← PEN technical specifications

Image Stabilisation	Built-in 5-axis sensor-shift image stabilisation
Video Quality	4K, C4K, Full HD, S&Q
Importer	OM Digital Solutions GmbH Willy-Brandt-Strasse 23 20457 Hamburg, Germany mail: imprint@om-digitalsolutions.com
Manufacturer	OM Digital Solutions Corporation 49-3 Takakura-machi, Hachioji-shi, Tokyo 192-0033, Japan mail: imprint@om-digitalsolutions.com

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Type

Lens mount	Micro Four Thirds

Image Sensor

Type	4/3'' Live MOS sensor
Effective pixels	20.4 Megapixels
Full resolution	21.8 Megapixels
Aspect ratio & area	4:3 / 17.4 x 13.0mm
Filter array	RGB

Dust Reduction System

Dust reduction filter	Supersonic Wave Filter

Viewfinder

Type	OLED Electronic Viewfinder
Pixel number	2.36M dots
Magnification	Approx. 1.10×–1.23× depending on Finder Style (-1m⁻¹, 50mm lens, infinity)
Angle of view	Approx. 100%
Style	3 styles selectable
Correction of color temperature	+/- 3 levels
Diopter adjustment	Equipped -4.0 - +2.0 diopters / built-in type
Eye point	Approx. 20.5 mm (-1m⁻¹, from rear lens surface)

Monitor

Monitor type	Vari-angle LCD - Touch Panel
Resolution	1040K dots
Monitor size	7.6cm / 3.0'' (3:2)
Brightness adjustment	+/- 7 levels
Color balance	Brightness ±7 levels / Colour temperature ±7 levels
Touch Control functions	AF area enlargement, AF area selection, AF targeting pad, Art Filter, Face/Subject selection, Frame forward/backward, Live Guide, Magnified playback, Menu control, Movie Controls, Profile mode controls, Scene Modes, Shutter release, Super Control Panel, Wi-Fi connection

Level Gauge

Detection	2-axis
Display	Rear display and viewfinder

Live View

Magnification levels	3 / 5 / 7 / 10 / 14x
Live ND	Available (ND2 / 4 / 8 / 16) S/M mode only; flash unavailable; ISO up to 800; max shutter speed 1/30 at ND2, decreasing with higher ND steps

Image Stabiliser

Image Stabilisation	Built-in 5-axis sensor-shift image stabilisation
Type	Sensor shift
Modes	S-IS AUTO, S-IS1, S-IS2, S-IS3, OFF
Lens IS priority	Available
Live View stabilisation	Available
Effective Compensation Range	Center 5.5 steps / Corner 4.5 steps Up to 5.5 EV steps

Focusing System

Method	High-speed imager AF; imager phase detection AF + imager contrast AF
Modes	S-AF, S-AF+MF, C-AF, C-AF+MF, MF, C-AF+TR, C-AF+TR+MF, Preset MF, Starry Sky AF, Starry Sky AF+MF, Super spot AF
Intelligent Subject Detection AF	Cats, Dogs, Human, *Still image mode only
Face Detection extension	Face / Eye detection AF available in Video recording mode only
Manual focus	Available, with enlarged focusing area, focus peaking and focus indicator
Focus areas	121 points * / 121 points contrast AF All target, single target (normal / small), group target (5-area / 9-area / 25-area), custom target 1-4 (AF area and its increment steps selectable)
AF illuminator	Equipped
AF targeting pad	Available

AF working range	-3.5 EV to 20 EV (ISO approx. 100, F2.8 lens)
Focus limit	Available; up to 3 distance settings can be saved
C-AF tracking sensitivity	5 steps
C-AF Center Priority	Available
Focus Bracketing Mode	
Number of images	3 - 999 shots
Step size	10 levels
Focus peaking	
Back light effect	On / Off
Color selection	White, black, red, yellow
Intensity	High / Normal / Low
Focus Stacking Mode	
Technology	Available
Compatible Lenses	7-14mm F2.8 PRO, 100-400mm F5.0-6.3 IS, 12-100mm F4 IS PRO, 12-40mm F2.8 PRO, 12-40mm F2.8 PRO II, 12-45mm F4 PRO, 14-42mm F3.5-5.6 III, 150-400mm F4.5 TC1.25x IS PRO, 300mm F4 PRO, 30mm F3.5 Macro, 40-150mm F2.8 PRO 40-150mm F4.0 PRO, 60mm F2.8 Macro, 8-25mm F4 PRO, 8mm F1.8 Fisheye PRO, M.Zuiko Digital ED 100-400mm F5.0-6.3 IS II, M.Zuiko Digital ED 150-600mm F5.0-6.3 IS, M.Zuiko Digital ED 50-200mm F2.8 IS PRO, M.Zuiko Digital ED 90mm F3.5 Macro IS PRO
Compatible Converter	1.4x Teleconverter MC-14, 2x Teleconverter MC-20
Note	Angle of view becomes slightly smaller

