



LEICA S

Medium format – minimum size.



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LEICA CAMERA AG

Passionate photography.



1913/14 Oskar Barnack constructs the **Ur-Leica**.

1925 **Leica I** with a fixed lens is presented at the Leipzig Spring Fair.

1930 The first Leica with interchangeable thread-mount lenses appears on the market.

1932 **Leica II**: the first camera with a coupled rangefinder.

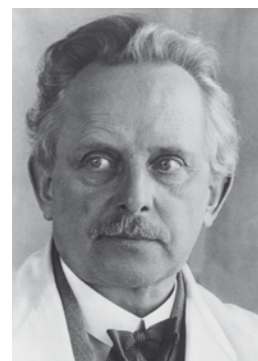
1954 **Leica M3** with combined bright-line viewfinder/rangefinder and bayonet lens mount.

1965 **Leicaflex**: the first Leica single lens reflex camera goes into production.

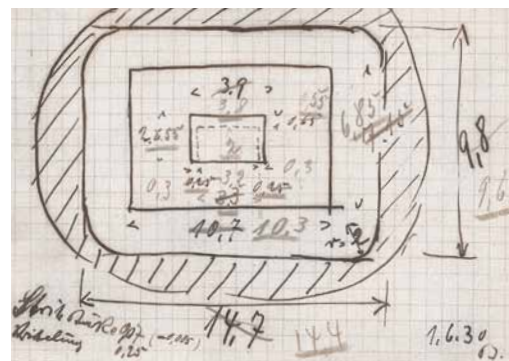
1966 **Leica Noctilux-M 50 mm f/1.2**: the first lens with an aspherical element.

1971 **Leica M5**: the first rangefinder camera with selective metering through the lens.

1996 **Leica S1**: the first digital camera with 75-megapixel resolution.



Oskar Barnack (1879 – 1936).



Sketched construction diagram by Oskar Barnack.



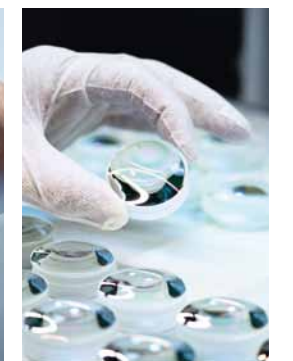
The Leitz Optics building, Wetzlar.



"Kissing in the rearview mirror," by Magnum photographer Elliott Erwitt, 1955.



Installation of the control board on the rear shell of the Leica S2.



Lens element and assembled lens testing.

2006 **Leica M8**: the first digital rangefinder camera.

2008 **Leica Noctilux-M 50 mm f/0.95 ASPH.**: the world's fastest ever aspherical lens.

2009 **Leica S2**: the professional digital camera sets new standards in medium-format photography.

Leica M9: the smallest digital system camera with a full-frame sensor.

Leica X1: the first compact camera with an APS-format sensor.

2012 **Leica S**: medium format – reduced to the maximum.

Leica M: the new M generation with a Leica Max 24 MP sensor, Live View, and video.

Leica X2: the trailblazer of its class in picture quality.

Leica Camera shares something with countless people around the world: a love of, and a passion for, photography. It's the fascination of capturing a moment in time; shaping it, transforming it into something timeless, and experiencing it again and again as a unique photograph. This is what has driven Leica for almost 100 years. We create cameras using the best possible materials and assemble them meticulously by hand, so that every Leica delivers unwavering reliability and quality over a lifetime. Whether it's used professionally, artistically, or for the

sheer joy of documenting life, one thing binds all Leica cameras together: they all help the photographer to concentrate on the essentials that comprise a great photograph. Each one is a small masterpiece. Leica cameras are compact, ageless, elegant, easy to use, and yet uncompromising in their optical, mechanical, and technical quality. They are the perfect tools for everyone who understands the fascination of photography and who loves a unique photograph.

LEICA **S**

In a class of its own.

LEICA

Leica

SUMMARIT-S 1:2.5/70 ASPH. CS



LEICA S

In a class of its own.

In designing and constructing a completely new and purely digital camera from the ground up without the need to employ a classical recording format, it makes sense to also take the opportunity to select a sensor format that provides an ideal balance between imaging quality and creative capabilities. This ideal balance is fulfilled by the sensor of the Leica S with its dimensions of 45 × 30 mm: the Leica ProFormat solves problems that could not be solved by established standard photographic formats. The Leica ProFormat offers the same aspect ratio as 35 mm format, but is significantly larger. At the same time however, it is smaller than the classic medium format. The larger the format, the shallower the depth of field for the same angle of view, meaning that shallow depth of field can be used more effectively for isolating details.

However, if the format is too large, the opportunity for the creative use of planes of sharpness also means that it becomes essential to stop down significantly to achieve an even slightly greater depth of field. In 35 mm format, and particularly in the case of wide-angle photography, extremely fast lenses are needed to accentuate planes of sharpness. In contrast, medium-format photography requires an enormous amount of light to achieve sufficient depth of field. At the same time, stopping down to small apertures has negative effects on lens performance. The format of the Leica S lies comfortably and ideally between these extremes: even in the wide-angle domain, S-Lenses permit the precise emphasis of planes of sharpness. At the same time, the selection of moderate apertures is sufficient to extend depth of field, allows the use of available light, and exploits the full performance potential of every lens.



The Leica ProFormat enables the lenses of the S-System to fully exploit their superior optical performance while simultaneously offering ideal levels of creative freedom.

LEICA S

In a class of its own.



Full-size view

THE IDEAL FORMAT

The Leica S-System was conceived exclusively for digital photography from the ground up, and offers professional photographers a unique combination of functional advantages. It unites the imaging quality of a medium-format camera with the mobility, speed, and versatility of a 35 mm camera. The innovative Leica ProFormat with its 45 × 30 mm sensor dimensions simultaneously enables compact camera design and a resolution of details at a much higher level than would ever have been possible in 35 mm format. At the same time, it preserves the familiar aspect ratio of 3:2, which enables a clear distinction between portrait and landscape formats, and is ideal for use in all contemporary media. The Leica S-System – an ideal symbiosis of ergonomics and performance.

