

Olympus OM-D E-M1X SPECIFICATIONS

Sensor / Dust Reduction

Sensor Type	4/3" Live MOS Sensor
Effective Pixels	20.4 million
Total Pixels	21.8 million
Aspect Ratio & Area	4:3 / 17.4 x 13.0mm
Dust Reduction	Super Sonic Wave Filter

Processor

Processor Type	Dual TruePic™ VIII
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Focusing System

AF System Type	High-speed imager AF: Imager phase detection AF and imager contrast AF used in combination; When a Four Thirds lens (mount adapter sold separately necessary) is attached, imager phase detection AF is always enabled).
AF Working Range	EV -3.5~20 (ISO approx.100, with a f/2.8 lens)
Focusing Points / Focusing Points Selection Mode	121-point cross-type phase detection AF and 121-point 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)
Focus Modes	Single AF (S-AF)*1 / Continuous AF (C-AF)*1 / Manual Focus (MF) / AF tracking (C-AF + TR)*1 / Preset MF*2 *1 AF+MF selectable *2 Distance setting values are rough estimates and not compatible lens except the AF lens.
AF Limiter	Available (Fn button can be assigned to On/Off; can save 3 distance settings) *Distance setting values are rough estimates.
AF Performance	C-AF lock (5 steps) , AF scanner (3 types) , C-AF Center Priority , C-AF Center Start 3x , 5x , 7x , 10x , 14x
Magnified Frame	*Autofocusing is possible in the magnified frame; can be assigned to button to turn magnify frame AF on/off and to activate magnification; touch icon on monitor to turn off; enables selection of focusing point from 800 or more.
Super spot AF	Available*(Contrast AF in center of the monitor when magnified) *Available only when a Micro Four Thirds lens is attached.
Face Detection AF / Eye Detection	Available Eye Detection AF mode : off / nearer-eye priority / right-eye priority / left-eye priority
Intelligent Subject Detection AF	Available Formula cars, rally cars, motorcycles, aircrafts, helicopters, bullet trains, standard trains, steam locomotives
AF Targeting Pad	Available (activate / deactivate with double tap on rear monitor)
Manual Focus Assist	Focus ring rotation activates Live View image magnification and/or focus peaking when in S-AF+MF or MF mode
Peaking Function	Activate with Fn button or focus ring Change peaking settings using the Info button Color selection: white, black, red, yellow Intensity selection: high, normal, low Back light effect: on, off
AF Focus Adj.	Adjust all, adjust by lens (for Phase detection AF only)
AF Illuminator	Available

Image Stabilization

System Type	Built-in 5-axis* sensor-shift image stabilization for movie and still photos *yaw/pitch/roll/vertical shift/horizontal shift
Modes	4 modes (S-IS AUTO, S-IS1, S-IS2, S-IS3), OFF
Live View Image Stabilization	Activation by half-pressing shutter button or pressing AEL/AFL button, enlarging view
Focal Length Setting	11 settings: 10 programmable settings (10 lenses), 1 open setting
IS for Live View Image	Activation by half-pressing shutter button or enlarging view
5-Axis Sync IS	Available* *When using M.Zuiko Digital lenses equipped with image stabilization
Stabilization Performance	7.0 EV* *Based on CIPA measurement conditions. When using M.Zuiko Digital ED 12-40mm f/2.8 PRO (focal length =40mm (35mm equivalent: 80mm)) 7.5 EV* *Based on CIPA measurement conditions. When using M.Zuiko Digital ED 12-100mm f/4.0 PRO (focal length =100mm (35mm equivalent: 200mm)), with camera body IS set to Off, Frame rate: High
Lens IS Priority	Available

