

CINEMA EOS



LEAVE NO STORY UNTOLD



Canon



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Every cinematographer has a story to tell

What you capture on set will define how your story unfolds. Great stories demand superb tonal accuracy, brilliant colour reproduction, subtle image adjustments and surprising angles and points of view, as well as digital robustness to survive extensive post-production. For all this, Canon has created the Cinema EOS system.

A ground-breaking professional HD cine camera system, Cinema EOS system fuses Canon's proven video technology and lens heritage with EOS creativity to give you unprecedented freedom to tell every story.

Designed from the ground up to serve the evolving needs of the cinematography world, it comprises one revolutionary EOS C300 camera in two versions – industry-standard PL-lens mount or Canon's EF mount – and a family of Canon EF and PL-mount interchangeable lenses with the optical performance, controls and usability you need to realise your creative vision

HD as it was meant to be

Practicality. Compatibility. Simplicity. And excellence in HD imagery. With the Cinema EOS system, Canon helps working professionals make HD the superb creative medium of the present. Make it new. Give it impact. And make it work within your budget. No matter what you're shooting – Hollywood movies, indie documentaries, episodic TV series, commercials, music videos – the Cinema EOS system will raise your game without compromising your productivity

We spent years studying the film and TV industry and its changing needs before bringing this system to market. We learned that HD imaging was still evolving – and that a new image sensor, advanced digital processing codec and 4K lenses specially created for moviemaking could elevate HD to a new plateau of performance in the 21st century.

Those were the parameters we gave our optical, electronic and mechanical engineers. We challenged them to design a new HD system that could provide immediate benefits to working cinematographers. Equipment that would fit production budgets already stressed by rising competitive pressure and uncertain economic conditions.

A system to grow with changing needs – adding new lenses, camera bodies and enhanced shooting and editing features, as technology advances. Canon doesn't claim to have all the answers at this point. But with the help of industry experts and professionals like you, we'll keep learning, evolving and innovating



Presenting the Canon Cinema EOS System

A new HD system for a new century, designed from the ground up to serve the evolving needs of the cinematography world. One revolutionary EOS C300 camera in two versions – Canon's EF mount or industry-standard PL-lens mount.

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A family of Canon EF Cinema lenses designed specifically for cinematography applications. Seamless compatibility with a wide range of accessories and production tools. Unrivalled versatility – and limitless potential for growth. This is the Canon Cinema EOS system.



EF Cinema lenses – Capturing the essence of your vision



Superb Performance for Exceptional Results

Canon EF Cinema lenses are designed and engineered to fulfil contemporary 4K production standards, surpassing the performance requirements of any HD imaging system. They feature large aspherical lens elements to achieve sharp, consistent images in virtually every shooting situation. Anomalous dispersion glass reduces chromatic aberrations and the 11-blade aperture diaphragms ensure beautiful bokeh – while innovative glass construction counteracts barrel expansion and contraction to avoid temperature-induced marking discrepancies. On zoom lenses geared inner focusing minimises focus-induced changes in the angle of view, reducing focus breathing virtually to zero.



Canon's range of 4K EF Cinema lenses is exclusively designed to stimulate creative expression and meet or exceed the exacting production standards of contemporary cinematographers. Reliable and robust, they include a host of advanced features, ensuring unsurpassed image quality and exceptional usability in every shooting situation.

Our current line up of 7 EF Cinema lenses, including wide-angle and telephoto zoom lenses for EF and PL Mounts and prime lenses for EF Mounts, covers the basics – with more on the way to stimulate your creativity.

Uncompromising Design for Working Professionals

EF Cinema lenses provide markings on angled surfaces on both sides of the barrel, making it easy to read focus and aperture settings from behind or either side of the camera. Focus markings can be switched from standard labelling to metric. Industry standard manual control rings are designed to maintain the proper amount of resistance with consistent operating torque. For zoom lenses, a covered flangeback adjustment mechanism is included. Lenses also share uniform gear position, diameter and rotation angle as well as front lens diameters, enabling the film crew to quickly change lenses without adjustment of the rig setup.

Cinema Zoom Lenses

Canon Cinema zoom lenses offer extraordinary optical performance for demanding high-end productions. Available in EF and PL mount configurations with fluorite, aspherical lens elements and advanced optical design, these unsurpassed EF Cinema lenses are capable of 4K image reproduction. The wide-angle CN-E14.5–60mm T2.6 L S/SP provides industry-leading breadth of range; the telephoto CN-E30–300mm T2.95–3.7 L S/SP rivals best-in-class zoom magnification and telephoto focal length. Together these lenses cover the range most commonly used in cinema shooting.

EF Cinema Prime Lenses

The brilliant series of EF Cinema prime lenses offer spectacular 4K-image quality and a full frame image circle, in lightweight, compact designs. Three models for EF mount cameras – CN-E24mm T1.5 L F, CN-E50mm T1.3 L F, and CN-E85mm T1.3 L F – offer consistent form factors and marking optimised for motion picture production. Whether you shoot with a Canon EOS C300 or EOS DSLR, you will appreciate the compact and consistent lens design; and your audience will love the results from the 11-blade aperture diaphragms, fast t-stops and proven Canon lens elements.

Additional cine lenses are already under development, reflecting Canon's commitment to offer the broadest range of professional cinema lenses to meet your needs, now and in the future.