LIGHTWEIGHT AND FAST

The design and form of the Leica S guarantees the superior speed and versatility needed for working on the move and in the studio. Its sophisticated ergonomic concept relies on a minimum number of controls that ensures perfect handling at all times, even in the most hectic situations. Thanks to its compact form and extraordinarily fast lenses, the S lets photographers achieve typical medium-format quality, even when shooting without a tripod and in available-light situations. Its fast autofocus system, fine-tuned for maximum precision by Leica, is a further guarantee for perfectly sharp and richly detailed images. The body, the lenses, and all other components of the S-System are sealed against dust and spray, are extremely robust, and are built with a long working life in mind.

THE ULTIMATE IN LENS PERFORMANCE

The S-System lenses are specifically designed and constructed for use on a digital camera. The exceptionally fast lenses offer photographers everything they could wish for at all apertures and distances. No matter what the shooting distance, the S offers the highest optical performance at maximum aperture, so photographers can rely on the superior performance of S-Lenses in every situation. The central shutter versions of all the S-Lenses enable particular flexibility in the creative use of light – in every situation, whether on location or in a studio setting.

LEICA S-LENSES

For the ultimate in photographic perfection.

Even the best camera cannot improve on the image its lens delivers. That is why our design engineers always push the limits of what is technically possible – and never accept compromises. In the case of the lenses for the S-System, legendary Leica quality is combined with cutting-edge technology. Our commitment to quality is founded on a simple principle: photographers must be able to rely completely on their lenses in all shooting situations and under all conditions. That is the reason Leica S-Lenses deliver excellent imaging performance not only at all focusing distances, but also at all apertures.

The unique combination of many years of experience and state-of-the-art production methods makes Leica the only manufacturer with the ability to produce large-diameter, aspherically ground lenses of the very highest quality in series production. This also holds true for high-quality special glass varieties – for instance, those with anomalous partial dispersion or ultra-high refractive indices – that demand the ultimate in technical expertise in their production.

Every Leica S-Lens also has its own integrated processor for complete control of all functions. At the same time, photographers can override the autofocus at any time and set the distance manually using the focusing ring. The majority of the Leica S-System lenses are also available with an innovative central shutter to guarantee maximum flexibility when using additional light sources, such as flash.

The lenses are as effectively prepared for the future as the cameras themselves: both system components can be updated with new firmware versions. The updating of lens firmware is performed automatically the moment the lens is attached to a camera body having the updated firmware.



LEICA S-LENSES

For the ultimate in photographic perfection.

OUTSTANDINGLY FAST

All Leica S-Lenses are unusually fast – an outstanding feature, particularly when compared with conventional medium-format lenses. A decisive factor in this is that they achieve very close to their optimum performance even at maximum aperture – this enables the photographer to use the best possible aperture for their creative needs in every situation. Stopping down brings only marginal improvement, and the fast initial aperture offers unrivaled creative freedom for photographers to explore planes of sharpness and less sharpness to isolate specific details of their subjects. With the interplay of precisely defined planes of sharpness and harmoniously resolved areas of less sharpness, visual effects that can only be achieved with the degree of perfection offered by Leica lenses unfold. At the same time, these extremely fast lenses ensure an intensely bright and clear viewfinder image that guarantees outstanding image assessment, even when focusing manually.

CONSISTENT SYSTEM INTEGRATION

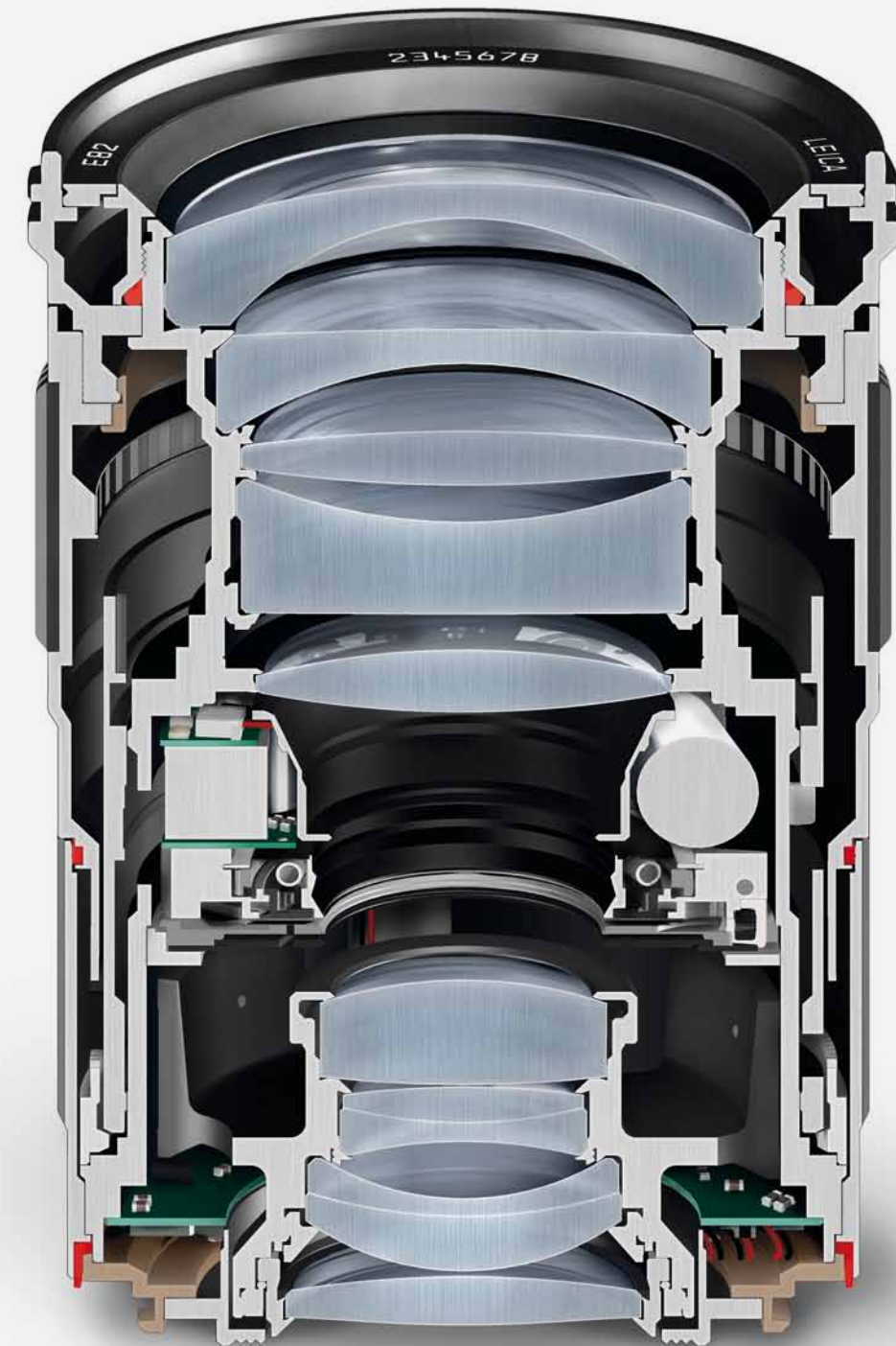
The purely digital concept of the S-System enables a significant improvement in imaging quality. For instance, the glass screen of the image sensor for all lenses and the dust and spray protection elements available with several lenses have been included as factors in their optical design. The image sensor of the S cannot be separated from the camera, is integrated with extreme precision, and, in contrast to film, has a much narrower and more precisely defined plane of sharpness. This in turn enables the use of optical designs that increase contrast rendition performance to previously unimagined levels. Such performance potential can only be fully exploited with an equally precise autofocus mechanism, and here, the microprocessor in every S-Lens works in perfect unison with the camera's control systems: the contacts of the interface between the camera and lens constantly relay and exchange data, commands, distance measurements, and much more. Thus, during every exposure, the camera and lens are a single and inseparable entity that, thanks to painstaking and reciprocal fine-tuning of both its components, delivers perfect image quality in every situation.