Shutter / Sequential Shooting

Shutter Type	Focal-plane shutter (mechanical shutter): 1/8000 - 60 sec., with selectable EV adjustment steps (1/3, 1/2, 1) *Live Bulb / LiveTime: selectable exposure time (1/2/4/8/15/20/25/30 min.), with 8-min. default setting *Live Composite: 3 hours maximum shooting time Electronic first curtain shutter (Anti-shock mode) : 1/320 - 60 sec Electronic shutter (Silent mode): 1/32000 - 60 sec Flicker Scan: Video recording 1/30 (50fps:1/50, 60fps:1/60, Highspeed: 1/120) -1/250.0 Still 1/50.0-1/7634 *Video recording S/M mode, Still S/M silent mode only. Selectable with a minimum of 0.1
Sequential Shooting Maximum Speed	[Sequential shooting H] approx. 15 fps with selectable 10-15 fps [Sequential shooting L] approx. 10 fps with selectable 1-10 fps [Anti-shock sequential shooting L] approx. 8.5 fps with selectable 1-8 fps [Silent sequential shooting H] approx. 60 fps with selectable 15, 20, 30, 60 fps [Silent sequential shooting L] approx. 18 fps with selectable 1-10, 15, 18 fps [Pro Capture H] approx 60 fps with selectable 15, 20, 30, 60 fps [Pro Capture L] approx 18 fps with selectable 1-10, 15, 18 fps *When using the M.ZUIKO DIGITAL ED 12-40mm f/2.8 PRO *Maximum sequential shooting speed may be affected by several factors including lens used, brightness, aperture, shutter speed, and ISO setting *When in Pro Capture mode, slower shutter speeds and flash can not be used *Pro Capture L mode is available when using an Olympus Micro Four Thirds lens *In Pro Capture L mode, the minimum aperture is f/8. *When ISO is 8000 or above, 30 fps becomes the maximum sequential shooting speed, and the actual shooting speed may become slower than the set shooting speed by a few frames per second. When using ISO Bracketing, performance will be affected at ISO 2000 or above *Focus and exposure are fixed at the values of the first shot when using sequential shooting H *Maximum sequential shooting speed is 8.5 fps for anti-shock sequential shooting L, even when set to 9 or 10 fps