EF Lenses for Cinema EOS – A world of creative options

Compatibility – your key to creativity, productivity and profit. The lenses you already own and trust. The optical elements and coatings that render every nuance of every scene. The systems made famous by generations of the world’s finest still photographers. All coming together in Cinema EOS to give professionals every opportunity to leave no story untold.

EF Lenses for Cinema EOS

Perfected in Canon laboratories and proven in the field, Canon’s EF lenses offer one of the finest and most comprehensive lens lineups available to cinematographers and videographers. All share Canon’s renowned accuracy, clarity and optical brilliance to bring fresh perspective to your vision. The range includes over 60 prime and zoom lenses in a variety of configurations – from our flagship zooms to compact fixed focal length lenses.

Their compatibility with the EF mount of the EOS C300 not only gives the Cinema EOS system access to the finest optics on the market, it also opens up new creative possibilities with Canon speciality lenses – including Tilt-Shift, Macro and Canon’s amazing EF 8-15mm f/4L Fisheye USM zoom lens. Many lenses support Canon’s advanced Peripheral Illumination Correction feature, which renders beautiful consistent colour and brightness across the entire image plane.



L-Series Lenses

Canon L-series lenses are highly regarded by professionals who demand uncompromising optical performance in specialised situations. With innovative Canon technologies such as Ultra-low Dispersion (UD) glass, fluorite and aspherical elements, and Super Spectra Multi Coating, these speciality lenses have earned their place on the cameras of serious photographers and videographers across the globe.

EF70million



Cinematographers may now expand their boundaries with the extensive selection of over 60 Canon EF/EF-S lenses, a robust line with over 70 million produced.

EF Speciality Lenses



Macro Lenses

In revealing the finest detail and achieving extraordinary edge-to-edge accuracy at very shallow depth-of-field, macro photography can be the ultimate test of optical performance. Canon’s superb lens line includes six ultra-precise macro lenses and three screw-on close-up lenses, plus a Life-Size Converter EF and two Extension Tube accessories.



Tilt-Shift Lenses

TS-E Lenses incorporate tilt and shift movement capabilities to bring the shooting advantages of technical view cameras to the EOS system. Tilt movements alter the angle of the focal plane between the lens and image sensor, modifying depth-of-field independently of the lens aperture. Shift movements slide the lens’s optical axis along the plane of the image sensor, enabling videographers to correct or alter perspective to almost any angle and add unimagined drama to a scene.



Fisheye and Fisheye Zoom Lenses

Super wide-angle and special effects photography captures each subject from a unique perspective. The Canon EF 8-15mm f/4L Fisheye USM is the world’s first fisheye zoom lens to create circular images with a 180° angle of view on full-frame DSLRs. With its ability to focus as close as 8 inches (0.2m), the Canon EF 15mm f/2.8 Fisheye lens can realise exceptionally sharp images throughout its broad focus range.

EOS C300

EOS C300 PL

High Definition, Exceptional Quality



Technology – but never for its own sake. Technology to simplify your shoot, increase your options, advance your art, accelerate your project turn time and lower costs. The technology behind Canon’s Cinema EOS system draws on everything we’ve learned about digital image capture – and every innovation that truly serves your creative effort

Canon EOS C300 (EF Mount) and EOS C300 PL (PL Mount)

To integrate easily into the working style and equipment array of film crews and production houses, the Cinema EOS system offers two powerful, modular camera bodies - the EOS C300 and EOS C300 PL. The EOS C300 has a Canon EF lens mount and is compatible with all of Canon’s EF lenses – over 60 in all - including compact fixed focal length, super telephotos, speciality Tilt-Shift, Macro and fisheye. Communication contacts built into the mount allow lens functions such as focus and aperture to be adjusted wirelessly via the optional Canon Wireless File Transmitter WFT-E6.

This offers huge potential for speciality applications where cameras must be controlled remotely, such as nature documentaries or reality TV. The EOS C300 PL has a PL mount and is compatible with a new series of Canon EF Cinema lenses (PL mount), as well as the majority of third-party optics available for 35mm motion picture cameras.



EOS C300 PL
with PL mount



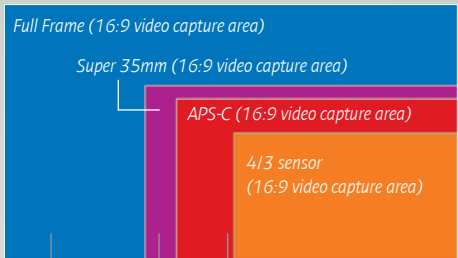
EOS C300
with EF mount

Canon DIGIC DV III Image Processor

Designed and built by Canon, the DIGIC DV III Image Processor delivers the highest image quality at the highest speeds. It processes the RGB representations originated in the single CMOS sensor into three channels (Red, Blue and Green) to maintain the rich resolution and clean colour fidelity formerly possible only in three-chip sensor designs.



CMOS sensor size comparison (not to scale)



EOS-1D X
EOS 5D Mark II EOS C300 and
EOS C300 PL EOS 7D /
EOS 60D

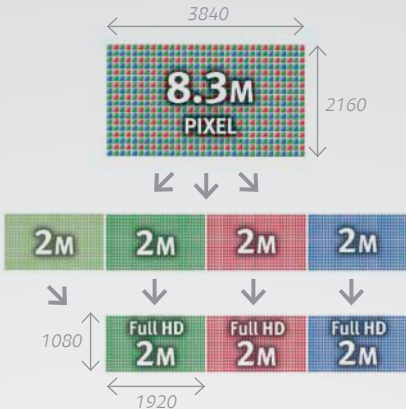
Super 35mm Canon CMOS Sensor

Modelled on the Super 35mm 3-perf motion picture film standard, Canon’s CMOS sensor has an active image size of 24.6 x 13.8mm. It utilises 3840 (H) x 2160 (V) photosites to perform the crucial optoelectronic transformation of digital imaging. Each photosite is a generous 6.4 x 6.4 micrometers in area and each has a microlens that ensures the highest efficiency in light transfer to the individual photodiode.