MANUFACTURING PRECISION MAKES THE DIFFERENCE

Excellent design is only one part of the secret of these lenses, the other is extreme precision in their construction. All S-Lenses are built with a high proportion of manual expertise by highly qualified specialists. Only decades of experience in the development of the interaction between optical and mechanical manufacturing and assembly to ever new heights of perfection make it possible to achieve the extremely precise tolerances demanded by the design specifications of each high-performance Leica lens. Our technical staff don't simply adjust until a value is somewhere within the defined tolerances, they take the time to ensure maximum precision. And this is the only way to ensure an ambitious design becomes a perfect product. It is not just the unique number of manual production phases that are typical of Leica, but also the consistent use of mechanical and automated procedures wherever they offer benefits within the production process. For example, aspherical lens technologies: no other manufacturer possesses Leica's immense experience in the production of aspherical lenses – a treasure trove of knowledge and expertise, without which the extreme performance characteristics of the Leica S-Lenses would never have been possible.

PERFECTLY PROTECTED

Just like all other components of the S-System, the lenses are perfectly protected against environmental influences such as dust and moisture. The focusing ring can even be used in the rain and it is impossible for water to enter the lens barrel, through either the bayonet mount or around the front lens. The exposed glass surfaces of all S-Lenses also feature Leica's water- and dirt-repellent AquaDura™ coating, which, in a similar way to a lotus leaf, prevents the adhesion of drops of water and particles of dirt. This also means that the age-old problem of condensation misting the front lens in cold weather is now a thing of the past and that, even in the rain, the S is always ready to shoot.



Made in Germany: Master craftsmanship and advanced technology – these are the key factors in the production of Leica high-performance lenses.

LEICA **SUPER-ELMAR-S** 24mm f/3.5 ASPH.

The super-wide lens.

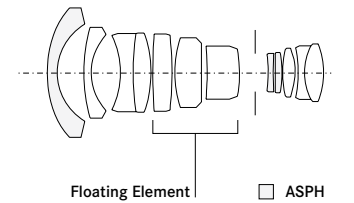


EXPAND YOUR HORIZONS

The Leica Super-Elmar-S 24 mm f/3.5 ASPH. has the same angle of view as a 19 mm lens in the full-frame 35 mm format. As a super-wide lens, its ultra-wide angle of view opens up an enormous range of creative opportunities in image composition – particularly in interior views, architectural, and landscape photography. At the same time, the lens is optimized for very high contrast rendition and the highest resolution from its widest aperture on down, and it delivers a constantly high level of quality from its closest focusing distance to infinity. The extraordinary degree of correction of this optical design is reflected, for example, in its almost complete freedom from distortion.

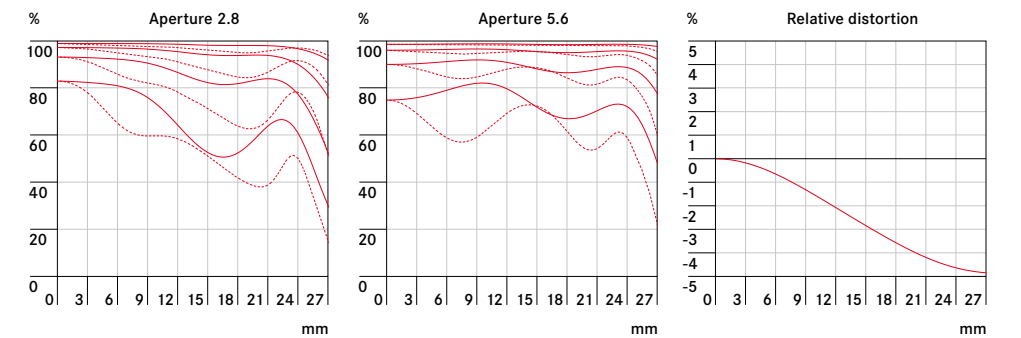
CONSTRUCTION DETAILS

Of its twelve elements in ten groups, five are made of glasses with anomalous partial dispersion. Three of these are fluorite lens elements with particularly low dispersion that enable the nearly perfect correction of chromatic aberrations. Two aspherical elements are located behind the iris and the aspherical surface of the front lens to minimize monochromatic aberrations. During focusing, only the middle group of three elements is moved; a floating element that is moved independently ensures that outstanding imaging performance is maintained even at the closest focusing range.

