

you can
Canon

EF-S 10-22mm f/3.5-4.5 USM
EF-S 17-85mm f/4-5.6 IS USM
EF-S 18-55mm f/3.5-5.6 II
EF 70-300mm f/4.5-5.6 DO IS USM
EF 50mm f/1.4 USM
EF-S 60mm f/2.8 MACRO USM

It starts with the glass.



Beyond the human eye.

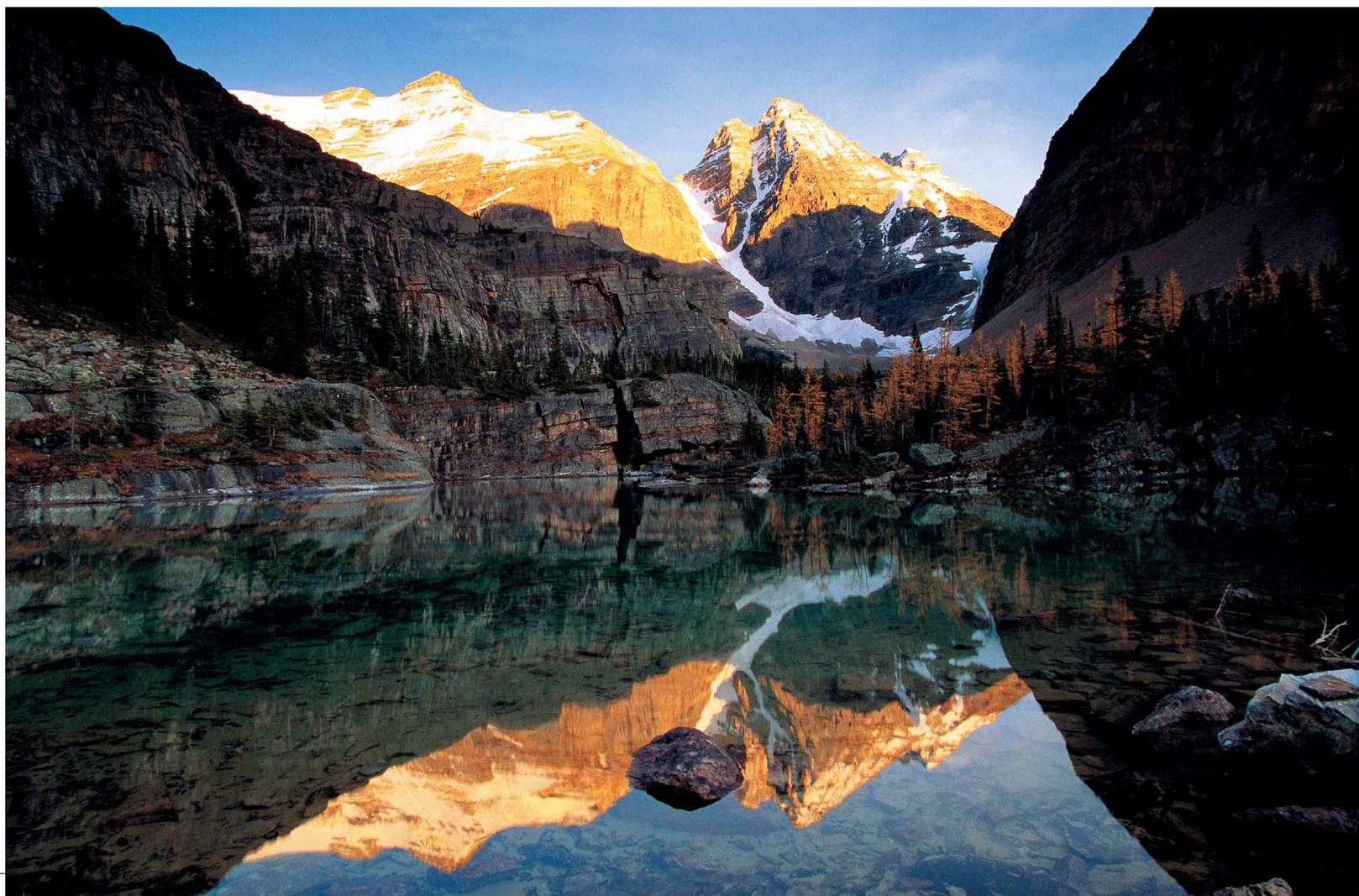
For sixty years, Canon's precision optics engineers have been in relentless pursuit of the optical Holy Grail: precision lenses that produce an image of a subject with perfect clarity and accuracy.