Proprietary technologies within the photosite simultaneously lower the image sensor noise floor while enhancing the photon capacity of the photodiode – a combination that assures superb dynamic range (up to 800% when using the Canon Log Gamma function).

Thanks to an effective resolution of 8.3MP, the image sensor utilises an innovative 3-channel readout technique that delivers RGB video components without the need for debayering algorithms. From these original video components, a native 1080-line readout can be selectively derived.

This high resolution sensor allows the EOS C300 and EOS C300 PL to include an optical low pass filter (OLPF) that operates at a higher cut-off frequency, reducing Moire effects and improving resolution of detailed subjects. A high-speed readout significantly reduces the vertical ‘skewing’ effect that can be characteristic of CMOS image sensors.



Signal processing equivalent to that in a 3-chip RGB system

High sensitivity, low noise

Canon developed the 8.3MP CMOS sensor found in the EOS C300 and EOS C300 PL to capture images using a wide pixel pitch for detailed, low-noise blacks and impressive dynamic range even at higher sensitivities. High performance image capture is possible at up to ISO20000.

The sensor offers not only high sensitivity with low noise but also high resolution and shallow depth-of-field, reduced rolling shutter artefacts and low power consumption. Working together, Canon’s Super 35mm CMOS sensor and DIGIC DV III Image Processor achieve a remarkably high signal-to-noise ratio that lets you record with great detail and impressive dynamic range even in minimal light.

Canon Log Gamma; 800% Dynamic Range

Built-in Canon Log Gamma is a special nonlinear transfer function specifically designed to deliver neutral image quality with wide dynamic range for maximum freedom in post-production. By managing the disposition of quantisation bits, Canon Log ensures excellent tonal reproduction within both highlight and lowlight areas of a digital image – maintaining a total dynamic range of 800%. Shooting in Canon Log mode, cinematographers can set the camera exposure value using their usual light meter practices.

EOS C300 and EOS C300PL – ISO and Dynamic Range specifications (Canon Log, Progressive scan)

Canon Log Base Sensitivity	S/N Ratio	GAIN		18% GRAY	ISO
	41dB	6.7 Stops	30dB	5.3 Stops	20000
	45dB	6.7 Stops	26dB	5.3 Stops	12800
	50dB	6.7 Stops	20dB	5.3 Stops	6400
	53dB	6.7 Stops	14dB	5.3 Stops	3200
	54dB	6.7 Stops	8dB	5.3 Stops	1600
	54dB	6.7 Stops	2.5dB	5.3 Stops	850
	54dB	6.8 Stops	2dB	5.2 Stops	800
	54dB	6.8 Stops	0dB	4.9 Stops	640
	54dB	7.8 Stops	-4dB	4.2 Stops	400
	54dB	8.1 Stops	-6dB	3.9 Stops	320

Canon Log – Ensures tonal reproduction for both highlight and lowlight regions during post-production.

Out of the box, and ready to go. In action, the Canon EOS C300 and EOS C300 PL may be today's most versatile and powerful HD creative tool. It includes every control you need, exactly where you expect it to be. Industry standard interfaces for Time Code, Genlock, HD-SDI, audio and wireless remote operational control, tilt viewfinder and even Pre Rec to buffer memory. All in a package so compact you'll never want to put it down.

Designed with filmmakers in mind

Compact Modular Design

The EOS C300 and EOS C300 PL are surprisingly small (133 x 171 x 179mm) and easily hand-held at just over 1.4kg – ideal for shooting situations that are challenging for larger cameras. A rotatable and removable hand grip with a control dial and function buttons allows for hand-held shooting in DSLR style – or remove it and use the supplied thumb rest for completely stripped-down shooting. The EOS C300 and EOS C300 PL also have manually-operated built-in Neutral Density glass filters offering 2, 4 and 6 stops of filtering.

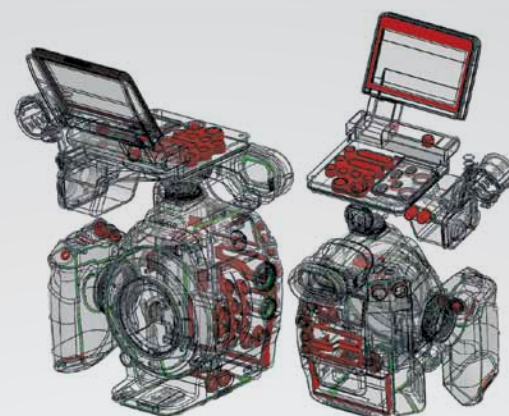
High resolution LCD for easy operation

The 10.1cm (4") backlit 1.23 megapixel monitor and control panel is designed for easy operation. It rotates 135° left/right or 270° down – and can be mounted directly on the camera body or the handle unit so the EOS C300 and EOS C300 PL can operate from any angle. The bright 1.55 megapixel electronic viewfinder also tilts up to a convenient 60° angle.

