# Specifications Collapse All

#### Metrics -

Dimensions (W x H x D) 110.7 x 64.6 x 34.4 mm

Dimensions (W x H x D) (4.36 x 2.54 x 1.35 inch)

Weight Approx. 217 g without Battery and SD Memory Card (0.478 lb)

Weight Approx. 243 g with Battery and SD Memory Card (0.536 lb)

## Optics -

Pixels

Camera Effective Pixels 12.1 Megapixels

Sensor

Sensor Size / Total Pixels / Filter 1/2.3-inch Large Pixel Sized High Sensitivity MOS Sensor / Total Pixel Number 12.8 Megapixels / Primary Color Filter

Lens

Aperture F3.3 - 6.4 / Multistage Iris Diaphragm (F3.3 - 8.0 (W), F6.4 - 8.0 (T))

Optical Zoom 30x

Focal Length f = 4.3 - 129mm (24 - 720mm in 35mm equiv.)

Focal Length (28 - 840mm in 35mm equiv. in 16:9 video recording / Level Shot function Off)

Focal Length (30 - 900mm in 35mm equiv. in 16:9 video recording / Level Shot function On)

Extra Optical Zoom (EZ) 36.7x (4:3 / 8M), 46.9x (4:3 / 5M), 58.6x (4:3 / under 3M)

Intelligent Zoom 60x

Lens LEICA DC VARIO-ELMAR

Lens 12 elements in 9 groups

Lens (5 Aspherical Lenses / 10 Aspherical surfaces / 3 ED Lenses)

2- Speed Zoom Ye

Optical Image Stabilizer/Five

HYBRID O.I.S. + (On / Off) / Yes

**Axis Correction** 

Digital Zoom Max. 4x (Max. 2x for TZ71)

Conversion Lens Compatibility -

Focus

Focusing Area Normal: Wide 50cm - infinity / Tele 200cm - infinity

Focusing Area AF Macro / MF / Intelligent Auto / Motion Picture: Wide 3 cm - infinity / Tele 200 cm - infinity

AF Assist Lamp Yes (On/Off)

Focus Normal / AF Macro / Macro Zoom / MF

Focus Quick AF On / Off (on in Intelligent Auto), Continuous AF (only for motion picture)

Focus AF/AE Lock Button (Set the Fn button in custom menu to AF/AE lock)

Eastle Booking One Shot AE (Set the En hutten in custom manuate AE ON). AE Area Select, AE Tracking

rocus reaking, one snot ar (set the ri) button in custom menu to arrony, ar area select, ar macking

AF Metering Face / AF Tracking / 23-area / 1-area (flexible / scalable)

Shutter

Shutter Speed Approx. 4 - 1/2,000 sec

Shutter Speed Starry Sky Mode: 15, 30, 60 sec

#### Recording -

Finder

Viewfinder 0.20" LVF (Live View Finder) (1,166K dots equiv.), Field of View: Approx. 100%, Lens 19.6x

Viewfinder Magnification: Approx. 2.59x / 0.46x (35 mm camera equivalent)

File

File Format Still Image: JPEG (DCF/Exif2.3) / RAW, DPOF

File Format 3D Image: MPO

File Format Motion Picture: AVCHD, MP4

**Recording Modes** 

Mode Dial / Mode Button Intelligent Auto, P, A, S, M, C1 (Custom), C2 (Custom), Panorama Shot, Scene, Creative Control

Creative Control mode Expressive, Retro, Old Days, High Key, Low Key, Sepia, Dynamic Monochrome, Impressive Art, High Dynamic, Cross Process, Toy Effect, Miniature

Effect, Soft Focus, Star Filter, One Point Color (15 filters)

Still Image Scene Mode Portrait, Soft Skin, Scenery, Sports, Night Portrait, Night Scenery, Handheld Night Shot, Food, Baby1, Baby2, Pet, Sunset, High Sensitivity, Glass