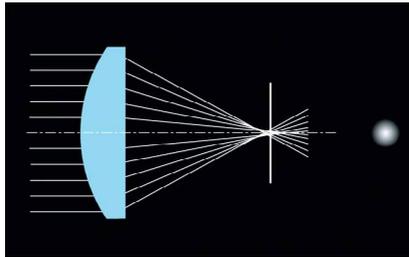
Canon's massive investment into lens technology has produced the renowned EF lens range. Every element of every EF lens is designed meticulously, its materials painstakingly inspected, and its surface ground precisely in order to create an interchangeable SLR lens of uncompromising quality that reaches beyond the limits of the human eye.

With their compact sensor size, the introduction of the EOS 20D and the EOS 350D (replacing the influential EOS 300D) has paved the way for a dedicated EF-S lens mount. These cameras accept all lenses in the EF range, including the special EF-S lenses. When mounted to these

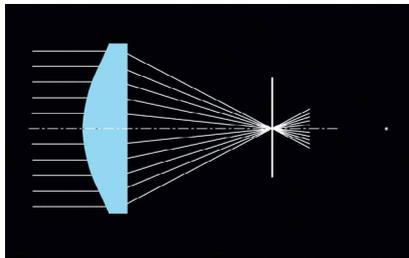
cameras, their focal length is effectively magnified by 1.6x. The EF-S range provides D-SLR photographers with the same wide-angle ranges popular amongst many advanced film photographers, while the new EF-S 60mm f/2.8 Macro USM lens is the first Macro lens available in the EF-S series.

Canon's commitment to maintaining its position as a world leader in lens development has resulted in a string of groundbreaking developments and awards, and is embodied in every single one of the more than 60 EF lenses now available. Because Canon's lens designers and engineers understand that it all starts with the glass.





Spherical aberration of spherical lens



Focal point alignment with aspherical lens

ASPHERICAL ELEMENTS

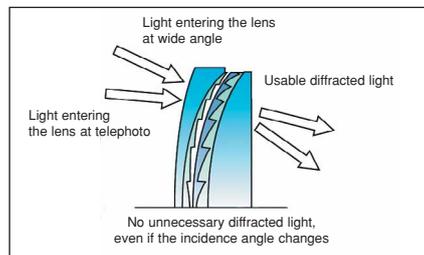
Unless corrected, light rays entering the edges and centre of spherical lens elements converge at different focal points. Known as spherical aberration, this phenomenon produces soft, low contrast images that look as if covered with a thin veil. In 1971, Canon became the first company in the world to correct this error in an SLR lens by incorporating an aspherical lens element. Now found in nearly every EF lens, these special elements help deliver corner-to-corner sharpness and clarity.

REAR FOCUSING

Many EF lenses employ a focusing method known as rear or inner focusing, whereby only the rear or inner lens elements move to achieve focus. This improves focus speeds, reduces power consumption, keeps lens length constant during focusing and allows one-piece lens-barrel construction for improved rigidity. Moreover, the front element does not move during focusing, making the lenses ideal for use with polarising filters, petal hoods and gel holders.

DO LENS ELEMENTS

Conventional lenses rely on *refraction* to focus light – the change in direction of light as it passes across a glass/air boundary. Light can also be ‘bent’ with *diffraction*, the tendency for light to spread after passing the edge of an obstruction. Canon’s multi-layer diffractive optical (DO) elements are the world’s first to harness the power of diffraction to focus light, dramatically decreasing telephoto lens size and weight, while delivering unprecedented image quality. The result is a celebration of precision optics, which has turned the world of telephoto lenses on its head.



Triple-layered DO lens

SUPER SPECTRA COATINGS

Up to 10% of light hitting untreated optical glass will reflect back off the surface. In lenses constructed of several elements, this results in significant light loss and causes ghosting (secondary images) and flare (washed out image). To eliminate harmful reflections off lenses and the sensors of digital cameras, the latest EF lenses are treated with Canon’s patented multi-layer Super Spectra coatings.