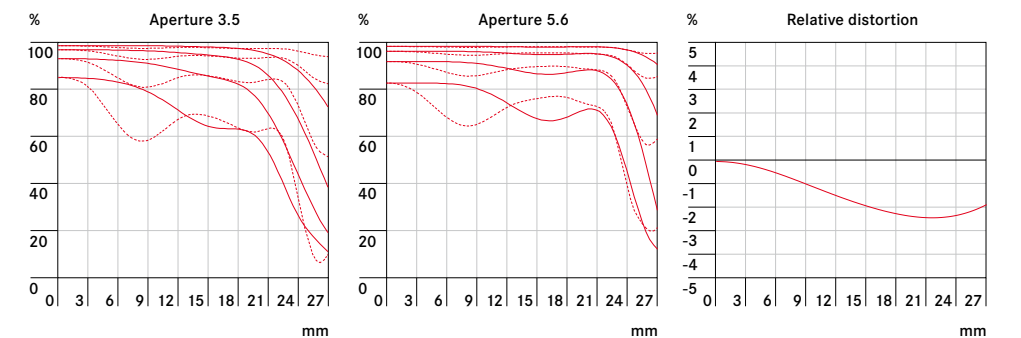


CHARACTERISTICS

At minimum focusing distance



At infinity



For a lens with a diagonal angle of view of 97°, the contrast rendition of this lens is already extraordinarily high at its maximum aperture. Stopping down increases its optical performance to only a very slight extent in the extreme corners of the image. Maximum distortion is remarkably low for such an extremely wide-angle lens. The contrast values are displayed here in percentages for spatial frequencies of 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) measurements.

LEICA **VARIO-ELMAR-S** 30-90 mm f/3.5-5.6 ASPH.

The standard zoom.

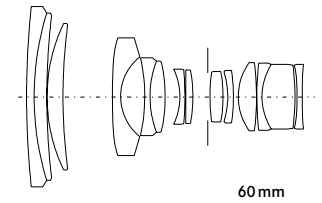


READY TO MASTER EVERY CHALLENGE

The Leica Vario-Elmar-S 30-90 mm f/3.5-5.6 ASPH. has the same imaging characteristics as a 24-72 mm zoom lens in the full-frame 35 mm format. It combines a useful and versatile range of focal lengths, compact construction, and low weight with extraordinarily high imaging performance from infinity to the closest focusing range, both wide-open and at all other apertures. With the exception of a slightly slower maximum aperture, the lens is a fully viable alternative to prime lenses. It significantly increases the photographer's flexibility and allows longer and much less tiring shooting sessions.

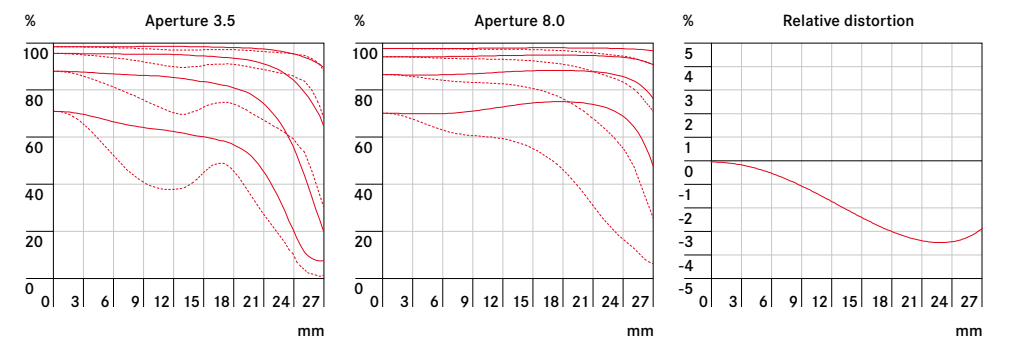
CONSTRUCTION DETAILS

Nine of the 14 elements in four groups are manufactured from glasses with anomalous partial dispersion. Of these, three are fluo-rite lenses with particularly low dispersion for superior correction of chromatic aberrations. Two aspherical surfaces on the rear element are employed to minimize monochromatic aberrations, while another aspherical surface on the front lens of the second group maintains consistent imaging performance at shorter distances and contributes to minimizing distortion.

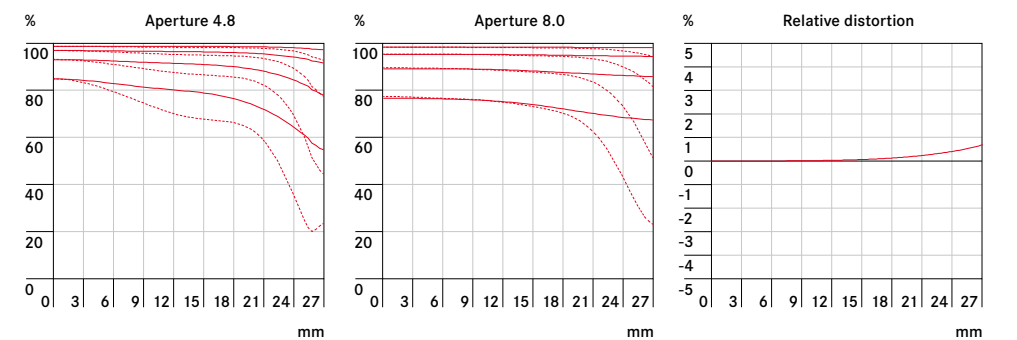


CHARACTERISTICS

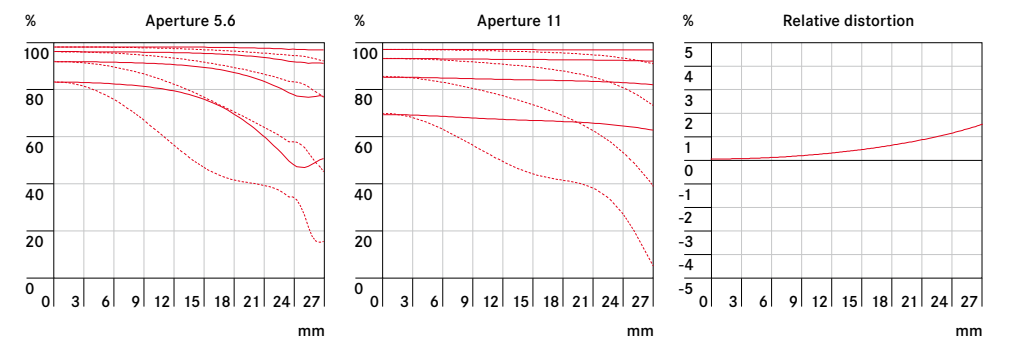
30 mm



60 mm



90 mm



Even wide open, the standard zoom lens is characterized by very high contrast rendition and high resolution throughout the entire zoom range and at all distance settings. Stopping down by one aperture value only slightly increases optical performance. Maximum distortion is low for a zoom lens. The contrast values are displayed here as percentages for spatial frequencies of 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) measurements.