Through, HDR, Starry Sky, High Speed Video, 3D Photo

Continuous Shooting Mode Full-Resolution Image: 10 frames/sec, Max. 6 images

Continuous Shooting Mode with AF Tracking: 6 frames/sec, 3 frames/sec

Continuous Shooting Mode Intelligent Burst Shooting

Continuous Shooting Mode High-speed Burst: Approx. 60 frames / sec

Continuous Shooting Mode (recorded in 2.5M / 0.3M for 4:3, 3M / 0.3M for 3:2, 3.5M / 0.2M for 16:9, 2M / 0.2M for 1:1)

Continuous Shooting Mode Approx. 40 frames / sec

Continuous Shooting Mode (recorded in 5M / 3M / 0.3M for 4:3, 4.5M / 2.5M / 0.3M for 3:2, 3.5M / 2M / 0.2M for 16:9, 3.5M / 2.5M / 0.2M for 1:1)

Continuous Shooting Mode Flash Burst Shooting

Motion Picture Recording (\*2)

HD Video 1920 x 1080 pixels, 60p (FHD: 28Mbps / AVCHD) (Sensor Output is 60fps)

HD Video 1920 x 1080 pixels, 60i (FHD: 17Mbps / AVCHD) (Sensor Output is 60fps)

HD Video 1280 x 720 pixels, 60p (HD: 17Mbps / AVCHD) (Sensor Output is 60fps)

HD Video 1920 x 1080 pixels, 30p (FHD: 20Mbps / MP4) (Sensor Output is 30fps)

HD Video 1280 x 720 pixels, 30p (HD: 10Mbps / MP4) (Sensor Output is 30fps)

STD Video 640 x 480, 30p (VGA: 4Mbps / MP4) (Sensor Output is 30fps)

High Speed Video 1280 x 720 pixels, 30p (HD: MP4) (Sensor Output is 120fps)

High Speed Video 640 x 480 pixels, 30p (VGA: MP4) (Sensor Output is 240fps)

Continuous recordable time (motion pictures)

**AVCHD** Approx. 75 min (FHD/60p), Approx. 80 min (FHD/60i) MP4 Approx. 90 min (FHD) Actual recordable time (motion pictures) **AVCHD** Approx. 30 min (FHD/60p), Approx. 35 min (FHD/60i) MP4 Approx. 40 min (FHD) **Exposure Parameters** Program AE, Aperture Priority AE, Shutter Priority AE, Manual Exposure **Exposure Compensation** 1/3 EV step, +/-2 EV Auto (AE) Bracketing 1/3-1EV step, Max. +/-1 EV, 3 frames **Light Metering** Intelligent Multiple / Center Weighted / Spot Auto / i.ISO / 80 / 100 / 200 / 400 / 800 / 1600 / 3200 / 6400 ISO Sensitivity **Picture Quality Still Picture Recording** [4:3] 4000x3000 (12M) / 3264x2448 (8M EZ) / 2560x1920 (5M EZ) / 2048x1536 (3M EZ) / 640x480 (0.3M EZ) **Still Picture Recording** [3:2] 4000x2672 pixels (10.5M) / 3264x2176 (7M EZ) / 2560x1712 (4.5M EZ) / 2048x1360 (2.5M EZ) / 640x424 (0.3M EZ) [16:9] 4000x2248 (9M) / 3840 x 2160 (8M EZ) / 2560x1440 (3.5M EZ) / 1920x1080 (2M EZ) / 640x360 (0.2M EZ) Still Picture Recording **Still Picture Recording** [1:1] 2992x2992 (9M) / 2448x2448 (6M EZ) / 1920x1920 (3.5M EZ) / 1536x1536 (2.5M EZ) / 480x480 (0.2M EZ) **Image Quality** RAW / RAW+Fine / RAW+Standard / Fine / Standard (3D Mode: MPO+Fine / MPO+Standard) **Image Quality** White Balance Auto / Daylight / Cloudy / Shade / Incandescent / White Set White Balance White Balance Adjustment (Except Auto) Photo Style / Film Mode Color Mode / Color Effect / My Picture Adjustment **Aspect Bracketing** Other Digital Red Eye Correction (Red-Yes (On/Off) Eye Removal) GPS Wi-FI IEEE 802.11b/g/n Wi-FI 2412 MHz - 2462 MHz (1-11 ch) Wi-FI WPA / WPA2 Wi-FI Infrastracture Mode / WPS / Wi-Fi Direct Wi-FI Wi-Fi Button NFC ISO/IEC 18092 (NFCIP-1) NFC-F **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, 3D Play, GPS Area Play\*, Travel, Category Selection, Select Date, Favorite), Calendar