Exposure System

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Modes	Aperture priority, Art Filter, AUTO, Bulb (Live Bulb, Live Time, Live Composite), Custom, Manual, Programme automatic, Scene select, Shutter priority
Exposure compensation	+/- 5 EV (1, 1/2, 1/3 steps) Note: Monitor and EVF displays only up to ±3 EV.
Exposure bracketing	3/5 frames (2.0 or 3.0 EV) 7
ISO bracketing	0.3, 0.7, 1.0 EV
HDR bracketing	3 / 5 frames (+/- 2 / 3 EV steps) 7 frames (+/- 2 EV steps)
AE lock	Available Flicker Scan: Available

Multi-Exposure

Max. number of frames	2 frames (shooting)
Auto gain control	Available

Interval shooting

Settings	Available Max. number of frames: 999 (Creation of time-lapse movie possible) Exposure smoothing

Light Metering

Method	TTL image sensor metering
Zones	324 zones Multi-pattern Sensing System
Detection range	-2 - 20 EV (f2.8, ISO 100)
Modes	Centre weighted metering, ESP light metering, Highlight, Shadow, Spot metering

Art Filter

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

Monochrome Profile Control

Monochrome Profile Control	8 color filters with 3 levels; shading effect 11 steps (-5 to +5); Film Grain Off/Low/Med/High; monochrome color Normal/Sepia/Blue/Purple/Green; MONO1–MONO4 memories

Color Profile Control

Color Profile Control	Color Profile Control Saturation of 12 colors adjustable in 11 steps (-5 to +5); shading effect 11 steps (-5 to +5); COLOR1–COLOR4 memories; Highlight & Shadow settings can be stored

Sensitivity

Auto	ISO LOW 64 - 6400
Manual	ISO LOW approx. 64 / approx. 100; ISO 200-25600

White Balance

AUTO WB system	Auto WB
White balance bracketing	3 frames; A-B / G-M axis; 2 / 4 / 6 steps
Custom WB	Custom WB (Kelvin setting)
Manual White balance (One-Touch)	Available
One-touch white balance	4 custom settings can be registered
Preset values	7

Sequence Shooting

Speed	Approx. 5fps (selectable 1-5fps) Max. number of frames: RAW 29 / JPG (LF): 154
Anti-shock mode	

Speed	Approx. 4.8fps (selectable 1-5fps)
Pro Capture mode	
Speed*	Approx. 30fps (selectable 15, 20, 30fps)
Speed (H)	Approx. 30fps **Compatible lenses are limited. ***Focus and exposure are fixed at first frame
Silent mode	
Speed (H)	Approx. 30fps Max. number of frames: RAW 20 / JPG (LF): 20 Max. number of frames: RAW 23 / JPG (LF): 48
Conditions	0When using the M.Zuiko Digital ED 12-40mm F2.8 PRO II Low ISO processing: Priority is given to sequential shooting

Image Processing

Art Filter bracketing	Available
Color space	sRGB / AdobeRGB
Fisheye compensation	Available; 3 styles with M.Zuiko Digital ED 8mm F1.8 Fisheye PRO
Black & White filter	Yellow, Orange, Red, Green
Picture mode	Vivid, Art Filter, Colour Creator, Custom, i-Finish, Colour Profile Control, Monochrome Profile Control, Monotone, Natural, Portrait, Underwater, Flat, e-Portrait
Engine	TruePic™ IX
Tele converter effect	2x

External Flash Control

X-sync speed	1/250 sec.; electronic shutter: 1/50 sec. up to ISO 6400, 1/20 sec. ISO 8000+ / ISO bracketing
Intensity	+/- 3 EV (1/3, 1/2, 1 EV steps)

Wireless Flash Control

Available

Recording Formats

JPEG	Applied
RAW	12bit
RAW & JPEG	Applied parallel recording
Aspect ratio	4:3 / 3:2 / 16:9 / 1:1 / 3:4