Max. Recordable Pictures in Sequential Shooting	[Sequential shooting H 15 fps] RAW: Max. 103 frames, JPEG (LF): Max. 132 frames [Sequential shooting L 10 fps] RAW: Max. 287 frames, JPEG (LF): Until card is full [Silent sequential shooting L 60 fps] RAW: Max. 49 frames, JPEG (LF): Max. 49 frames [Silent sequential shooting L 18 fps] RAW: Max. 74 frames, JPEG (LF): Max. 89 frames
Sequential Shooting Frame Count	1 - 99 frames
Pre-shutter Frames *For Pro Capture mode only	Number of frames recorded prior to full-press of the shutter button can be set from 0 to 35 frames.
Self Timer	Operation time: 12 sec., 2 sec., custom (Wait time: 1-30sec., Shot interval: 0.5/1/2/3sec., Number of shots: 1-10, Every time AF: ON/OFF)
Viewfinder / Monitor	
Finder Type	Eye-level electronic viewfinder, approx. 2.36M dots
Field of View / Viewfinder Magnification	Approx. 100% / Approx. 1.48x*1 - 1.65x*2 (-1m-1, 50mm lens, Infinity) *1: Finder Style 1, 2 (aspect ratio 4:3) *2: Finder Style 3 (aspect ratio 4:3)
Eye Point / Diopter Adjustment Range	Approx. 21mm (-1m-1, Distance from rear lens surface) / -4 ~ +2m-1
Preview	Live View preview with depth of field preview lock
Display Grid	Off / normal grid / trichotomy / golden grid / scale / diagonal / movie grid *grid color is selectable
Level Gauge	2-axis (horizontal / vertical) level gauge
One Touch Tele-Converter	Available (2x)
Finder Style	3 styles
Brightness / Color Temp Control	Adaptive brightness technology (EVF Auto Luminance) / ±7 level manual brightness control / ±7 level manual color temperature control
S-OVF (Simulated OVF)	Expands the Live View dynamic range. *Available in the EVF when in P, A, S and M modes. Art filter, WB and exposure are not reflected in EVF.
Rear Monitor Size	3.0-inch vari-angle monitor* *Approx.1037k dots (3:2), electrostatic capacitance touch panel
Touch Control	Shutter release, Touch AF (AF area selection, AF area size adjustment) AF targeting pad, frame forward/backward, magnified playback, Super Control Panel, Wi-Fi connection, movie controls
Tilting Capability	Available (mirror display when monitor is in self portrait position)
Brightness / Color Temp Control (Rear Monitor)	±7 levels / ±7 levels
Color Tone Select	Vivid / Natural
Live View	Approx. 100% field of view, exposure compensation preview, WB adjustment preview, gradation preview, face detection preview (up to 8 faces), grid line, magnification display (x3/x5/x7/x10/x14), Live View Boost 1, Live View Boost 2* (For dark situations) *Settings can be specified for each shooting mode
Live View Boost	*Live View Boost 2: Frame Rate Priority or Quality Priority selectable *Off: Brightness in Live View shows specified exposure settings.
Exposure Control / Flash	
Metering System	Digital ESP metering (324-area multi pattern metering), center-weighted average metering, spot metering*, spot metering with highlight control, spot metering with shadow control *Also available AF target spot metering
Metering Range	EV -2 - 20 (ISO approx.100, with a f/2.8 lens)
Exposure Mode / Shooting Mode	P: program AE (program shift can be performed), A: aperture priority AE, S: Shutter priority AE, M: Manual, B: Bulb (Live Bulb, Live Time and Live Composite are available), Custom 1~4
ISO Sensitivity	AUTO ISO (default) : LOW (approx.64) - 6400 with customizable default and upper limit (200 - 6400) Manual ISO : LOW (approx.64, approx.100), 200 - 25600 (adjustable in 1/3 or 1 EV steps) ±5 EV, adjustable by 1/3, 1/2 or 1 EV steps
Exposure Compensation	When shooting in HDR or in video, only adjustable up to ±3 EV steps Live View only reflects up to ±3 EV steps
AE Lock	Locks with a half-press of the shutter button (can be set to AEL/AFL button as well)
Anti-Flicker Shooting	Available
Flash Intensity Control Mode	TTL Auto, Auto*, Manual, Super FP*(FP-TTL AUTO, FP-MANUAL) * Available on the external flash
Flash Mode	Redeye, Fill-in, Flash Off, Red-eye Slow sync.(1st curtain), Slow sync.(1st curtain), Slow sync.(2nd curtain), Manual (1/1 (FULL) ~1/64) 1/250 sec.
Synchronization Speed	*When using Super FP: 1/125-1/8000 sec. *When using electronic shutter: 1/50 sec. up to ISO6400, 1/20 sec. for ISO 8000 and higher, and 1/20 sec. for ISO bracketing
Flash Intensity Control	Up to ±3 EV in 1/3, 1/2, 1 EV steps selectable
Compatible External Flash	FL-50R, FL-36R, FL-20, FL-14, FL-300R, FL-600R, FL-900R, STF-8, FL-700WR
Wireless Flash Control Method	Triggered and controlled by Olympus Wireless RC Flash system compatible flashes: FL-LM3 or separately available FL-600R and FL-900R, STF-8, FL-700WR
External Flash Intensity Type	TTL Auto, Auto, Manual, FP-TTL-AUTO, FP-MANUAL
Channel No.	4 channels
Group No.	4 groups (External flash 3 groups + commander flash)
Radio Wireless Control	Available
Memory / Image Recording (File Format)	
Compatible Memory	SD, SDHC*1, SDXC*1 *1 UHS-I,II compatible
Recording Format	DCF2.0, Exif2.31
File Format	RAW (12-bit lossless compression), JPEG, RAW+JPEG
Recording Image Size	[RAW] 5184 x 3888 pixels [JPEG] 5184 x 3888 pixels - 1024 x 768 pixels
Dual Card Slot Settings	Standard, Auto Switch, Dual Independent, Dual Same *When two cards are inserted, card to be saved on to or to be viewed can be designated.
Folder Creation and Selection	Available

