

# CAMEDIA E-10

## 1. General information

Q: What is the difference between the E-10 and C-2500L?

A: This table illustrates the main differences.

	E-10	C-2500L
File type	TIFF: non-compression image JPEG DCF (Design rule for Camera File System) DPOF compatible	
SmartMedia 3V (3.3V)	4 MB, 8 MB, 16 MB, 32 MB and 64 MB Important: <u>2 MB cards cannot be used</u>	2 MB, 4 MB, 8 MB, 16 MB, 32 MB and 64 MB
CompactFlash	Type I / Type II : up to 256 MB (micro drive is not recommended)	Type I: up to 96 MB
Imager (CCD)	2/3 inch <u>interlaced</u> primary (RGB) colour filter	2/3 inch progressive primary (RGB) colour filter
CCD pixel	4.0 million pixels (effective: 3.9 million pixels)	2.5 million pixels (effective: 2.4 million pixels)
Image quality mode	RAW: CCD raw data TIFF: 2,240 x 1,680 pixels: non-compression SHQ: 2,240 x 1,680 pixels: low compression JPEG HQ: 2,240 x 1,680 pixels: JPEG SQ: 1,280 x 960 pixels: JPEG *1) TIFF mode only with 2,240 x 1,680 pixels *2) JPEG mode can be adjusted in size and compression level from the following settings. Recording resolution in pixels: 2,240 x 1,680 (FULL) 1,600 x 1,200 (HALF) 1,280 x 960 (SXGA) 1,024 x 768 (XGA) 640 x 480 (VGA) JPEG compression ratio: 1/2.7, 1/4, 1/8	SHQ: 1,712 x 1,368 pixels: TIFF (non-compression) 1,712 x 1,368 pixels: JPEG HQ: 1,712x1,368 pixels: JPEG SQ: 1,280 x 1,024 pixels: JPEG 640 x 512 pixels: JPEG
Metering system	Digital ESP, centre-weighted average, spot	Centre-weighted average, spot
Exposure control	Program auto, aperture priority, shutter priority and manual exposure mode  Exposure compensation +/- 3EV with 1/3 EV steps  Aperture setting (1/3EV steps) Wide: F2.0 – F11 Tele: F2.4 – F11  Shutter speed setting (1/3EV steps) Auto mode: 2 – 1/640 sec. manual mode: bulb (up to 30 seconds), 8- 1/640	Program auto, aperture priority and manual exposure mode  Exposure compensation +/- 2EV with 1/3 EV steps  Aperture setting: Wide: F2.8, F5.6 Tele: F3.9 – F7.8  Shutter speed setting Auto mode: 1/2 – 1/10000 sec. manual mode: 8- 1/10000
ISO sensitivity	Auto, 80, 160, 320	100, 200, 400
White balance	Full auto, pre-set (7 steps), one touch	Full auto, pre-set (6 steps), one touch
Lens	Olympus lens: 9 - 36mm 4x zoom F2.0/2.4 – 11, 14 elements in 11 groups all glass, including 2 aspherical lenses, two high index low dispersion lenses and one ED (Extra-low Dispersion) lens equivalent to 35 -140 mm lens on 35 mm camera.	Olympus lens: 9.2 - 28 mm 3x zoom F2.8/3.9 – F5.6/7.8, 7 elements in 7 groups all glass, including 1 aspherical lens equivalent to 36 - 110 mm lens on 35 mm camera
Sequence shooting	Approx. 3 frames a second up to 4 images	Approx. 1.3 frames a second up to 5 images

Quick shooting	Possible	Possible
Super macro	No	Wide: approx. 2cm -0.6m Tele: approx. 0.3m - 0.6m
Macro	Approx. 0.2m - 0.6m	Approx. 0.3m - 0.6m
Manual focus	0.2m – ∞ (at infinity)	0.3m, 0.35m, 0.4m, 0.5m, 0.6m, 0.8m, 1m, 1.2m, 1.5m, 2m, 2.5m, 3.5m, 5m, 8m, 15m, ∞
Close-up display	1.5x, 2x, 2.5x, 3x, 4x (scrolling possible)	2x, 4x (scrolling possible)

## Q2: Main features

### (1) High image quality

- 4.0 million pixels CCD
- high performance 4x zoom lens: F2.9/F2.4 all glass lens, all multi-coated
- versatile metering system: D-ESP, center weighted and spot
- versatile white balance mode: Full auto TTL, easy on-touch and 7 steps pre-set

### (2) Manoeuvrability

- approx. 60 ms shutter time lag
- 3 frames per second up to 4 images
- compatible with 5 kinds of battery
- strong aluminium die-casting body
- SmartMedia and CompactFlash compatibility
- 20cm macro photo possible in all focus length

