

Sensor size

17.4 mm x 13.0 mm (Micro Four Thirds)

Lens mount

Micro Four Thirds Mount

Image sensor type

4/3 Stacked BSI Live MOS Sensor

Number of pixels

Number of effective pixels: Approx. 20.4 million pixels

Total number of pixels: Approx. 22.9 million pixels

Aspect ratio

4:3

Dust reduction

Supersonic Wave Filter (image sensor dust reduction system)

Still Photo Recording format

DCF2.0, Exif2.31

Still Photo File format

JPEG, RAW(12-bit lossless compression), JPEG+RAW

Still Photo Recording image size

RAW: 5184 x 3888

JPEG: 5184 x 3888 – 1024 x 768

Dual Slot Settings

Standard, Auto Switch, Dual Independent, Dual Same

Folder creation and selection

Available

Image stabilization type

Built-in 5-axis sensor-shift image stabilization

Image stabilization mode

S-IS AUTO, S-IS1, S-IS2, S-IS3, OFF

Stabilization performance

Compensation steps (Body only): 7.0

Focal length: 40mm (35mm equivalent: 80mm)

5-axis Sync IS

Available

Focal length setting

11 settings: 10 programmable settings (10 lenses)

Finder type

Eye-level OLED electronic viewfinder, approx. 5.76M dots

Field of view / Viewfinder magnification

Approx. 100% / Approx. 1.48x – 1.65x (–1m–1, 50mm lens, Infinity)

Eye point / Diopter adjustment range

Approx. 21mm (–1m (raised to –1), Distance from rear lens surface) / –4 – +2m (raised to –1)

## Display Grid

Off / normal grid / trichotomy / golden grid / scale / diagonal / movie grid

## Level Gauge

2-axis (horizontal/vertical) level gauge

## Finder Style

3 styles

## Brightness and Color Temperature Control

Adaptive brightness technology (EVF Auto Luminance) / +/-7 level manual brightness control / +/-7 level manual color temperature control both GM and BA

## S-OVF (Simulated OVF)

Yes

## Eyecup

EP-18 (bundled)

## Monitor type

3" vari-angle monitor (electrostatic capacitance touch panel), Approx.1.62M dots (3:2)

## Touch control

Shutter release, Touch AF (AF area selection, AF area size adjustment), Face selection by touch operation, AF targeting pad, Frame forward/backward, Magnified playback, Super Control Panel, Wi-Fi connection, Movie controls

## Tilting capability

Swivel type

## Brightness / Color temperature control

+/-7 levels / GM +/-7 levels, BA +/-7 levels

## AF system

High-speed imager AF

## AF working range

Lowest luminance (-6.0 EV) / Highest luminance (19 EV)

## Focusing point selection mode

Cross-type phase detection AF (1,053 points), Contrast AF (1,053 points) / All target, Single target (1 point), Small target (9 points), Cross target (39 points), Middle target (63 points), Large target (165 points), Custom target (AF area and its increment steps selectable)

## Focus mode

Single AF (S-AF), Single AF (S-AF+MF), Continuous AF (C-AF), Continuous AF (C-AF+MF), Manual Focus (MF), AF tracking (C-AF + TR), AF tracking (C-AF + TR+MF), Preset MF, Starry sky AF (S-AF), Starry sky AF (S-AF+MF)

## C-AF tracking sensitivity settings

5 steps

## C-AF Center Priority

Yes

## AF limiter

Yes

AF targeting pad

Yes

Magnified frame AF

3x, 5x, 7x, 10x, 14x

Super spot AF

Yes

Face detection AF / Eye detection AF

Yes

AI detection AF

Formula cars, rally cars, motorcycles / Aircrafts, helicopters / Bullet trains, standard trains, steam locomotives / Birds / Dogs, cats

Manual focus assist

Yes

Peaking function

Yes

AF Focus Adj.