Copy	Copy single file, copy multiple files, copy all *When copied, the new file will be given a different name from that of the original file.
White Balance / Color Mode	
White Balance Mode	Auto WB, 7 Preset WBs, 4 Capture WBs, Custom WB(Kelvin setting)
White Balance Compensation*	±7 steps along A-B / G-M axis * Except for Custom WB
Preset White Balance	7 preset WBs (3000K - 7500K) - Sunny(5300K), Shadow(7500K), Cloudy(6000K), Incandescent(3000K), Fluorescent(4000K), Underwater, WB Flash(5500K)
CWB (Kelvin Setting)	2000 - 14000K
Capture White Balance	4 custom settings can be registered
Color Mode	sRGB, Adobe RGB
Bracketing / HDR	
Exposure Bracketing	2, 3 or 5 frames in 0.3/0.7/1.0EV steps selectable, 7 frames in 0.3/0.7EV steps selectable
ISO Bracketing	3 frames in 0.3/0.7/1.0EV steps selectable
White Balance Bracketing	3 frames in 2, 4, 6 selectable steps for A-B/G-M axis.
Flash Bracketing	3 frames in 0.3/0.7/1.0EV step selectable
Art Filter Bracketing	i-Enhance, Vivid, Natural, Muted, Portrait, Monotone, Custom, Art Filters, Color Creator selectable
Focus Bracketing	3 to 999 shots, focus steps adjustable from 1 to 10 (compatible with Micro Four Thirds lenses) 8 shots are taken at different focus points and automatically composited together into a single image * Angle of view becomes slightly smaller (The cut area guide is displayed) * Compatible with : M.Zuiko Digital ED 60mm f/2.8 Macro M.Zuiko Digital ED 12-40mm f/2.8 PRO M.Zuiko Digital ED 40-150mm f/2.8 PRO M.Zuiko Digital ED 30mm f/3.5 Macro M.Zuiko Digital ED 7-14mm f/2.8 PRO M.Zuiko Digital ED 8mm f/1.8 Fisheye PRO M.Zuiko Digital ED 300mm f/4.0 IS PRO M.Zuiko Digital ED 12-100mm F4.0 IS PRO
Focus Stacking Mode	HDR1, HDR2 (painting-like) ※ISO sensitivity is fixed at 200, and maximum shutter speed setting is 4 sec. ※Exposure compensation can be performed.
HDR (Auto Composite)	3 or 5 frames in 2.0 or 3.0 EV steps, or 7 frames in 2.0 EV steps. *This sequential shooting H AE bracketing is specifically designed for shooting images that will be HDR-processed on a PC.
Bracketing for HDR post-process	
Creative Features	
Picture Mode	i-Enhance, Vivid, Natural, Muted, Portrait, Monotone, Custom, e Portrait, Underwater, Color Creator, Art Filters
Gradation	Auto, Normal, High Key, Low Key [except when using e-Portrait, Underwater, Art Filters, Color Creator]
Highlight and Shadow Control	±7 steps each for highlight, shadow, midtone
Picture Tone	Neutral, Sepia, Blue, Purple, Green for Monotone
Art Filter (Variation / Art Effect)	Pop Art (I, II / a.b.c.d.e) Soft Focus (- / c.e) Pale & Light Color (I, II / a.b.c.d) Light Tone (- / d) Grainy Film (I, II / b.c.d.f.g) Pin Hole (I, II, III / d.) Diorama (- / d.) Cross Process (I, II / b.c.d.) Gentle Sepia (- / a.b.c.d.f.) Dramatic Tone (I / b.c.d.e.f.) (II / b.c.d.e.f.g.h) Key Line (I, II / a.b.c.d.e.) Watercolor (I, II / a.b.c.d.) Vintage (I, II, III / a.b.c.d.e.f.i) Partial Color (I, II, III / a.b.c.d.e.f.i) Bleach Bypass (I, II / a.b.c.d.e.f.i) Instant Film (- / a.b.c.d.e.f.i)
Art Effect	a. Soft Focus Effect b. Pin-Hole Effect c. White Edge Effect d. Frame Effect e. Star Light Effect f. Blur Effect (Top & bottom, Left & Right) g. B&W Effect (None, Yellow, Orange, Red, Green) h. Picture Tone (None, Sepia, Blue, Purple, Green) i. Shade Effect (Top & bottom, Left & Right)
Color Ring (for partial color)	18 color selectable
Live Bulb / Live Time	Update Interval Time - 0.5 sec – 60 sec
Live Composite	Update Interval Time / composite method – 0.5 sec – 60 sec / Lighten Mode (Bright area prioritization)
Interval Shooting	Interval Time 1sec. - 24 Hours, Max 999 frames. Available on making Time-lapse movie automatically
Multiple Exposure (number of pictures / function)	2 frames / Auto gain, Exposing on Recorded picture(RAW)
Fisheye Compensation	3 styles (can be confirmed in Live View) *Underwater correction compatible * Enabled when M.Zuiko Digital ED 8mm f/1.8 Fisheye PRO is used.
Live ND (Neutral Density)	Available *Shutter Priority and Manual mode only, flash can not be used, ISO up to 800, the maximum shutter speed is 1/30 (when ND2 is set) and the speed drops if the number of ND steps is raised Equivalent to 50 megapixels / 25 megapixels
High Res Shot	*Available in P/A/S/M mode, RAW+JPEG or JPEG. *JPEG: 8160 x 6120(50M) 5760 x 4320(25M) / RAW: 10368 x 7776 *RAW data can be developed in-camera. You need to install Olympus Workspace to develop on a PC. *Electronic Shutter 1/8000 - 60 sec.

