibility	-
	Focus	Focusing Area	Normal: Wide 50 cm - infinity / Tele 100 cm - infinity
		Focusing Area]Macro / Intelligent AUTO/ motion picture: Wide 5 cm - infinity / Tele 100cm - infinity
		AF Assist Lamp	Yes (On/Off), LED light in motion picture
		Focus	Normal, AF Macro, Macro Zoom

		Focus	Quick AF (Always On), Continuous AF(only for motion picture)
		Focus	AF Tracking
		AF Metering	Face / AF Tracking / 23-Area / 1-Area / Spot
	Shutter	Shutter Speed	approx. 8 - 1/1300 sec
		Shutter Speed	15sec / 30sec / 60sec in Sarry Sky mode
Recording	Finder	Viewfinder	-
	File	File Format	Still Image: JPEG(DCF/Exif2.3), DPOF
		File Format	Motion picture: MP4
	Recording Modes	Mode Dial / Mode Button	Intelligent AUTO, Normal Picture, Creative Control, Sports, Snow, Beach&Surf, Advanced Underwater,
		Mode Dial / Mode Button	Panorama Shot, SCN
		Creative Control mode	Expressive, Retro, High Key, Low Key, Sepia, Dynamic Monochrome, Impressive Art, High Dynamic, Cross Process, Toy Effect, Miniature Effect, One Point Color
		Still Image Scene Mode	Portrait, Soft Skin, Scenery, Night Portrait, Night Scenery, Food, Baby1, Baby2, Pet, Sunset, High Sensitivity, Starry Sky, Glass Through
		Continuous Shooting Mode	Full-Resolution Image, approx. 1.3 frames/sec
		Continuous Shooting Mode	High-speed Burst Mode: approx. 8 frames/sec
		Continuous Shooting Mode	(recorded in 3M for 4:3, 2.5M for 3:2, 2M for 16:9, 2.5M for 1:1)
		Continuous Shooting Mode	Flash burst shooting
	Motion Picture Recording (*2)	HD Video	1280 x 720 pixels, 25fps (HD: 10Mbps / MP4)
		STD Video	640 x 480 pixels, 25fps (VGA: 4Mbps / MP4)
		High Speed Video	-
	Continuous recordable time (motion pictures)	AVCHD	-
		MP4	approx. 100 min (HD)
	Actual recordable time (motion	AVCHD	-
	pictures)	MP4	approx. 50 min (HD)
	Exposure Parameters	Exposure	Auto(Program AE)
	A distribution	Exposure Compensation	1/3 EV step, +/-2 EV

		Auto (AE) Bracketing	1/3 -1EV step, Max +/-1EV, 3 frames
		Light Metering	Intelligent Multiple
		ISO Sensitivity	I.ISO / 100 / 200 / 400 / 800 / 1600
		ISO Sensitivity	High Sensitivity mode (ISO 1600-6400)
	Picture Quality	Still Picture Recording	[4:3] 4608x3456 (16M) / 3648x2736 (10M EZ) / 2560x1920 (5M EZ) / 2048x1536 (3M EZ) / 1280x960 (1M EZ) /640x480 (0.3M EZ)
		Still Picture Recording	[3:2] 4608x3072 (14M)
		Still Picture Recording	[16:9] 4608x2592 (12M)
		Still Picture Recording	[1:1] 3456x3456 (12M)
		Image Quality	-
		White Balance	Auto / Daylight / Cloudy / Shade / Incandescent / White Set
		Photo Style / Film Mode	-
		Color Mode / Color Effect / My color	Color Mode : Standard, Black&White, Sepia, Vivid(Normal only), Happy (only in iA Mode)
		Picture Adjustment	-
		Aspect Bracketing	-
	Other	Digital Red Eye Correction (Red-Eye Removal)	Yes (On/Off)
		GPS	-
		Wi-FI	-
		NFC	-
		Zoom in Motion Picture	Yes
		Self Timer	2 sec / 10 sec
		Self Shot Mode	-
Playback	Display	Playback Mode	All,, Slideshow, Filtering Play (Picture Only, Video Only, Category Selection, Select Date, Favorites), Calendar
		Thumbnails / Zoomed Playback	12,30-thumbnails / Yes
		Calendar Display / Dual- Image	Yes / No

		Playback	
		Set Favorites / Rotate Image	Yes / No
		Show Histogram	-
		Show Highlights	-
		DPOF Print Setting / Set Protection	Yes / Yes
	Edit	Retouch	Creative Retouch / Auto Retouch / Color Reproduction
		Resize / Cropping / Aspect Conv. / Leveling	Yes / Yes / No / No
		Copy / Title Edit / Text Stamp	Yes / No / Yes
		Cut Animation	-
		Video Divide	Yes
		PictBridge Support	Single / Multi / All / Favorites / DPOF
Setup		OSD language	Japanese, English, German, French, Italian, Spanish, Chinese (Traditional), Chinese (Simplified)
Others	Monitor	LCD Monitor	2.7"(6.75cm) TFT Screen LCD Display (230K dots)
		LCD Monitor	Field of View : approx. 100%
		LCD Monitor	AUTO Power Monitor mode, Power Monitor mode, High Angle mode
	Flash	Built- in- Flash	Auto, Auto/Red-eye Reduction, Forced On, Slow Sync./Red-eye Reduction, Forced Off,
		Built- in- Flash	0.3 - 4.4m (Wide / i.ISO), 1.0 - 3.0m (Tele/ i.ISO)
	Media	Recording Media	Built-in Memory, SD Memory Card, SDHC Memory Card, SDXC Memory Card
		Built- in- Memory	Approx.220MB
	Audio	Microphone / Speaker	Mono / Mono
	Interface	Interface	AV Output (PAL/NTSC), USB(AV/USB Multi)
	Power	Power	Li-ion Battery Pack (3.6V / 680mAh / 2.5Wh)
		Power	AC Adaptor (Input: 110-240V AC)(Optional)
		Battery life (approx.)	250 pictures (CIPA Standard)*1
	Standard Package	Included Software	PHOTOfunSTUDIO 9.0 SE
		Standard Accessories	Battery Pack, Battery Charger, AC Cable, USB Cable, Hand Strap, Silicone Jacket, CD-ROM

NOTE	*1
NOTE	Recording conditions by CIPA standard
NOTE	- CIPA is an abbreviation of [Camera & Imaging Products Association].
NOTE	- Temperature: 23 oC (73.4 oF)/Humidity: 50%RH when LCD monitor is on.
NOTE	- Using a Panasonic SD Memory Card (32 MB).
NOTE	- Using the supplied battery.
NOTE	- Starting recording 30 seconds after the camera is turned on. (When the optical image stabilizer function is set to [ON].)
NOTE	- Recording once every 30 seconds with full flash every second recording.
NOTE	- Rotating the zoom lever from Tele to Wide or vice versa in every recording.
NOTE	- Turning the camera off every 10 recordings and leaving it until the temperature of the battery decreases.
NOTE	*2
NOTE	- These are standard times taken at a temperature of 23 oC (73.4 oF) and a humidity of 50%RH.
NOTE	- The time available for recording varies depending on the environment, the interval between recordings, and the manner of use.
NOTE	- Actual recordable time is the time available for recording when repeating actions such as switching the power supply [ON] / [OFF], starting/stopping recording, zoom operation etc.
NOTE	- Use a card with SD Speed Class with "Class 4" or higher when recording motion pictures.
NOTE	SD speed class is the speed standard regarding continuous writing.
NOTE	- Maximum time to record motion pictures continuously with [MP4] is 29 minutes 59 seconds or up to 4 GB.