The LCD includes a built-in Waveform Monitor (WFM) function that shows the overall brightness of a scene and a Vectorscope (VS) to display real-time hue and saturation levels. For sharp focus there are two peaking modes and a magnified focus assist function.



With matte box, follow focus and monitor unit



Dust-proof, splash-proof design ■ Sealed areas

Rugged, Durable and Quiet

The EOS C300 and EOS C300 PL are designed to run cool, quiet and clean. They feature a dust-proof and splash-proof design that includes sealing gaskets around the edges of all access covers, dials fitted with o-rings on the axis of rotation and button key-tops sealed with rubber. The built-in cooling system includes a heat-dissipating duct in the centre of the body, a graphite sheet that conducts sensor heat towards the heat sink, three ventilation holes and a cooling fan that pulls hot air out through an exhaust opening. All air is directed through a discrete pathway that keeps dust particles away from sensitive components ensuring rugged, reliable operation.

Rich Audio Controls

When mounted, the included audio control unit provides two XLR audio inputs with +48V phantom power. A 3.5mm microphone terminal is also built in to the camera. Audio is recorded uncompressed in 16-bit PCM format at 48 kHz for high fidelity sound. Both XLR inputs, as well as the mic terminal have the option for automatic, as well as full manual gain control (-Infinity to +18dB). Additionally, a 3.5mm headphone terminal with 16 volume settings offers accurate audio monitoring.

Comfortable Ergonomic Controls

The moment you pick up the EOS C300 or EOS C300 PL, you'll feel right at home with a logical layout of buttons and dials that make operation simple. The detachable grip rotates 360° in 15-degree increments so the start/stop, iris control and multi-controller buttons are always literally at your fingertips. Four separate start/stop buttons and 15 other customisable buttons distributed over the camera body mean quiet and intuitive access. Large dials positioned in two places can be customised for different functions and are easy to operate from all angles. A lock switch turns off all controls except the recording button and the function buttons. Small ridges between the buttons help prevent activating functions by mistake.

Pre Rec for Shooting in a Single Take

For situations where there is no second take and action shoots when things can happen with little warning, the Pre Rec feature continually records approximately three seconds of full motion imaging to buffer memory. When you press the record button, these seconds are automatically added to the shot – and you'll have a welcome margin of insurance to capture the unexpected.

Low Power Consumption

The EOS C300 and EOS C300 PL are extremely efficient, requiring a minimum of around 10 watts of power during recording. This low power consumption helps to achieve a compact, light body design and long battery life (up to 205 minutes with the supplied BP-955 battery).

Wireless Control for Remote Shooting

Greater mobility when you need it – that's the advantage of Canon's optional Wireless File Transmitter WFT-E6. The EOS C300 and EOS C300 PL come preconfigured so that camera settings can be viewed and securely controlled on third-party devices with common web browsers, including computers, smartphones and tablets without the need for additional software. With the WFT-E6, the camera can be controlled from up to 150 metres away over an 802.11 b/g/n/a wireless network. You can start and stop recording and also adjust white balance, gain and other parameters as well as control the focus and aperture of Canon EF lenses. Shot mark and metadata input are available, along with a live view of the current composition.



Compatibility with Third-Party Accessories

Not only is the EOS C300 series compatible with an extraordinary range of PL and EF lenses, it's also compatible with major third-party shooting accessories like matte boxes, flags and support rods, geared control rings, marking disks, and knobs for follow focus. So you can step up to the Cinema EOS system and not worry about leaving your favourite equipment behind.



Wireless Transmitter WFT-E6



Wireless Controller

Canon's Cinema EOS system works the way you do. It integrates with file-based standards, can match the exact frame rates of film cameras, offers plug-ins for leading NLE programs and adds every essential professional facility: slots, terminals, tools, modes and adjustments – for simple and seamless digital workflow.

A world of creative options

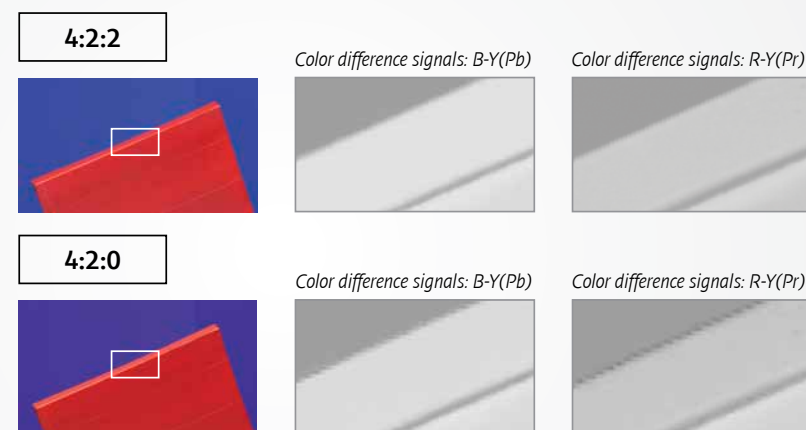
XF Codec Image Quality

To create digital files with the highest image quality that are robust enough for major post-production, the EOS C300 and EOS C300 PL use an MXF codec – the same codec used by Canon XF-series professional camcorders. With 4:2:2 colour sampling, image files have double the vertical resolution of colour components created with 4:2:0 colour sampling, minimising jagged edges between red and blue and ensuring ample quality for chroma key compositing with green screens.

XF Codec Quality Chart

These illustrations represent a colour image converted to RGB, after which each component signal is converted to monochrome. Since B-Y and R-Y signals lack a brightness component and only indicate saturation, images produced from them look quite unnatural to the human eye. To avoid confusion, the illustrations are produced by conversion to monochrome and then, for convenience, conversion of saturation to brightness.