Handheld High Res Shot	Equivalent to 50 megapixels / 25 megapixels *Available in P/A/S/M mode, RAW+JPEG or JPEG. *JPEG: 8160 x 6120(50M) 5760 x 4320(25M) / RAW: 8160 x 6120 *Flash can not be used *RAW data can be developed in-camera. You need to install Olympus Workspace to develop on a PC. *Electronic Shutter 1/8000 - 60 sec.
Keystone Compensation	Available (can be confirmed in Live View) *Horizontal and vertical compensation can be performed simultaneously.
Video / Audio Recording	
Video Recording Format	MOV(MPEG-4AVC/H.264)
Movie Mode / Frame Rate / Compression Method	4096 × 2160 (C4K) / 24p / IPB (approx. 237 Mbps) 3840 × 2160 (4K) / 30p, 25p, 24p / IPB (approx. 102 Mbps) 1920 × 1080 (FHD) / 30p, 25p, 24p / ALL-I (A-I), IPB (SF, F, N) 1920 × 1080 (FHD) / 60p, 50p / IPB (SF, F, N) 1280 × 720 (HD) / 60p, 50p, 30p, 25p, 24p / ALL-I (A-I), IPB (SF, F, N) 60p : 59.94 fps, 50p : 50.00 fps, 30p : 29.97 fps, 25p : 25.00 fps, 24p : 23.98 fps, C4K 24.00 fps FHD ALL-I (A-I) : ALL-Intra / approx. 202 Mbps), FHD IPB (SF: SuperFine / approx. 52 Mbps, F: Fine / approx.. 30 Mbps, N: Normal / approx. 18 Mbps) HD ALL-I (A-I) : ALL-Intra / approx. 102 Mbps), HD IPB(SF : SuperFine / approx.26Mbps, F:Fine / approx.14Mbps、 N : Normal / approx.10Mbps) HD (1280 × 720) / 30p *Frame rates may drop when particular Art Filters and Movie Effects are used. *Class 10 or higher SD card is recommended for shooting movies. *UHS-II or UHS-I U3 card is recommended for 4K,C4K,ALL-I shooting.
Maximum Video Recording Time	Approx. 29min
Movie Tele-converter	Approx. 3x (enlarges view of selected area)
Art Filter Movie	Available (Frame rates may drop when certain Art Filters are used)
Movie Effect	One-shot Echo / Multi-echo / Art Fade / Old Film [AVI]
Time-lapse Movie	3840×2160 (4K) / 5fps 1920×1080 (FHD)/ 5fps, 10fps, 15fps 1280×720 (HD)/ 5fps、10fps、15fps、30fps
Quick Movie / Slow Movie High speed movie	With (Both or either of the two may not be available depending on the frame rates. 120fps (1920×1080/MOV)
IS for Movie	M-IS1*(Image sensor shift and electronic image stabilizer with multi motion IS), M-IS2(Image sensor shift with multi motion IS), Off *While using M-IS1, field of view may be affected.
AE Lock	Available
Video Exposure Control	Program AE, aperture priority AE, shutter priority AE, manual
Grid Lines / Focus Peaking	4 types of grid lines / 4 colors for focus peaking
Time Code	Rec run/free run, drop frame/non-drop frame
Live View Output via HDMI	Monitor Mode (outputs video and info display to a connected monitor) *1 Record Mode (outputs video only, with no info display) *2 *1 While recording, footage is simultaneously displayed on the HDMI monitor and on the camera, but the info display is shown only on either one of the two. While playing movies, footage is simultaneously displayed on the HDMI monitor (normal size) and on the camera (normal size or enlarged). However, the image can not be enlarged on the camera when a movie is being recorded. *2 Movie quality is set to YCbCr 4:2:2 (8 bit), frame rate follows movie setting (24p, 30p and 60p settings are not recommended.), and sound will be recorded.
Movie Picture Mode	Flat,OM-Log400 *View assist compatible
Audio Recording Format	Wave Format (Stereo linear PCM/16-bit, Sampling frequency 48kHz)
Microphone / Speaker	Built-in stereo microphone / built-in mono speaker *External stereo microphone can be attached
Microphone Function	Wind noise reduction, recording volume, microphone volume limiter Audio dubbing possible for still pictures (up to 30 sec.) *May affect audio quality.
IC Recorder Linkage	Slate Tone / Synchronized Audio Rec-Movie Rec *LS-100 compatible
Operability	
GPS Info Function	Available (Via GPS smartphone) *Built-in GPS info given priority
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 *P / A / S / M / B and drive mode can be selected. Aperture, shutter speed, exposure, ISO sensitivity, white balance and sequential shooting can be adjusted.
Image Share	File Type: JPEG*, MOV Marking function for image share.
Easy Connection	Connect using a QR code Connect using Bluetooth (View, Transfer only. Enabled from the second time)
Tethered Shooting	Via USB cable (camera can be operated by both PC or camera controls) Via Wi-Fi (Transfer of recorded images to PC via access point, 5GHz and 2.4GHz available)
GPS / Field Sensor System	GPS (GLONASS,QZSS), compass, manometer, temperature sensor, Acceleration sensor
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), Light Box display
Information Display	Histogram (independent luminance / RGB available), Highlight/Shadow point warning, AF frame, Photographic information, OFF
Custom	
My Menu	35 items in 5 tabs with 7 items each
Mode dial my set	4 types of settings can be configured to C1-C4 modes on mode dial.