IMAGE STABILIZATION

IMAGE STABILIZER Canon’s Image Stabilizer (IS) lenses use tiny movement detection gyros and a special moving lens element to combat camera shake. Canon’s IS is so effective at eliminating camera shake that it compensates for up to 3 f-stops, allowing the photographer to keep shooting with long focal lengths in low light conditions. It’s like having a steadying hand to help you when the conditions force the shutter speeds beyond your normal limits.



Without IS



Ring-type USM

ULTRASONIC MOTORS

ULTRASONIC The outstanding auto-focus speed of EF lenses is due in part to Canon’s Ultrasonic Motors (USM). These tiny yet extraordinarily powerful motors use ultrasonic frequency vibrations to drive focusing in near-silence at blistering speed. The USM lens can stop, without overshooting, the instant the camera detects focus is achieved. A full-time manual focus override allows the ultimate creative control.



With IS

First choice.

Digital photographers now have a new favourite – a ‘standard’ lens that photographers will intuitively reach for in most shooting situations.

EF-S 17-85mm f/4-5.6 IS USM

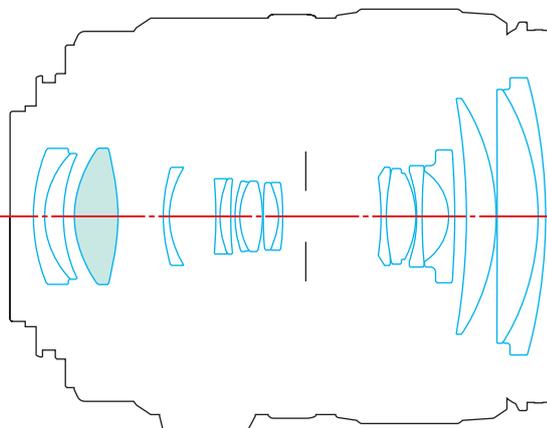
With its framing option versatility, high magnification zoom and light weight, the EF-S 17-85mm f/4-5.6 IS USM is destined for popularity. Ideal for fast moving photography, the lens is also perfect for travel, where it is not practical to carry around a heavy bag of kit.

The lens has an extremely useful effective focal length of approximately 27-136mm in the 35mm format. It’s ring-type USM works in concert with the EOS 20D and EOS 350D to provide super-fast, precision auto focusing and tracking.

IMAGE STABILIZER  ULTRASONIC



● Aspherical lens





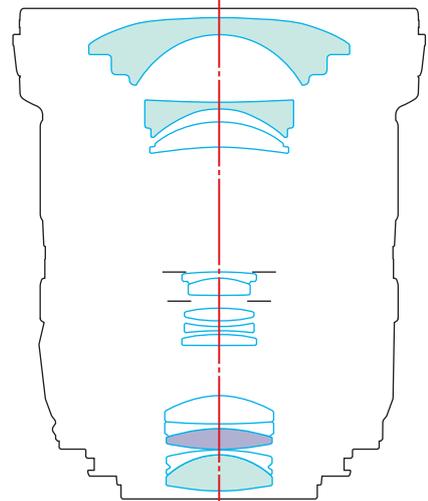
Wide.

Capable of expression beyond the human perspective, the EF-S 10-22mm f/3.5-4.5 USM represents new levels of dramatic effect for the digital photographer.

EF-S 10-22mm f/3.5-4.5 USM

This extraordinary lens has an equivalent focal length range in the 35mm format of approximately 16-35mm. Not only does this super-wide zoom give you the freedom to get exactly what you want in the shot, it dramatically alters perspective to allow for dynamic expression. The lens allows you to get extremely close to subjects, exaggerating the difference in size between a near object and its background. Creative photographers

can use this phenomenon to create excellent separation between subject and background for a strong sense of presence, or for a pan-focus effect with everything from foreground to background sharply in focus. Incredibly light and compact for an interchangeable lens at this focal length, the EF-S 10-22mm f/3.5-4.5 USM also has a minimum focusing distance of just 24cm.