LEICA **ELMARIT-S** 30 mm f/2.8 ASPH. (CS)

The extreme wide-angle.

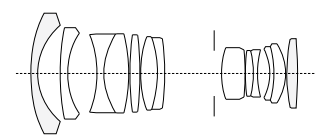


A WIDE VIEW OF THE WORLD

The LEICA Elmarit-S 30 mm f/2.8 ASPH. (CS) has an angle of view equivalent to that of a 24 mm lens in 35 mm format, therefore almost belonging in the domain of super-wide lenses. At the same time, the lens is optimized for maximum contrast rendition and highest resolution from its widest aperture, and guarantees a constantly high level of quality from its closest focusing distance to infinity. The extraordinary degree of correction of this optical design is reflected, for example, in its almost complete freedom from distortion. The Leica Elmarit-S 30 mm f/2.8 ASPH. is also available as a CS version with a central shutter.

CONSTRUCTION DETAILS

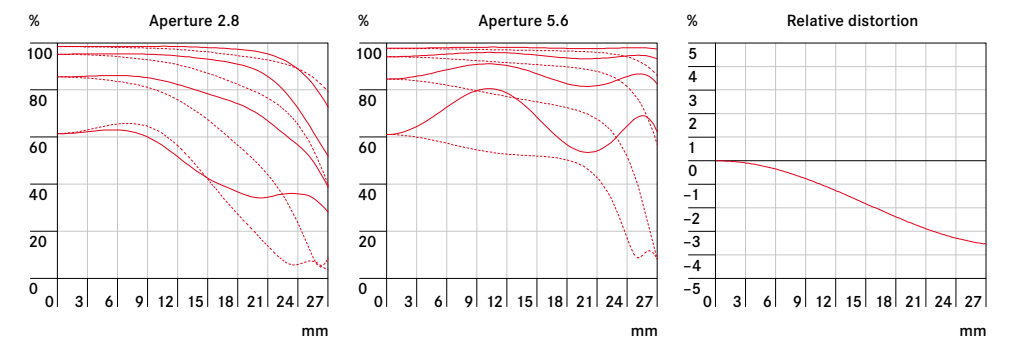
Of its 13 elements in nine groups, five are made of glasses with anomalous partial dispersion. Three of these are fluorite lens elements with particularly low dispersion for the correction of chromatic aberrations. Three elements with a particularly high refractive index and two aspherical elements minimize monochromatic aberration. Only the rear group, containing six elements, moves during focusing, which ensures excellent performance from infinity to its closest focusing range.



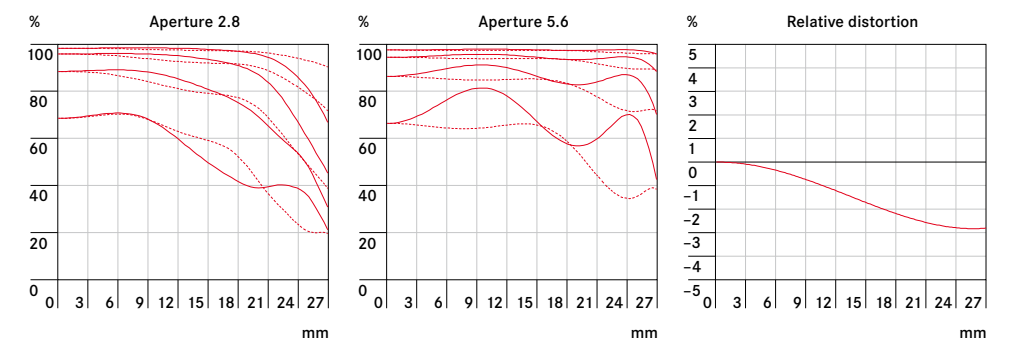
□ ASPH.

PERFORMANCE CHARACTERISTICS

At minimum focusing distance



At infinity



For a lens with a diagonal angle of view of 84°, the contrast rendition is already extraordinarily high at its maximum aperture. Stopping down increases its optical performance to only a very slight extent in the extreme corners of the image. The maximum distortion of 2.8% is impressively low for such an extremely wide-angle lens. The contrast values are displayed here in percent for 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) structures.

LEICA **SUMMARIT-S** 35 mm f/2.5 ASPH. (CS)

The fast universal wide-angle.

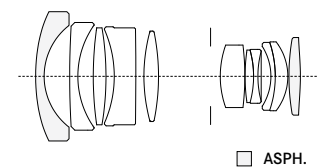


THE LENS FOR EVERY SITUATION

The angle of view of the Leica Summarit-S 35 mm f/2.5 ASPH. (CS) corresponds to that of a 28 mm lens in 35 mm film format and is an ideal focal length for landscape and architectural photography, as well as for studio work. Systematically designed with maximum contrast performance at maximum aperture from infinity to its closest focusing distance, this unusually fast lens is predestined for use as a universal lens. Its sophisticated design and construction almost completely eliminate optical errors such as distortion and chromatic aberration. The Leica Summarit-S 35 mm ASPH. f/2.5 is also available as a CS version with an integrated central shutter.

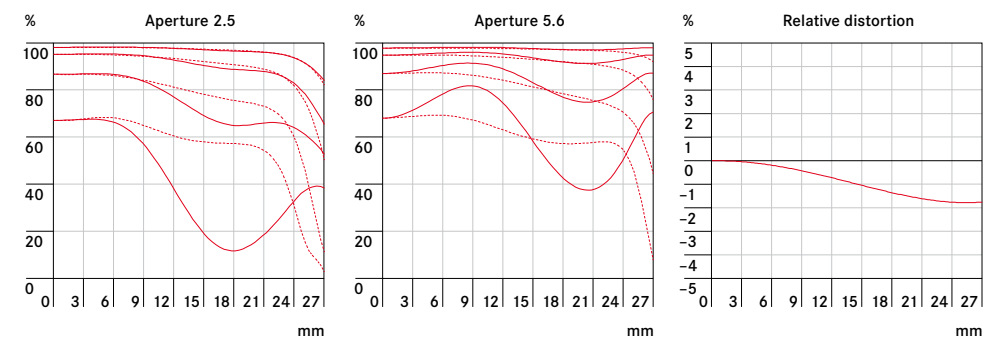
CONSTRUCTION DETAILS

To reduce chromatic aberrations to an absolute minimum, five of the 11 lens elements are manufactured from glasses with anomalous partial dispersion, of which three also display particularly low dispersion characteristics. Two elaborately manufactured aspherical surfaces ensure that effects like distortion are kept to an extraordinarily low level. Rear-group focusing guarantees consistently outstanding imaging properties from infinity to its closest focusing distance.