Still Image Recording

DCF	2.0
EXIF	3.0
RAW	Applied

Image Size

RAW	5184 x 3888 compressed
JPEG	5184 × 3888 to 1024 × 768

Movie Recording System

Recording format	MOV(MPEG-4AVC/H.264)
Picture mode	Flat, OM-Log400, OM-Cinema1, OM-Cinema2
Time code	Rec run / Free run Drop frame / Non-drop frame ALL-I: FHD 30p/25p/24p approx. 202 Mbps (48kHz/16bit) or approx. 205 Mbps (96kHz/24bit) FullHD IPB /LongGOP FHD 30p/25p/24p approx. 30/33 Mbps; 60p/50p approx. 52/55 Mbps depending on audio

Video Quality	4K, C4K, Full HD, S&Q
4K Movie quality	4096×2160 (C4K) / 24p approx. 237/240 Mbps 3840 x 2160 (4K) / 30p, 25p, 24p / IPB (approx. 102 Mbps)
HD Movie quality	Full HD 1920 × 1080 30p/25p/24p ALL-I or LongGOP; 60p/50p LongGOP

Movie Specialties

Art Filter	Available
Fast motion	S&Q Movie available
Flicker Scan	Available
Monitor mode	Live View Output via HDMI: Monitor mode / Record mode
Record mode	4K/C4K cannot be set; movie quality can be YCbCr 4:2:2 8-bit
High-Speed Recording	S&Q capture up to 120 fps
Time lapse	4
Slow motion	Available

Sound Recording System

Speaker	Built-in mono speaker
Image footage	30s
Internal microphone	Built-in stereo microphones
Microphone functions	Recording Volume, Volume limiter, Wind Noise Reduction

View Images

Modes	Calendar, Enlargement, Index, Movie, Single-frame
Shooting information	Off / On
Highlight/Shadow point warning	Available

Histogram in playback mode	Available
Auto rotation	Available

Image Editing

Editing functions	Aspect ratio, Correction of saturation, e-Portrait, Gradation auto, Image Overlay, Monochrome, Post recording, RAW data edit, Red-eye reduction, Resize, Sepia, Trimming

Movie Editing

In-movie image extraction	Available (4K only)
Trimming	Available

Customisation Options

Programmable button	Equipped
Fn Button	Equipped
My Mode	5 settings storable (Can be set to mode dial.)
Factory reset	Full / Basic
Menu languages in camera	*Available menu languages vary by region., Czech, Dutch, English, Finnish, French, German, Italian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Turkish

Interface

Hot shoe	Equipped
Microphone jack	3.5 ø mm mini-jack (plug-in power on/off)
USB 2.0 High Speed	Applied
USB 3	Type C

Wireless connectivity	Bluetooth®, Wi-Fi
Communication method	Bluetooth® Low Energy Ver.5.2
Note	"HDMI", the HDMI logo and "High-Definition Multimedia Interface" are trademarks or registered trademarks of HDMI Licensing LLC. The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by OLYMPUS CORPORATION is under license. Wi-Fi is a registered trademark of the Wi-Fi Alliance.

Wi-Fi Functions

Easy Connection	QR code setting
GPS info	Available through Smartphone GPS data
Image Share	Available; marking function for image share Simple Image Transfer (Power-Off Standby) Images can be automatically imported using image-share marking / remotely viewed while camera power is off; activated via Bluetooth and imported via Wi-Fi Wireless Release Remote Control Wireless release (half/full press), movie start/stop
Wireless Shooting	Available (Live View remote control)

Tough Features

Weatherproof	Dustproof, Splashproof
Weatherproof Construction	IPX1 when body is used with OM SYSTEM splashproof lens

Power Supply

Battery life

Image shooting	EVF approx. 410 shots / LCD approx. 410 shots (CIPA)
Movie recording	Approx. 80 min CIPA; approx. 130 min when zoom and other operational functions are not used
Battery	BLS-7 Li-ion battery
Sleep mode	1, 3, 5min. and off selectable.

USB charging	Built-in battery can be charged with USB (when camera power is off)
USB Charger	00

Dimensions / Weight

Width	125.8mm
Depth	43.3mm
Height	74.5mm
Weight	393g (including battery and memory card)
Weight (body only)	344g (body only)

Environment

Humidity	30 - 90% operation humidity / 10 - 90% storage humidity
Temperature	0 - 40°C (operation) / -20 - 60°C (storage)

Exterior

Available Colours	Black, Silver

Product safety

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