Menu custom set	Available (Settings configured to C1-C4 can be called up via the menu even in P,A,S,M and B modes. *Some items including shooting mode may not be called up.
Multi Selector customization	With
Dial customization	Dial function and dial direction are customizable for both dials
Lever customization	Select assignment from 3 different modes, power switch, or off (no function assignment) Up to 39 functions can be assigned to buttons
Button Customization	*Up to 24 functions can be assigned for movie recording *Buttons on lenses can also be customized from the camera *Some buttons may have restrictions to what functions can be assigned
Copyright Settings/Lens info Settings	With / With (save up to 10 lenses)
Menu Languages (34 selectable)	English, French, German, Spanish, Italian, Japanese, Korean, Traditional Chinese, Simplified Chinese, Russian, Czech, Dutch, Danish, Polish, Portuguese, Swedish, Norwegian, Finnish, Croatian, Slovenian, Hungarian, Greek, Slovakian, Turkish, Latvian, Estonian, Lithuanian, Ukrainian, Serbian, Bulgarian, Rumanian, Indonesian, Malay, Thai
Connectivity / Power Requirements	
USB Connector	USB Type-C
Remote Connector	φ2.5Pin Jack (when using separately available RM-CB2).
HDMI Connector	Micro HDMI (type D)
Flash Attachment	Hot shoe, sync terminal
Wireless LAN	Built-in (IEEE 802.11b/g/n/ac)
MIC Input Jack	φ3.5 stereo mini jack (plug-in power on/off)
Headphone Jack	φ3.5 stereo mini jack
PC Interface	SuperSpeed (USB3.0)
TV Interface	Not Available
Battery	Two BLH-1 Li-ion batteries (included) * Can be operated when only one BLH-1 Li-ion battery is equipped.
Battery Status Display	Remaining power (4 steps, %, or by-minute display), shot count, degradation
AC Adapter	AC-5 AC adapter is separately available (connects to power battery holder HLD-9 to provide power to camera).
USB Bus Power	A USB PD bus power can be used ※ PD compliant Camera: Rev 3.0 Ver 1.0a
USB Charging	Built-in battery is charged with AC-5 / USB * When the camera power is off * Performance varies depending on different USB devices
Sleep Mode	Available (1/3/5 min. off)
Number of Recordable Pictures	Approx. 870 shots (using 2 BLH-1 and Toshiba SDXU-D032G with IS ON, with no flashes attached, based on CIPA test standards) Approx. 2,580 shots (using quick sleep mode, under Olympus testing conditions based on CIPA test standards)
Battery Life for Movie Recording	Approx. 170 minutes* (under standard JEITA testing) Approx. 350 minutes* (when zoom and other operational functions are not used) *When repeatedly recording at the maximum time of 29 minutes
Weights & Dimensions / Operating Environment / Box Contents	
Weight	Approx. 997g (with 2 BLH-1 batteries and 2 Memory cards, based on CIPA standards, without eyecup) Approx. 849g (body only)
Dimensions	W:144.4mm H:146.8mm D:75.4mm (based on CIPA standards: excludes protrusions)
Environmentally Sealed	Dust, Splash (IPX1), Freezeproof
Operating Temperature Range	-10°C ~ +40°C (when in operation) / -20°C ~ +60°C (when stored)
Operating Humidity Range	30 - 90% (when in operation) / 10 - 90% (when stored)
Box Contents	Body, USB cable, cable clip, cable protector, shoulder strap, instruction manual, warranty card, BLH-1 Li-ion battery (Two), BCH-1 Li-ion battery charger (Two)