### (3) easy operation

- quick operation possible with well-positioned short-cut buttons
- focus detail checking possible with focusing screen in optical viewfinder
- photographic information in optical viewfinder
- Swivel TFT LCD monitor for waist level shooting or high angle shooting

### (4) versatile accessories system

- enrich extension lens system  
cable remote control system (AF lock possible).
- x-synchronisation socket and hot shoe for external flash system
- USB storage class for easy connection with personal computer system

## Q Movie?

No

## Q: Sound recording?

No

## Q: Water-proof?

No

## Q: Aqua case?

No

## Q: Can The TFT LCD monitor show a live image in shooting mode?

Yes

## Q: Quick view function?

Yes. Double click of display button can change to display mode from shooting mode

## Q: Multi-AF?

No

## Q: Image stabilisation system?

No

## Q: Image effects like sepia and black and white?

No

## Q: Panorama function?

No

## Q: Back up battery for date data?

Internal rechargeable manganese-lithium battery is used. It does not need to be changed.

## Q: Can focusing screen be changed?

No

Q: Does E-10 have an eyepiece shutter?

Yes

Q: Electronic shutter sound?

Yes, there are two possible options: Mode 1 is based the mechanical sound made by the OM-2. Mode 2 is based on the shutter sound of the L-1 (motor driven).

## 2: Shooting

Q: Does the camera use the Olympus image optimisation algorithm, TruePic?

Yes

Q: How does quick and sequence shooting work?

The camera saves image data in an internal 256 Mbit (32 MByte) RAM before writing it onto a SmartMedia or CompactFlash memory card. The user can take pictures quickly if the internal buffer memory has enough space for next picture. Picture can be taken every 1 - 2 sec after the last exposure even when not in sequence mode).

In sequence mode, approx. 3 frames can be captured in a second. (TFT monitor does not show live image during sequence shooting.)

Q: Auto bracketing?

Auto bracketing is possible (Auto Exposure Bracket).

The setting order is normal, under and over exposure. (3 shots are taken in the same quality mode)

The exposure compensation level is selectable from 1/3EV, 2/3EV and 1EV.

Q: What is the field of view?

95% in optical SLR viewfinder. 100% in LCD monitor.

Q: Eye-point (eye-relief)?

11.1mm (-1 diopter) from cover glass of optical view finder

Q: Dioptic correction of viewfinder?

-3 to +1 diopers adjustment possible with dial. Factory setting is -0.5 diopters.

Q: Finder magnification?

Wide: 0.42x, Tele: 1.60x

Q: Photographic information in the viewfinder

AF mark, flash mark, macro mark, shutter speed, aperture value, metering mode, exposure (compensation) level, AE lock mark and white balance mark

These are shown for 8 sec after the first release.

Q: Spot metering?

Yes. The central 1.2% of the frame is measured.

Q. How many blades does E-10's aperture have?

7 blades.

Q: What are the file sizes?

The approximate sizes are as follow:

Pixel size	Compression ratio				
	1/1	1/2.7	1/4	1/8	RAW
2,240 x 1,680 (FULL)	11.3 MB	2.8 MB	2 MB	1 MB	7.6 MB
1,600 x 1,200 (HALF)	-	1.5 MB	1 MB	510 KB	-
1,280 x 960 (SXGA)	-	940 KB	650 KB	340 KB	-
1,024 x 768 (XGA)	-	610 KB	420 KB	230 KB	-
640 x 480 (VGA)	-	260 KB	180 KB	110 KB	-

\*) RAW data can be shown as a thumbnail image because of the character of the data (it is not really image data yet). Please use image application software on personal computer to view. (the extension of RAW data is .orf.)

Q: flash working range

ISO	E-10 WIDE	E-10 TELE	C-2500L WIDE	C-2500L TELE
AUTO	0.6m - 8.9m	0.5m - 7.4m	-	-
80	0.6m - 6.3m	0.5m - 5.2m	-	-
100	-	-	0.3m - 3.6m	0.3m - 2.5m
160	0.9m - 8.9m	0.7m - 7.4m	-	-
200	-	-	0.9m - 5.1m	0.6m - 3.5m
320	1.3m - 12.5m	1.0m - 10.4m	-	-
400	-	-	1.2m - 7.2m	0.8m - 5.0m

Note: Smaller aperture setting in A or M mode, E-10 can still get sufficient lighting at shorter distance than above data. The lens barrel may cut light beam from flash in macro photo distance. Please check image after shooting.