XF Codec Quality Chart



CF Card Slots and Terminals

Image Files are recorded to inexpensive and easy-to-find CF cards in dual card slots - two reusable 32 GB CF cards let you record more than two and a half hours of 4:2:2 footage at 50Mbps. You can even record to two CF cards simultaneously or relay record and copy from one card to another.

Recording Modes

With the realities of production in mind, the camera allows you to record in a number of different modes, resolutions and frame rates. You can shoot in both PAL and NTSC modes at 50Mbps (CBR), 35Mbps (VBR) and 25Mbps (CBR) with a range of settings for resolution, colour, frame rate and recording time. Whether you're shooting with the expectation of significant editing and post-production, recording for compatibility with HDV editing, or simply creating the longest possible HD image files, the EOS C300 and EOS C300 PL will perform flawlessly.

Black Balance Adjustment

In ambient conditions that cause the black in the video signal to shift out of alignment, black balance can be easily adjusted to bring it back. A simple process with the body cap on the camera, black balance adjustment is especially useful the first time you use the camera (or when it's been on the shelf for an extended period), when you'll be shooting in a wide range of temperatures or when the ISO sensitivity or gain settings have been changed.

Custom Pictures

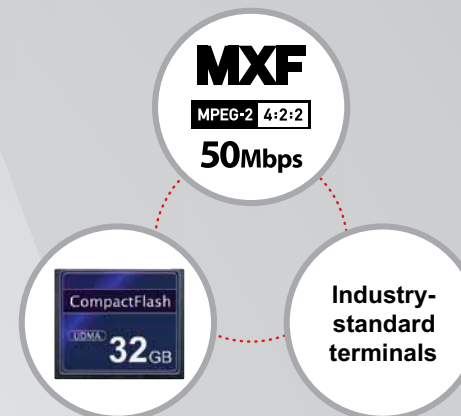
To achieve the look and feel you want in less time during post-production, you can create up to 26 different Custom Picture settings, which can include different image quality adjustments, such as gamma, knee, colour matrix, sharpness, noise reduction and more. Settings can be created in-camera and saved to the camera or to an SD card for transfer to other cameras. A number of natural colour settings are already included in camera, as well as a Cinema setting for post-production and EOS setting to match images captured by a Canon EOS DSLR.

Fast Motion, Slow Motion

For more creative possibilities in post production you can transform normal action into intense high-speed motion up to 60x by capturing fewer frames per second, or capture more frames per second to slow down motion to 1/2.5x at 720p. You can also programme your camera to record a set number of frames at defined intervals for amazing time-lapse photography – and its frame recording feature is perfect for stop-frame animation.

In post-production – Taking it to the screen

24.00p



Accommodating File-Based Production

The Cinema EOS system creates files in the internationally standardised Material eXchange Format (MXF) - wrapping video and audio with metadata in a single file that maintains access to critical information throughout the production process. Files are recorded to inexpensive and easy-to-find CF cards in dual card slots, giving you unlimited hot-swappable storage on reliable solid-state media.

For industry standard peripherals, the EOS C300 and EOS C300 PL have all the right terminals: Remote (2.5mm), Sync out (BNC), HDMI type A out, GenLock (BNC), Time Code (BNC), HD/SDI out (BNC), Headphone, SD card, DC IN socket, plus MIC and XLR connectors (CH1 & CH2) when using the Canon Monitor/Controller unit. The camera also includes a dedicated connection port for the optional Canon Wireless File Transfer WFT-E6 unit.

Perfect for Mixed Shoot Editing

The tremendous dynamic range of the EOS C300 and EOS C300 PL with Canon Log gamma can be easily converted to industry standard 10-bit Cineon (.cin) Log format, which assures smooth integration with industry-standard post workflow and finishing.

The 24.00p mode matches the exact frame rates of film cameras, so there's no need for time-consuming frame-rate conversion. Whether your entire production is digital or your Cinema EOS camera is used as an A, B, or C camera on a primarily film-based shoot, the integrity of your image and sound is assured through the editing process – and beyond.

Non-Linear Editing Integration

To manage your recorded material more efficiently, the Cinema EOS system offers two solutions: direct export to Non Linear Editing (NLE) programs through a supplied software plug-in, or file management through Canon's supplied XF Utility Software. Developed in concert with companies like Adobe, Apple, Avid and Grass Valley, Canon software plug-ins give you simple, lossless transfer. You'll also have Windows® / Mac® compatibility for cross-platform versatility. For professional editing or file management outside of NLE programs, Canon's XF Utility software offers basic playback, backup, metadata management and much more – in a simple, logical package that doesn't require extensive training.