Yes

AF illuminator

Yes

Focus indicator

Yes

Metering system

Digital ESP metering (324-area multi pattern metering), Center-weighted average metering, Spot metering, Spot metering with highlight/shadow control (TTL Image sensor metering)

Metering range

Lowest luminance (-2 EV) / Highest luminance (20 EV)

ISO sensitivity (AUTO)

LOW (approx.80) – 102400

ISO sensitivity (MANUAL)

LOW (approx.80, approx.100), 200 – 102400

Exposure compensation

+/-5 EV (adjustable by 1/3, 1/2 or 1 EV steps)

AE lock

Yes

Anti-Flicker Shooting

Yes

Focal-plane shutter (mechanical shutter)

1/8000 – 60 sec, Live Bulb, LiveTime, Live Composite

Electronic first curtain shutter

1/320 – 60 sec

Electronic shutter (Silent mode)

1/32000 – 60 sec

## Flicker Scan

Video recording: 1/30 – 1/250.0

Still: 1/50.0 – 1/7634

## Sequential shooting max speed

Sequential shooting: approx 10 fps with selectable 1–10 fps

Anti-shock sequential shooting: approx 10 fps with selectable 1–10 fps

Silent sequential shooting: approx 20 fps with selectable 5, 10, 15, 20 fps with blackout

Silent sequential shooting SH1: approx 120 fps with selectable 60, 100, 120 fps without blackout

Silent sequential shooting SH2: approx 50 fps with selectable 25, 50, fps without blackout

Pro Capture: approx 20 fps with selectable 5, 10, 15, 20 fps

Pro Capture SH1: approx 120 fps with selectable 60, 100, 120 fps

Pro Capture SH2: approx 50 fps with selectable 25, 50 fps

## Maximum recordable frames

Sequential shooting 10 fps [RAW]: Approx. 139

Sequential shooting 10 fps [JPEG LF]: Approx. 169

Silent sequential shooting 20 fps [RAW]: Approx. 108

Silent sequential shooting 20 fps [JPEG LF]: Approx. 116

Silent sequential shooting SH1 120 fps [RAW]: Approx. 92

Silent sequential shooting SH1 120 fps [JPEG LF]: Approx. 92

Silent sequential shooting SH2 50 fps [RAW]: Approx. 96

Silent sequential shooting SH2 50 fps [JPEG LF]: Approx. 97

## Flash intensity control method

TTL Auto, Manual, Auto, Super FP (FP-TTL AUTO, FP-MANUAL)

## Flash mode

Fill-in, Flash Off, Slow sync., Manual (1/1 (FULL) – 1/64)

## Red-eye sync

Yes

## Synchronization timing

1st curtain, 2nd curtain selectable

## Synchronization speed

1/250 sec.

## Flash intensity control

+/-3 EV (1/3, 1/2, 1 EV steps selectable)

## Compatible external flash

FL-LM3, FL-600R, FL-900R, STF-8, FL-700WR

## Olympus Wireless RC Flash system

FL-600R, FL-900R, FL-700WR (Triggered and controlled by flash)

## Commander flashes

FL-LM3, FL-600R, FL-900R, STF-8, FL-700WR

## Radio wireless control

Yes

External Flash intensity type

TTL Auto, Manual, Auto, FP-TTL AUTO, FP-MANUAL

Channel

4 channels

Group No.

3 groups (External flash 2 groups + commander flash)

White balance mode

Auto WB, 7 WB presets, 4 Capture WB, Custom WB (Kelvin setting)

White balance compensation

+/-7 steps along A-B / G-M axis

Color matrix

sRGB, Adobe RGB

Picture Mode

i-Finish, Vivid, Natural, Flat, Portrait, Monotone, Custom, Underwater, Color Creator, Art Filters

Gradation

4 types (Auto, Normal, High Key, Low Key)

Highlight and shadow control

Yes

Art Filter

Pop Art, Soft Focus, Pale & Light Color, Light Tone, Grainy Film, Pin Hole, Diorama, Cross Process, Gentle Sepia, Dramatic Tone, Key Line, Water Color, Vintage, Partial Color (18 color selectable), Bleach Bypass, Instant Film

Color Creator

Yes

Exposure bracketing

2, 3 or 5 frames (0.3/0.7/1.0EV steps selectable), 7 frames (0.3/0.7EV steps selectable)

ISO bracketing

3 frames (0.3/0.7/1.0EV steps selectable)

White balance bracketing

3 frames (A-B/G-M axis)

Flash bracketing

3 frames (0.3/0.7/1.0EV steps selectable)

Art Filter bracketing

i-Enhance, Vivid, Natural, Muted, Portrait, Monotone, Custom, Art Filters, Color Creator selectable