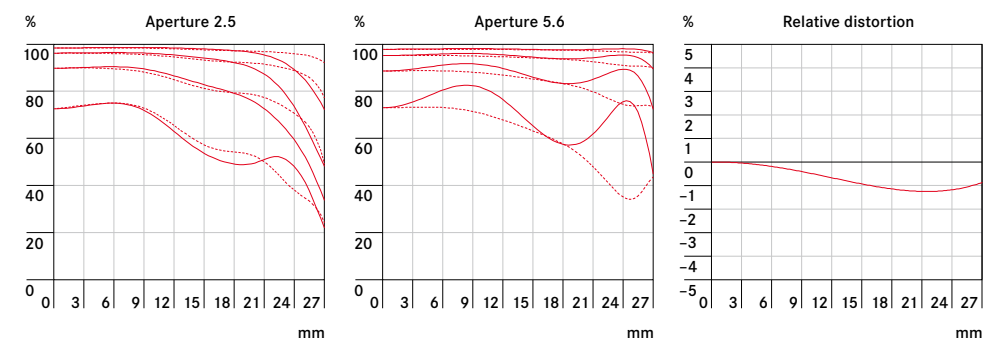


PERFORMANCE CHARACTERISTICS

At minimum focusing distance



At infinity



Considering how fast this lens is, the high contrast performance at maximum aperture is even more remarkable. Stopping down slightly lets the lens develop its already superior performance into the extreme corners of the image. Its very low distortion of only 1.2% enables its use as a universal lens and requires no additional correction or manipulation in postprocessing. The contrast values are displayed here in percent for 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) structures.

LEICA **SUMMARIT-S** 70 mm f/2.5 ASPH. (CS)

The high-performance standard lens.

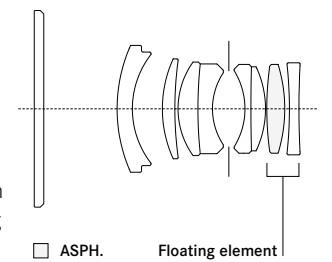


STANDARDS REDEFINED

The Leica Summarit-S 70 mm f/2.5 ASPH., also available in a CS version with a central shutter, is suitable as a standard focal length for an enormous range of photographic situations, and, thanks to its speed and superior imaging quality, masters them at all apertures and focusing distances. The use of aspherical surfaces to almost completely eliminate monochromatic aberration is unusual for this focal length, and underlines the exceptional character of this lens.

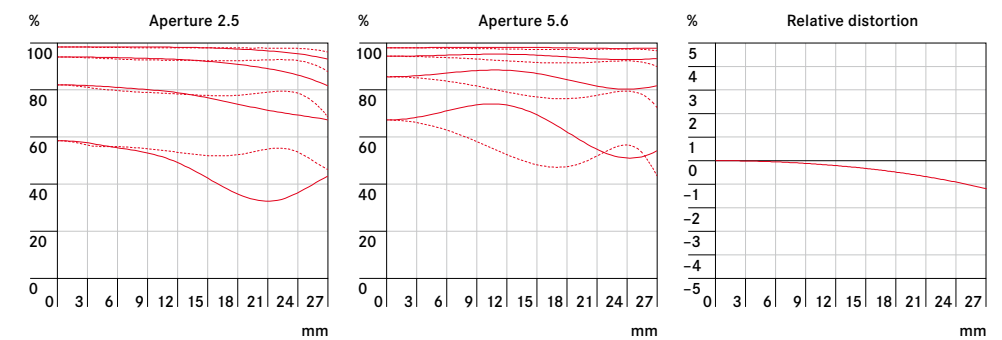
CONSTRUCTION DETAILS

The eight lens elements of the Leica Summarit-S /70 mm f/2.5 ASPH. (CS) are arranged in six groups. Two cemented elements made from glasses with high anomalous partial dispersion minimize chromatic aberration, while glass with extremely high refractive indices and an aspherical element counteracts monochromatic aberrations. The built-in front filter is an integral part of the optical design and provides optimum protection against dust and spray. In this design, focusing in combination with a floating element ensures excellent performance in the close focusing range.

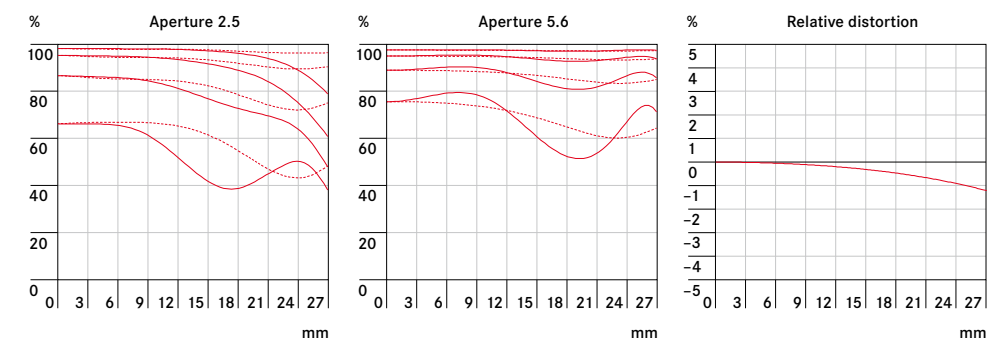


PERFORMANCE CHARACTERISTICS

At minimum focusing distance



At infinity



This lens finds unlimited uses in practice thanks to its consistently high levels of performance. It achieves close to its maximum contrast rendition at its largest aperture. Stopping down even slightly brings perfect corner-to-corner sharpness. Its maximum distortion value of 1.2% is significantly below a perceptible level. The contrast values are displayed here in percent for 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) structures.

LEICA **TS-APO-ELMAR-S** 120 mm f/5.6 ASPH.

A specialist lens for controlling perspectives and planes of focus.

