

LUMIX Active Lifestyle Tough Camera DMC-TS30R - Red

DMC-TS30R

• 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
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- **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&St Advanced Underwater,
- Mode Dial / Mode Button Panorama Shot, SCN
- Creative Control mode Expressive, Retro, High Key, Low Key, Sepia, Dynamic Monochrome, Impressive , 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, F 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, 30 fps (HD: 10Mbps / MP4)
- STD Video 640 x 480 pixels, 30 fps (VGA: 4Mbps / MP4)
- High Speed Video -
- *Continuous recordable time (motion pictures)*
- AVCHD -
- MP4 approx. 100 min (HD)
- *Actual recordable time (motion pictures)*
- AVCHD -
- MP4 approx. 50 min (HD)
- *Exposure Parameters*
- Exposure Auto(Program AE)
- 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 L.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 Playback Yes / No**
- **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
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- **Setup**

- OSD language English, Spanish
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- **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 (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, USB Cable, Hand Strap, CD-ROM
- NOTE *1
- NOTE Recording conditions by CIPA standard
- NOTE - CIPA is an abbreviation of [Camera & Imaging Products Association].
- NOTE - Temperature: 23 °C (73.4 °F)/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 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.
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