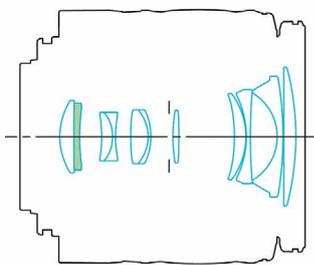
- Aspherical lens
- Super UD lens



Ready.

EF-S 18-55mm f/3.5-5.6 II

The EF-S 18-55mm f/3.5-5.6 II is an exceptionally lightweight lens, with an equivalent focal length in the 35mm format of approximately 29-88mm. This makes it an excellent standard zoom lens for everyday use so you never miss that great shooting opportunity. Zoom in on the smile of a running child and then zoom out to capture the whole scene.



● Aspherical lens

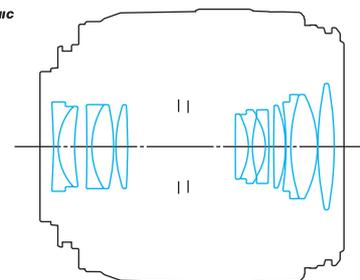


Close.

EF-S 60mm f/2.8 MACRO USM

Get right up close to beautifully intricate plants and insects with Canon's first EF-S series Macro lens.

The EF-S 60mm f/2.8 Macro USM lens delivers high picture quality and even colour reproduction throughout all focusing distances. With 1:1 magnification, you can explore an exciting new photographic dimension, creating the sense for your audience of being part of a miniature world. Compact and lightweight, this remarkable lens can be positioned just 20 cm from your subject – delight in the effect of your micro environment filling the frame.

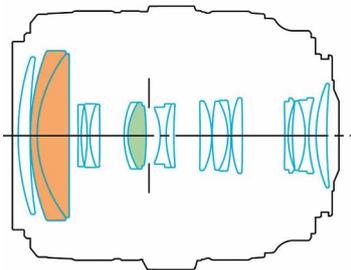


Powerful.

EF 70-300mm f/4.5-5.6 DO IS USM
 Measuring less than 10cm long and weighing just a fraction of conventional lenses of equivalent focal lengths, this lens is symbolic of Canon's leadership in precision optics. The only zoom lens in the world to feature a 3-layer diffractive optical element, it sets new standards in image quality and mobility. The lens boasts image quality on a par with Canon's professional L-series lenses. Its power amplifies when fitted to the EOS 20D or EOS 350D, where its effective focal length in the 35mm format becomes approximately 112-480mm.



 **IMAGE STABILIZER**



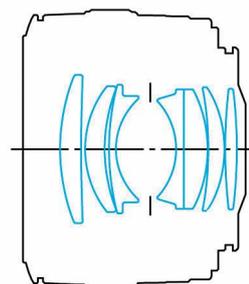
- Aspherical lens
- DO lens

Portrait.

EF 50mm f/1.4 USM

The EF 50mm f/1.4 USM has an effective focal length in the 35mm format of approximately 80mm when fitted to the EOS 20D or EOS 350D, suiting it perfectly to portrait photography. The brightness of this lens allows hand held naturally lit dusk and indoor shots that are difficult with zoom lenses.

 **ULTRASONIC**



LENS ACCESSORIES

To further extend your creativity, Canon produces an extensive range of lens accessories. Various filters, drop-in filters and gelatin filter holders can be fitted to most lenses to create a variety of effects – from the subtle to the dramatic – or to protect your lens' front element. Lens hoods help prevent flare by shielding your lens from extraneous light when shooting into the sun or other bright light source. Functional, rugged and well built lens cases are available to help protect your valuable investments from the elements. For more details of Canon's range of accessories, check with your local dealer.