Focus bracketing

Yes

Focus stacking

Yes

Focus stacking compatible lens

M.Zuiko DIGITAL ED 7-14mm F2.8 PRO

M.Zuiko DIGITAL ED 8-25mm F4.0 PRO

M.Zuiko DIGITAL ED 12-40mm F2.8 PRO

M.Zuiko DIGITAL ED 12–40mm F2.8 PRO II  
M.Zuiko DIGITAL ED 12–45mm F4 PRO  
M.Zuiko DIGITAL ED 12–100mm F4.0 IS PRO  
M.Zuiko DIGITAL ED 40–150mm F2.8 PRO  
M.Zuiko DIGITAL ED 40–150mm F4.0 PRO  
M.Zuiko DIGITAL ED 100–400mm F5.0–6.3 IS  
M.Zuiko DIGITAL ED 150–400mm F4.5 TC1.25x IS PRO  
M.Zuiko DIGITAL ED 8mm F1.8 Fisheye PRO  
M.Zuiko DIGITAL ED 30mm F3.5 Macro  
M.Zuiko DIGITAL ED 60mm F2.8 Macro  
M.Zuiko DIGITAL ED 300mm F4.0 IS PRO  
M.Zuiko DIGITAL 1.4x Teleconverter MC–14  
M.Zuiko DIGITAL 2x Teleconverter MC–20

HDR (Auto composite)

HDR1, HDR2 (painting–like)

Bracketing for HDR postprocess

3 or 5 frames (2.0 or 3.0 EV steps), 7 frames (2.0 EV steps)

Keystone Compensation

Yes

Fisheye Compensation

3 Styles

Live ND

Yes

Tripod High Res Shot

JPEG (80M): 10368 x 7776

JPEG (50M): 8160 x 6120

JPEG (25M): 5760 x 4320

RAW: 10368 x 7776

Handheld High Res Shot

JPEG (50M): 8160 x 6120

JPEG (25M): 5760 x 4320

RAW: 8160 x 6120

Live Bulb /. Live Time

Yes

Live Composite

Yes

Interval Mode

Yes

Multi Exposure

Yes

Multi Aspect

4:3(Default), 3:2, 16:9, 1:1, 3:4

## Magnification

2x

## Detection

2-axis (horizontal / vertical)

## Video recording format

MOV(MPEG-4AVC/H.264)

4096 x 2160 (C4K): 60p, 50p / LongGOP (Approx. 202Mbps)

30p, 25p, 24p / LongGOP (Approx. 102Mbps)

3840 x 2160 (4K):60p, 50p / LongGOP (Approx. 202Mbps)

30p, 25p, 24p / LongGOP (Approx. 102Mbps)

1920 x 1080 (FHD):60p, 50p / LongGOP (Approx. 52Mbps)

30p, 25p, 24p / ALL-I (Approx. 202Mbps), LongGOP (Approx. 27Mbps)

MOV (HEVC/H.265)

4096 x 2160 (C4K):60p, 50p / LongGOP (Approx. 152Mbps)

30p, 25p, 24p / LongGOP (Approx. 77Mbps)

3840 x 2160 (4K):60p, 50p / LongGOP (Approx. 152Mbps)

30p, 25p, 24p / LongGOP (Approx. 77Mbps)

1920 x 1080 (FHD):60p, 50p / ALL-I (Approx. 162Mbps) , LongGOP (Approx. 42Mbps)

30p, 25p, 24p / ALL-I (Approx. 82Mbps) , LongGOP (Approx. 22Mbps)

## Art Filter Movie

Yes

## One-push Movie Digital Converter

Approx. 1.4x

## Time Lapse Movie

3840 x 2160 (4K) / 5fps, 10fps, 15fps, 30fps

1920 x 1080 (FHD) / 5fps, 10fps, 15fps, 30fps

1280 x 720 (HD) / 5fps, 10fps, 15fps, 30fps

## Quick Movie / Slow Movie

Yes

## High speed movie

240,200,120,100fps (1920 x1080 / MPEG-4 AVC/H.264)

200,120,100fps (1920 x 1080 / HEVC/H.265)