Specifications

EOS C300 – compatible with Canon EF and EF Cinema lenses

EOS C300 PL – compatible with PL mount lenses, including the Canon EF Cinema Lens range

CAMERA	
Image Sensor	Super35mm type CMOS
Sensor System	RGB primary colour filter (Bayer array)
Total pixels per sensor	9.84 megapixels
Effective pixels per sensor	8.29 megapixels
Minimum illumination	NTSC Mode 0.3 Lux. [F1.2 lens , 24dB, 29.97p mode, shutter speed 1/30], PAL Mode 0.25 Lux. [F1.2 lens, 24dB, 25p mode, shutter speed 1/25]
Sensitivity	NTSC: F9. [1920x1080/59.94i, ISO640 (0dB), 2000 Lux, 89.9% reflection], PAL: F10. [1920x1080/50.00i , ISO640 (0dB) , 2000 Lux, 89.9% reflection]
S/N Ratio	NTSC: 54dB (Typical). [1920x1080/29.97P, Canon Log base sensitivity ISO850 (Dynamic range 800%)] PAL: 54dB (Typical). [1920x1080/25.00P, Canon Log base sensitivity ISO850 (Dynamic range 800%)]
Dynamic Range	During normal shooting: 300% With Canon Log gamma: 800% (ISO 850 or above/gain 2.5 dB or more)
Horizontal Resolution	Up to 1000 TV lines or more (1920 x 1080i mode), depends on lens used
Lens	
Lens Mount	C300 Canon EF Mount C300PL PL Mount
Focal length	C300 Equivalent to 1.53x the focal length of EF lenses; As indicated for EF-S lenses and Canon cine lenses C300PL As indicated for Canon Cinema Lenses and other PL mount lenses
Peripheral illumination correction	C300 YES (dependent on lens used) C300PL No
ND filter	3 glass filters in camera body: 2 stops; 4 stops; 6 stops. Operate via body or wireless control.
Focus control	C300 Via lens, wireless control or wired remote (dependent on lens used) C300PL Manual via lens
Iris control	C300 Via body, grip, wireless control or wired remote. 1/2-stop, 1/3-stop or FINE control. Possible to maintain constant F-number during zoom C300PL Manual via lens
Image stabilization system	C300 Depends on lens used C300PL No
Image Processor	
Type	DIGIC DV III
RECORDING	
Video storage media	Type 1 Compact Flash memory cards (2 card slots)
Type	UDMA4, 30MB/s or faster (40MB/s or faster for Fast/Slow recording)
Recording time	64GB CF card: Up to 160mins (1080/50i @ 50 Mbps)
Recording file format	Material eXchange Format (MXF); OP-1a pattern
Recording format	MPEG-2 Long GOP, 50Mbps CBR (4:2:2) MPEG-2 422@PHL; 35Mbps VBR (4:2:0) MPEG-2 MP@HL; 25Mbps CBR (4:2:0) MPEG-2 MP@H14
Recording frame rate	50Mbps: 1920 x 1080/59.94i, 50i, 29.97p, 25p, 24p, 23.98p; 1280 x 720/59.94p, 50p, 29.97p, 25p, 24p, 23.98p. 35Mbps: 1920 x 1080/59.94i, 50i, 29.97p, 25p, 23.98p; 1280 x 720/59.94p, 50p, 29.97p, 25p, 23.98p. 25Mbps: 1440 x 1080/59.94i, 50i, 29.97p, 25p, 23.98p.
Slow/Fast motion	YES. 720p: 1-60fps in 1fps steps. 1080p: 1-30fps in 1fps steps (available options may differ according to recording mode selected)
Interval Record	YES. 1, 2, 3, 6, 9 or 12 frames, 25 time intervals (available options may differ according to recording mode selected)
Frame Record	YES. 1, 2, 3, 6, 9 or 12 frames (available options may differ according to recording mode selected)
Pre Record (cache record)	YES (3 seconds)
Relay Recording	YES
Double Slot (simultaneous) Recording	YES
Scan Reverse	YES. Up/down, left/right, up/down/left/right image inversion.
Internal Data Transfer	MOVIE: Yes (CF card to CF card)
Photo storage media	SD/SDHC memory card
Still quality	During video recording: 1920 x 1080; During playback: 1920x1080, 1280 x 720
SYSTEM	
LCD	
Size	10.1cm (4"), 100% view
Size Dots	1.23 million
Image quality adjustments	Brightness, contrast, colour, sharpness, backlight, black & white Up/down/left/right according to camera configuration
Adjustable	Waveform Monitor and Vectorscope
Waveform Monitor	Peaking; Magnifying; Edge Monitor (using waveform display)
Focus Assist	Peaking 1, Peaking 2 (Colour, Gain, Frequency customisable for each)
Peaking	Level 1; Level 2; Both. Output via HD-SDI or HDMI
Zebra	On/Off (Aspect ratio, Aspect marker, Safety Zone Area, Safety Zone, Grid, Horizontal, Centre)
Markers	