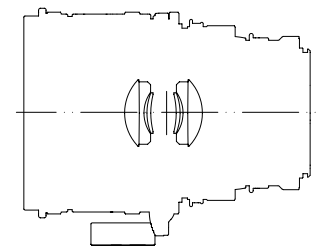


PERSPECTIVE CONTROL

As with a view camera, the adjustments possible with the Leica TS-APO-Elmar-S 120 mm f/5.6 ASPH. allow full control over perspective and the precise location of the plane of sharpest focus. The lens delivers an image circle with a diameter increased by 24 mm to allow parallel shifts of up to 12 mm in all directions in relation to the optical axis. This effectively relocates the camera's point of view and correspondingly alters the perspective. For example, this allows architectural photography without undesired converging or diverging verticals. Independent of this shift function, the lens can also be tilted by up to 8° in all directions to tilt the plane of sharpest focus according to the Scheimpflug principle. Using this technique, photographers can shoot a flat subject from an oblique angle at maximum aperture and adjust the location of the plane of sharpest focus to ensure that the subject is absolutely sharp in all areas despite the shallow depth of field. Conversely, tilting the plane of focus in the opposite direction to the elongation of the subject may be used to significantly reduce depth of field to create attractive pictorial effects.

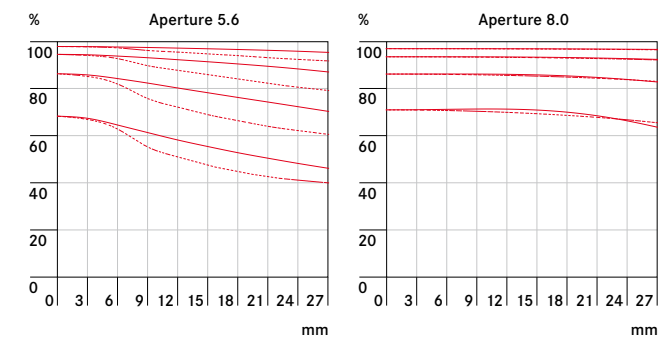
CONSTRUCTION DETAILS

Due to its special construction as a tilt/shift lens, the external form of the Leica TS-APO-Elmar-S 120 mm f/5.6 ASPH. differs from the other S-System lenses. Along with a focusing ring for setting the correct distance, a preset ring and a setting ring are provided for setting the aperture. The lens has a total of four rings for controlling tilt and shift. There is one turn-and-push ring for setting the tilt, another for setting the shift direction and one each for setting the degree of tilt or shift. The lens is also fitted with a tripod plate with 1/4" and 3/8" bushes that, thanks to a rotatable clamping ring and a fixing screw, allow the lens to be firmly fixed in any chosen position.

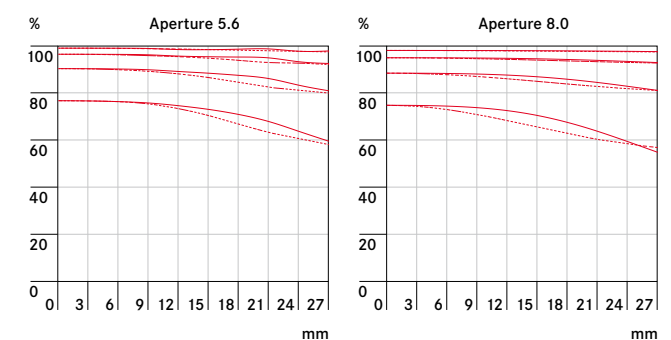


CHARACTERISTICS

At minimum focusing distance



At infinity



The large image circle of the lens allows a simultaneous shift of 12 mm and tilt of 8°. The tilting and shifting mechanisms can each be rotated through 360° to allow independent setting of tilt and shift values in every direction. These adjustment options give photographers enormous freedom for creative manipulation of their images during shooting.

LEICA APO-MACRO-SUMMARIT-S 120 mm f/2.5 (CS)

The perfect portrait lens.

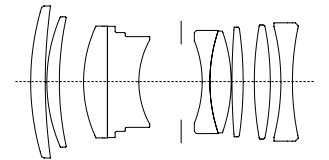


MUCH MORE THAN JUST A PORTRAIT LENS

The Leica APO-Macro-Summarit-S 120 mm f/2.5 (CS) has a true dual function. Firstly, it is a macro lens for close-up photography up to a reproduction ratio of 1:2 and, secondly, it is a fast telephoto lens with an unusually wide maximum aperture of f/2.5. At the same time, it offers such astounding imaging qualities at maximum aperture throughout its entire focusing range that stopping down really only increases the depth of field, but cannot further increase its superior contrast rendition. This brings countless fascinating options for exploring the creative opportunities offered by selective sharpness. The alternative CS version with a central shutter further increases its enormous range of potential uses.

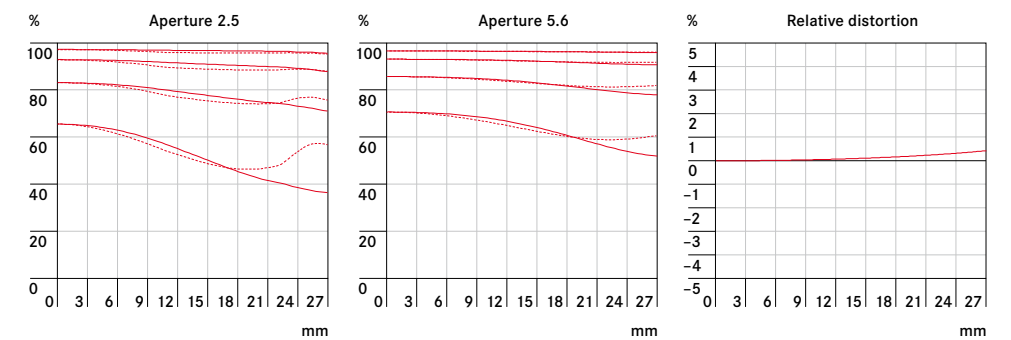
CONSTRUCTION DETAILS

The lens design comprises nine elements in seven groups, and its front-group focusing with a floating element guarantees outstanding contrast performance at even the shortest focusing distances of the macro domain. Three elements are made of glasses with anomalous partial dispersion and two of these have extremely low dispersion, which minimizes monochromatic aberrations. The sophisticated APO correction enables perfect resolution of even high-contrast, fine-detail structures.