\* Not available on products for China. Playback Mode

12,30-thumbnails / Yes Thumbnails / Zoomed Playback

Calendar Display / Dual-Image

Playback

Yes (Menu / Zoom Lever) / No

Set Favorites / Rotate Image Yes / No

**Show Histogram** Yes

**Show Highlights** 

**DPOF Print Setting / Set** 

Yes / Yes

Protection

Edit

Auto Retouch / Creative Retouch Retouch

Resize / Cropping / Aspect Conv.

/ Leveling

Yes / Yes / No / No

Copy / Title Edit / Text Stamp Yes / Yes / Yes

**Cut Animation** Yes

Video Divide Yes

PictBridge Support Single / Multi / All / DPOF / Favorites

#### Setup -

**OSD** language English, Spanish

## Others -

Monitor

LCD Monitor 3.0" (7.5cm) TFT Screen LCD Display (1,040K dots), AR Coating

**LCD Monitor** Field of View: Approx. 100%, Wide Viewing-angle

**LCD Monitor** Power Monitor mode, AUTO Power Monitor mode

Flash

**Built-in-Flash** Auto, Auto/Red-eye Reduction, Forced On, Slow Sync./Red-eye Reduction, Forced Off

**Built-in-Flash** 0.6 - 6.4m (Wide / ISO Auto), 2.0 - 3.3m (Tele / ISO Auto)

Media

**Recording Media** Built-in Memory, SD Memory Card, SDHC Memory Card, SDXC Memory Card

**Built- in- Memory** Approx. 86MB \* Approx. 86MB for China

Audio

Microphone / Speaker Stereo / Mono Interface

Interface microHDMI, AV Output (NTSC), USB (AV/USB Multi)

Power

Power Li-ion Battery Pack (3.6V, 1250mAh, 4.5 Wh) (Included)

Power AC Adaptor (Input: 110 - 240V AC) (Included, connect with USB cable)

Battery life (approx.) 300 pictures (CIPA Standard)\*1

**Standard Package** 

Included Software PHOTOfunSTUDIO 9.6PE
Included Software LoiLoScope (trial version)

Included Software Adobe Reader

Included Software • The software to process RAW file on PC is not bundled with DMC-ZS50.

Included Software To do this, SILKYPIX Developer Studio is available for download at Ichikawa Soft Laboratory's website using PC connected to the Internet.

Standard Accessories Battery Pack, AC Adaptor, USB Cable, Hand Strap, CD-ROM

NOTE \*1

NOTE Recording conditions by CIPA standard

NOTE - Temperature: 23 oC (73.4 oF) / Humidity: 50%RH when LCD monitor is on.

NOTE - Using a Panasonic SDHC Memory Card

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 - The number of recordable pictures varies depending on the recording interval time.

NOTE - If the recording interval time becomes longer, the number of recordable pictures decreases.

NOTE - CIPA is an abbreviation of [Camera & Imaging Products Association].

NOTE

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 [AVCHD] in [FHD/60p] / [FHD/60i] is 29 minutes 59 seconds.

NOTE - Maximum time to record motion pictures continuously with [MP4] is 29 minutes 59 seconds or up to 4 GB.

UPC 885170235465