SYSTEM cont.	
EVF	1.3cm (0.52") 1.55 million Brightness, contrast, colour, sharpness, backlight, black & white
Size Dots	Vertical tilt + 2.0 to -5.5 diopters
Image quality adjustments	
Adjustable	
Correction lens	
Inputs/Outputs	
Audio in	XLR inputs with 48V phantom power (x2), 3.5mm microphone input jack
Headphone output	3.5mm stereo jack
Video monitor output	YES (BNC, SD output only via Synch terminal)
HDMI	YES (Type A, output only)
HD/SD-SDI output	YES (BNC, output only, embedded audio and time code)
Time code	YES (BNC, switchable input/output)
Genlock	YES (BNC, input only)
Synch	YES (BNC, output only, 5 modes: HD Sync, HD-Y, SD blackburst, SD composite, Off)
DC input	YES
Remote Control Terminal	2.5mm mini jack
Wireless Control Terminal	YES (optional accessory required for wireless control)
Colour Bars	EBU, SMPTE, ARIB
Misc	
Tally lamp	YES
Accessory shoe	YES (cold shoe, 3 locations: top of body, top of handle, front of handle)
Custom key	YES (15 assignable buttons; select from 30 functions)
SHOOTING FUNCTIONS	
Exposure	
Exposure metering	Manual exposure determined by shutter setting, iris setting, ISO/gain setting and ND filter setting
ISO Sensitivity	1-stop display: 320 ¹ , 400, 800, [850] ² , 1600, 3200, 6400, 12800, 20000 1/3rd stop display: 320, 400, 500, 640, 800, [850] ² , 1000, 1250, 1600, 2000, 2500, 3200, 4000, 5000, 6400, 8000, 10000, 12800, 16000, 20000 ³
Gain setting	NORMAL: -6dB, -3dB, 0dB, 3dB, 6dB, 9dB, 12dB, 15dB, 18dB, 21dB, 24dB, 30dB; FINE: 0dB to 24dB (0.5dB increments)
Shutter speed	
Control Modes	Off; Speed; Angle; Clear Scan (CS); Slow Shutter (SLS)
Shutter speed	1/3 to 1/2000 depending on frame rate and Shutter Control Mode
Shutter Angle	11.25° to 360° depending on frame rate
Slow Shutter (SLS)	1/3, 1/4, 1/6, 1/8, 1/12, 1/15, 1/25, 1/30 depending on frame rate
Clear Scan	59.94i/p: 59.94 ~ 250.27Hz; 50i/p: 50 to 250.78Hz; 29.97p: 29.97 ~ 250.27Hz; 25p: 25 to 250.78Hz; 23.98/24p: 23.98 ~ 250.27Hz
Custom Picture	
Stored Configurations	9, including 2 presets (CINEMA and EOS Std)
Storage Medium	SD/SDHC memory card (all customisation data and metadata), up to 20 Custom Pictures per card
Gamma	8 profiles
White balance	
Auto	NO
Preset	Daylight (5400K), Tungsten (3200K), Kelvin (2000K-15000K, 100K intervals), Set A, Set B
White Balance Shift	YES. -9 to +9 (Daylight and Tungsten only)
Black balance	
Black balance adjustment	YES
Audio	
Recording	16-bit 2ch (48 kHz) linear PCM
Control	Independent limiters and auto/manual settings
Microphone attenuation	YES
Microphone level meter	YES
MISCELLANEOUS	
Dimensions	Approx 133 x 179 x 177mm (thumbrest attached); Approx 174 x 179 x 177mm (grip attached); Approx 185 x 284 x 301mm (grip, monitor unit and handle attached)
Detachable handle	YES
Weight (camera only)	C300 1430g C300 PL 1630g
Weight (fully equipped)	C300 Approx 2700g (grip, monitor unit, handle, BP-955, 2x CF card) C300 PL Approx 2900g (grip, monitor unit, handle, BP-955, 2x CF card)
Operating Temperature range	-5°C to +45°C, 60% relative humidity
All data is based on Canon's standard testing methods. This Leaflet and the specifications of the product have been developed prior to the date of product launch. Specifications are subject to change without notice. *and ®: All company and/or product names are trademarks and/or registered trademarks of their respective manufacturers in their markets and/or countries.	

1. 320 and 20000 are not 1-stop increments but represent highest and lowest supported ISO values
2. [850] = Lowest ISO sensitivity achieving 800% dynamic range with Canon Log function.
3. 50Mbps CBR mode, HD-SDI off, using EVF.