Q: G number of internal flash

ISO equivalent	GN
80	12.5
160	17.7
320	25
(ISO100: for reference)	(14)

Q: flash working range of external flash

Length (m) = (GN of flash) \* square(ISO on camera / ISO100) / F value of camera (aperture setting)

Q: E-10 has an external flash off mode.

No. please turn off external flash or disconnect external flash.

### 3: Extension lens

Q: E-10's extension lens?

	specifications					
	Model name	Focus length with E-10	Composition F No.	Front filter size	Rear filter size	note
Macro extension lens	MCON-35	-	Same with camera setting	72mm	62mm	2 elements in 2 groups all multi-coated lens
0.8x wide extension lens	WCON-08B	28mm		105mm		3 elements in 3 groups all multi-coated lens
1.45x tele extension lens	TCON-14B	200mm		86mm		5 elements in 3 groups all multi-coated lens
3x extension lens	TCON-300	420mm	F2.8 at open aperture (-0.36EV sift)	49mm	-	12 elements in 11 groups all multi-coated lens full length approx. 180mm support arm is required to mount extension

Q: Contents of the extension lens box

Model		Contents
Macro extension lens	MCON-35	1. extension lens 2. front cap 3. rear cap 4. case 5. instruction manual
0.8x wide extension lens	WCON-08B	
1.45x tele extension lens	TCON-14B	
3x extension lens	TCON-300	1. extension lens 2. front cap 3. rear cap 4. case 5. instruction manual 6. support arm 1 (TCON-SA1)

Q: working distance/subject field size of E-10

Zoom position	Focus mode	distance	Subject field size (H)mm x (V)mm
WIDE	Normal or manual focus mode	$\infty$	-
		60cm	629 x 465
	Macro or manual focus mode	20cm	234 x 172
TELE	Normal or manual focus mode	$\infty$	-
		60cm	176 x 132
	Macro or manual focus mode	20cm	76 x 57

Q: working distance/subject field size of E-10 with macro extension lens MCON-35

	Camera focus position	distance	Subject filed size (H)mm x (V)mm
WIDE	$\infty$	35cm	333 x 251
	60cm	22cm	226 x 170
	20cm	12cm	147 x 110
TELE	$\infty$	35cm	86 x 65
	60cm	22cm	65 x 49
	20cm	12cm	49 x 37

Note: in usual lens mode, normal focus mode is 60cm to infinity. Macro focus mode is 20cm to 60cm. Manual focus mode is 20cm to infinity ( $\infty$ ). Please set extension lens mode to get proper focus and exposure, normal focus mode can use 20cm to infinity in the extension lens mode.

Q: working distance/subject field size of E-10 with macro extension lens WCON-08B

	Camera focus position	distance	Subject filed size (H)mm x (V)mm
WIDE	$\infty$	$\infty$	-
	60cm	39cm	553 x 408
	20cm	11cm	194 x 143

Note: in usual lens mode, normal focus mode is 60cm to infinity. Macro focus mode is 20cm to 60cm. Manual focus mode is 20cm to infinity ( $\infty$ ). Please set extension lens mode to get proper focus and exposure, normal focus mode can use 20cm to infinity in the extension lens mode.

Q: working distance/subject field size of E-10 with macro extension lens TCON-14B

	Camera focus position	distance	Subject filed size (H)mm x (V)mm
TELE	$\infty$	$\infty$	-
	60cm	113cm	249 x 187
	20cm	32cm	108 x 81

Q: working distance/subject field size of E-10 with macro extension lens TCON-300

- at  $\infty$  position on TCON-300

	Camera focus position	distance	Subject filed size (H)mm x (V)mm
TELE	$\infty$	$\infty$	-
	60cm	6.13m	518 x 389
	20cm	2.64m	226 x 168

- at 4m position on TCON-300

	Camera focus position	distance	Subject filed size (H)mm x (V)mm
TELE	$\infty$	4m	330 x 249
	60cm	2.43m	204 x 153
	20cm	1.6m	136 x 102

- at 2m position on TCON-300

	Camera focus position	distance	Subject filed size (H)mm x (V)mm
TELE	$\infty$	2m	165 x 124
	60cm	1.52m	127 x 95
	20cm	1.15m	97 x 73

Note: Exposure level shifts with the TCON-300. (F2.4 changes to F2.8). In usual lens mode, normal focus mode is 60cm to infinity. Macro focus mode is 20cm to 60cm. Manual focus mode is 20cm to infinity ( $\infty$ ). Please set extension lens mode to get proper focus and exposure, normal focus mode can use 20cm to infinity in the extension lens mode.