Specifications

	EF-S 10-22mm f/3.5-4.5 USM	EF-S 17-85mm f/4-5.6 IS USM	EF-S 18-55mm f/3.5-5.6 II
35mm FILM EQUIVALENT FOCAL LENGTH (mm)	Approx. 16 – 35	Approx. 27 – 136	Approx. 29 – 88
ANGLE OF VIEW (HORIZ - VERT - DIAG)	97° 10' – 54° 30' • 74° 10' – 37° 50' • 107° 30' – 63° 30'	68° 40' – 15° 25' • 48° – 10° 25' • 78° 30' – 18° 25'	64° 30' – 23° 20' • 45° 30' – 15° 40' • 74° 20' – 27° 50'
LENS CONSTRUCTION (ELEMENTS/GROUPS)	13/10	17/12	12/9
NO. OF DIAPHRAGM BLADES	6	6	6
MINIMUM APERTURE	22 – 27 ⁴	22 – 32 ⁴	22 – 38
CLOSEST FOCUSING DISTANCE (M)	0.24	0.35	0.28
MAXIMUM MAGNIFICATION (x)	0.17 (at 22mm)	0.20 (at 85mm)	0.28 (at 55mm)
DISTANCE INFORMATION	YES	YES	YES
IMAGE STABILIZER¹	NO	Approx. 3 steps	NO
AF ACTUATOR	USM ⁵	USM ⁵	MM ⁶
FILTER DIAMETER (mm)	77	67	58
MAX. DIAMETER X LENGTH (mm)	83.5 x 89.8	78.5 x 92	68.5 x 66
WEIGHT (g)	385	475	190
MAGNIFICATION WITH EXTENSION TUBE EF12 II²	0.77 – 0.58	0.43 – 0.14	0.81 – 0.23
MAGNIFICATION WITH EXTENSION TUBE EF25 II	1.51 – 1.28	0.72 – 0.33	0.92 – 0.51 ⁷
LENS HOOD	EW-83E	EW-73B	EW-60C
SOFT CASE	LP1319	LP1116	LP814
G.F. HOLDER III (HOOD III³)	(0)	(0)	(0)
G.F. HOLDER IV (HOOD IV³)	(0)	(0)	(0)

	EF 70-300mm f/4.5-5.6 DO IS USM	EF 50mm f/1.4 USM	EF-S 60mm f/2.8 MACRO USM
35mm FILM EQUIVALENT FOCAL LENGTH (mm)	–	–	Approx. 96
ANGLE OF VIEW (HORIZ - VERT - DIAG)	29° – 6° 50' • 19° 30' – 4° 35' • 34° – 8° 15'	40° • 27° • 46°	20° 40' • 14° 10' • 24° 30'
LENS CONSTRUCTION (ELEMENTS/GROUPS)	18/12	7/6	12/8
NO. OF DIAPHRAGM BLADES	6	8	7
MINIMUM APERTURE	32 – 38 ⁸	22	32
CLOSEST FOCUSING DISTANCE (M)	1.4	0.45	0.20
MAXIMUM MAGNIFICATION (X)	0.19 (at 300mm)	0.15	1
DISTANCE INFORMATION	YES	NO	YES
IMAGE STABILIZER¹	Approx. 3 steps	NO	NO
AF ACTUATOR	USM ⁵	Micro USM ⁵	USM ⁵
FILTER DIAMETER (mm)	58	58	52
MAX. DIAMETER X LENGTH (mm)	82.4 x 99.9	73.8 x 50.5	73 x 69.8
WEIGHT (g)	720	290	335
MAGNIFICATION WITH EXTENSION TUBE EF12 II²	0.26 – 0.04	0.39 – 0.24	1.28 – 0.20
MAGNIFICATION WITH EXTENSION TUBE EF25 II	0.46 – 0.09	0.68 – 0.53	1.61 – 0.44
LENS HOOD	ET-65B	ES-71II	ET-67B
SOFT CASE	LP1116	ES-C9/LP1014	LP1016
G.F. HOLDER III (HOOD III³)	(4)	(2)	(6)
G.F. HOLDER IV (HOOD IV³)	(4)	(2)	(6)

¹ Based on a shutter speed of "1/focal length" seconds, said to be the limit for photography without image stabilization.

² Extension Tube EF12 II can be used with EF lenses except the EF 14mm f/2.8L USM and lenses which cannot be focused manually.

³ Maximum number of Hood III/IV attachable.

In the case of zoom lenses, the maximum number applies to the shortest focal length.

⁴ For EOS models with 1/3 stop increments.

⁵ Mechanical full-time manual focusing built-in.

⁶ Micro motor.

⁷ Only compatible at tele.

⁸ Data based on EOS models with exposures displayed in 1/2 stop increments. Varies slightly with the EOS-1Ds, EOS-1D, EOS-1V, EOS-1N, EOS-1 and EOS 3.

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