## Image Stabilization for video recording

M-IS1 (multi motion IS by Image sensor shift and electronic image stabilizer), M-IS2 (Multi motion IS by Image sensor shift), OFF

Grid Line

Yes

Focus Peaking

4 colors

Zebra Pattern

Yes

Center Marker

Yes

Time code

Rec run / free run, drop frame / non-drop frame

Live View Output via HDMI

Monitor mode / Record mode / RAW mode

Movie Picture Mode

Flat, OM-Log400, HLG

AE Lock

Yes

Sound recording format

Wave Format (Stereo linear PCM/16-bit, Sampling frequency 48kHz)

High-Resolution Audio recording

Stereo linear PCM/24-bit, Sampling frequency 96kHz

Microphone / Speaker

Built-in stereo microphone / built-in mono speaker

Microphone function

Wind noise reduction, recording volume, microphone volume limiter

GPS info. Function

Yes

Wireless Shooting

Live View, Rec View, Wireless Touch AF shutter, Self Timer (w/ Countdown guidance, Sequential shooting, movie recording capability), Wireless Release, Movie Recording, Power Off

Image Share

Yes

Easy Connection

Connect using a QR code

Connect using Bluetooth (View, Transfer only)

Tethered shooting control

USB connection

Wi-Fi connection (2.4GHz/5GHz)

Playback mode

Single-frame, Information display, Index display (4/9/25/100 frames), Calendar, Enlargement (2x – 14x), Movie (with sound, FF/REW/Pause), Picture rotation (auto)

## Information display

Histogram (independent luminance / RGB available), Highlight/Shadow point warning, AF frame, Photographic information, OFF

## Movie Editing function

Trimming (beginning / end) / In-movie image extraction (4K only)

## Editing function

RAW data edit, Gradation auto, Monochrome, Sepia, Red-eye fix, Saturation, Resize (1280x960, 640x480, 320x240), Trimming, Image Overlay, Post recording

## RAW data edit

RAW data edit based on settings of the camera (including Color Creator, Art Filter, ART-BKT).

## Rating

Yes

## Print function

Print reservation (DPOF)

## Languages

18 languages selectable : English, French, German, Spanish, Italian, Japanese, Traditional Chinese, Simplified Chinese, Russian, Czech, Dutch, Polish, Portuguese, Swedish, Norwegian, Finnish, Slovak, Thai

## Splashproof Type / Dustproof

IEC Standard publication 60529 IP53 (applies when the body is used with our splashproof Lens)

## Freeze proof

-10 Degree C

## USB/Remote controller connector

USB Type-C / Dia. 2.5-Pin Jack (Optional remote cable RM-CB2, remote controller RM-WR1 can be used)

## HDMI connector

Micro HDMI (type D)

## Flash attachment

Hot shoe, sync terminal

## Wireless LAN

Built-in (IEEE 802.11a/b/g/n/ac)

## Bluetooth

Built-in (Bluetooth Ver.4.2 Bluetooth Low Energy)

## Microphone input jack

Dia. 3.5mm stereo mini jack (plug-in power on/off)

## Headphone connector

Dia. 3.5mm stereo mini jack

## PC interface

SuperSpeed (USB3.0)

## Battery

BLX-1 Li-ion battery

#### Battery status display

Remaining power (10 steps, %, or by-minute display), Shot count, Degradation

#### USB bus power

A USB PD bus power can be used

#### USB charging

Built-in battery can be charged with USB

#### Sleep mode

1/3/5 min., Off

#### Number of recordable images

Standard mode: approx 520 shots / Quick sleep mode: approx 1100 shots

#### Temperature

-10 Degree C - +40 Degree C (when in operation), -20 - +60 Degree C (when stored)

#### Humidity

30 - 90% (when in operation), 10 - 90% (when stored)

#### Battery Info

Required, included

#### Battery Material

Lithium ion

#### Battery Type

Non-universal

#### Battery Quantity

1

#### Memory

Slot 1: SD, SDHC (UHS-I / II), SDXC(UHS-I / II)

Slot 2: SD, SDHC (UHS-I / II), SDXC(UHS-I / II)

#### Dimensions (W x H x D)

134.8 x 91.6 x 72.7mm (Approx)

#### Weight

599g (CIPA standards, with 1x BLX-1 battery and 1 memory card, without eyecup)

511g (Body only)