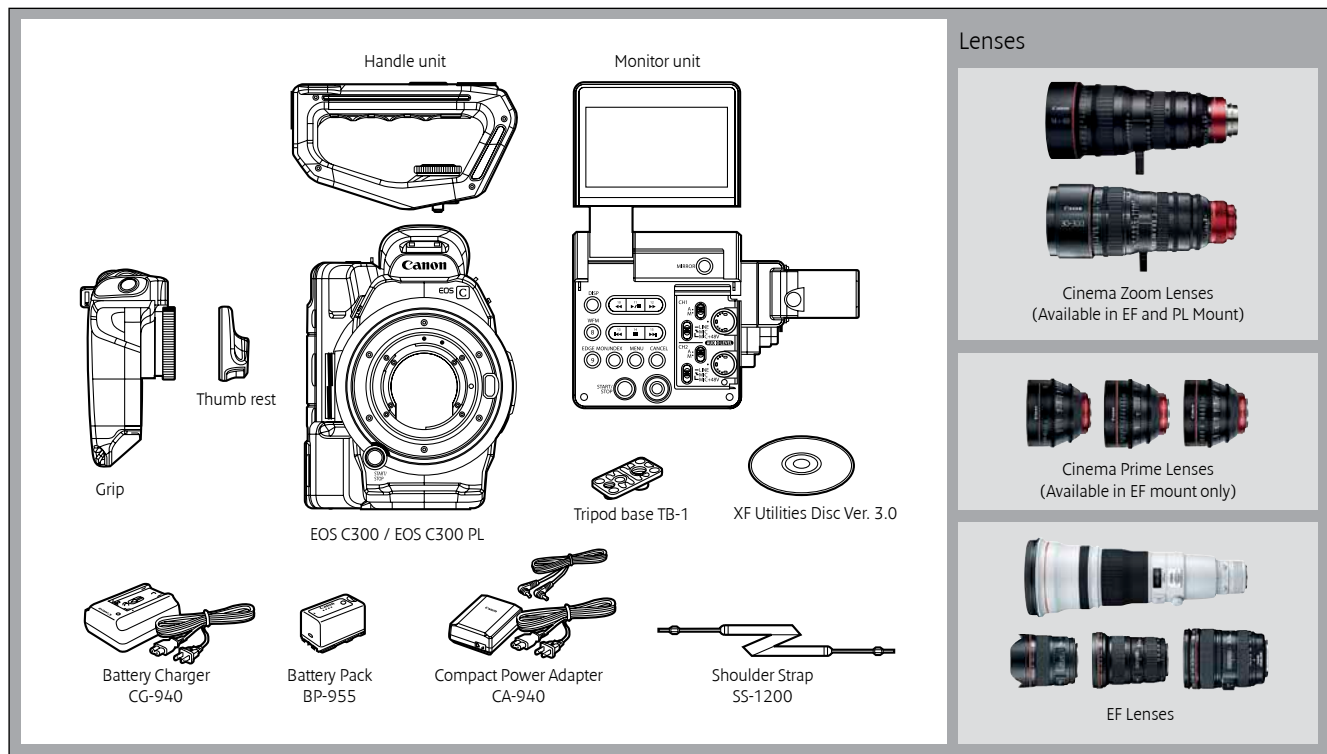
Lens Specifications

EF Cinema Lens

Canon EF Cinema Zoom Lenses													
	Mount	Focal Length	Zoom Ratio	Max. Relative Aperture (T-Number)	Iris Blades	Angle Of View		M.O.D. (from image sensor)	Object Dimensions at M.O.D.		Front Diameter	Approx. Size (W x H x L)	Approx. Mass
						1.78:1 24.6 x 13.8mm	1.78:1 24.0 x 13.5mm		1.78:1 24.6 x 13.8mm	1.78:1 24.0 x 13.5mm			
CN-E14.5–60mm T2.6 L SP	PL	14.5–60mm	4.1x	1:2.6 at 14.5–60mm	11	79.2° x 49.9° at 14.5mm 22.6° x 12.8° at 60mm	74.2° x 57.8° at 14.5mm 20.7° x 15.2° at 60mm	0.70m/2'4"	65.2 x 36.7cm at 14.5mm 15.0 x 8.4cm at 60mm	66.9 x 37.5cm at 14.5mm 15.4 x 8.6cm at 60mm	Ø136mm	5.35 x 6.42 x 12.52 in./ 136.0 x 163.1 x 318.0mm	9.9 lb./ 4.5kg
CN-E14.5–60mm T2.6 L S	EF								5.35 x 6.42 x 12.83 in./ 136.0 x 163.1 x 326.0mm				
CN-E30–300mm T2.95–3.7 L SP	PL	30–300mm	10x	1:2.95 at 30–240mm/ 1:3.7 at 300mm	11	43.6° x 25.4° at 30mm 4.6° x 2.6° at 300mm	44.6° x 25.9° at 30mm 4.7° x 2.6° at 300mm	1.5m/5'	98.8 x 55.6cm at 30mm 9.6 x 5.4cm at 300mm	101.3 x 56.8cm at 30mm 9.9 x 5.6cm at 300mm	Ø136mm	5.67 x 6.58 x 13.47 in./ 144.0 x 167.1 x 342.1mm	12.79 lb./ 5.8kg
CN-E30–300mm T2.95–3.7 L S	EF								5.67 x 6.58 x 13.78 in./ 144.0 x 167.1 x 350.1mm				
Canon EF Cinema Prime Lenses													
	Mount	Focal Length	Zoom Ratio	Max. Relative Aperture (T-Number)	Iris Blades	Angle Of View		M.O.D. (from image sensor)	Object Dimensions at M.O.D.		Front Diameter	Approx. Size (W x H x L)	Approx. Mass
						1.5:1 36.0 x 24.0mm	1.78:1 24.6 x 13.8mm		1.5:1 36.0 x 24.0mm	1.78:1 24.6 x 13.8mm			
CN-E24mm T1.5 L F	EF	24mm	–	1:1.5	11	73.7° x 53.1°	54.3° x 32.1°	0.30m/12"	28.8 x 19.2cm	19.7 x 11.0cm	Ø114mm	4.66 x 4.66 x 4.0 in./ 118.4 x 118.4 x 101.5mm	2.65 lb./ 1.2kg
CN-E50mm T1.3 L F	EF	50mm	–	1:1.3	11	39.6° x 27.0°	27.6° x 15.7°	0.45m/18"	24.9 x 16.6cm	17.0 x 9.5cm	Ø114mm	4.66 x 4.66 x 4.0 in./ 118.4 x 118.4 x 101.5mm	2.43 lb./ 1.1kg
CN-E85mm T1.3 L F	EF	85mm	–	1:1.3	11	23.9° x 16.1°	16.5° x 9.3°	0.95m/3'2"	34.3 x 22.9cm	23.4 x 13.1cm	Ø114mm	4.66 x 4.66 x 4.0 in./ 118.4 x 118.4 x 101.5mm	2.87 lb./ 1.3kg



EOS C300 / EOS C300 PL System



The following optional Canon accessories can be purchased for use with the EOS C300 and EOS C300 PL:

Canon Battery Pack BP-955

Canon Battery Pack BP-975

Canon Compact Power Adaptor CA-930¹

Canon Compact Power Adaptor CA-940²

Canon Wireless Controller WFT-E6

Canon Tripod Adaptor TA-100

Canon Tripod Adaptor TB-1

¹ For charging BP-900-series batteries only.
CA-930 cannot be used to connect EOS C300 to mains power.

² Includes DC-940 cable

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