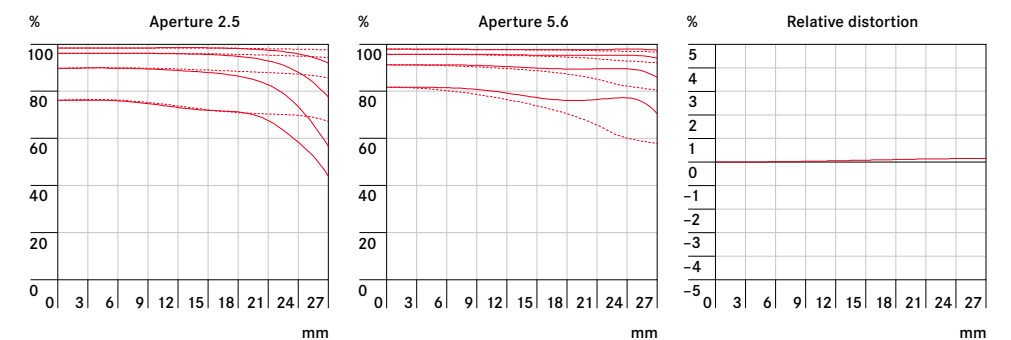


PERFORMANCE CHARACTERISTICS

At minimum focusing distance



At infinity



The unusually fast initial aperture for this focal length, and for a lens designed for macrophotography, already delivers almost perfect contrast performance wide open, which can be improved only slightly at the extreme edges of the frame by stopping down a little. This applies equally to both the macro and telephoto domains. The minimal barrel distortion remains insignificant in practice. The contrast values are displayed here in percentages for 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) structures.

LEICA APO-ELMAR-S 180 mm f/3.5 (CS)

The ultimate in long lens photography.

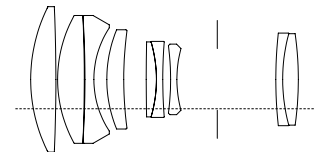


CUTTING THE DISTANCE

The Leica APO-Elmar-S 180 mm f/3.5, also available as a CS version with a central shutter, sets new standards of quality for handheld telephoto photography. It's a fact: as the contrast performance cannot be improved any further by stopping down, wide open is a working aperture, and optical errors are practically unknown to this ultrahigh-performance lens. Thanks to its high speed, this lens is outstanding for the creative use of selective focus in portraits. At the same time, its closest focusing distance of only 1.5 meters makes it ideal for fascinating close-up studies. In studio work, the greater camera-to-subject distance helps by creating more space for setting up the lighting, for example.

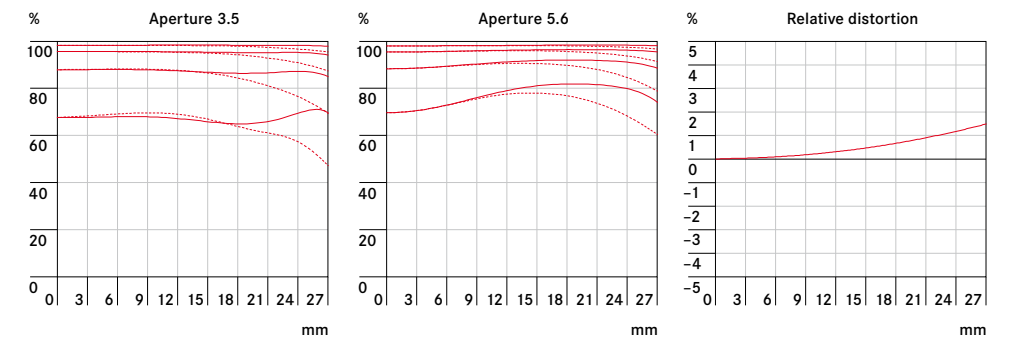
CONSTRUCTION DETAILS

The design of the apochromatically corrected Leica APO-Elmar-S 180 mm f/3.5 (CS) consists of nine elements in seven groups. Of the six lenses made from glasses with anomalous partial dispersion, two have particularly low dispersion and are instrumental in the elimination of chromatic aberrations. Three lens elements made from glass with a high refractive index almost completely eliminate monochromatic aberrations.

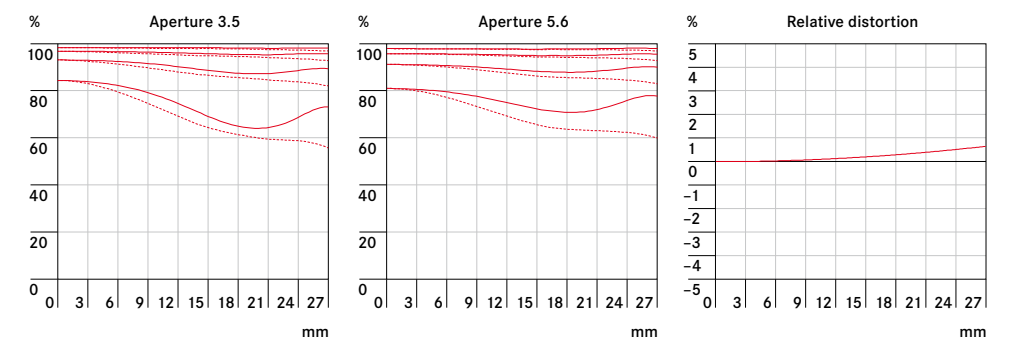


PERFORMANCE CHARACTERISTICS

At minimum focusing distance



At infinity



The power to resolve extreme contrasts and the consistent edge-to-edge performance of this lens are extraordinary in every respect. In actual use, the improvement of its optical performance when stopped down, hardly perceptible in the MTF curves, has no effect whatsoever on the extraordinary imaging qualities of this lens. The contrast values are displayed here in percentages for 5, 10, 20, and 40 lp/mm for the height of the Leica ProFormat for tangential (dotted line) and sagittal (continuous line) structures.

CLOSER TO THE ACTION

The Elpro-S accessory close-up lens reduces the close focusing limit to 1.1 metres and offers a reproduction ratio of 1:4.5.



LEICA S-LENSES

The central shutter.



Precision technology – made in Germany:
every Leica S-Lens is also
available with a central shutter.

CREATIVE CONTROL

Conceived, designed, and constructed exclusively by Leica, the central shutter available for all Leica S-Lenses is a masterpiece of precision and reliability. Bigger inside than out: the Leica central shutter has a very large inner diameter optimized for the extraordinarily fast initial apertures of the Leica S-Lenses. At the same time, it is so compact in size that it can be easily integrated into every S-Lens. It is constructed with an extremely long service life of at least 100,000 shutter cycles and, with its fastest shutter speed of 1/1000th of a second, offers photographers significantly greater exposure leeway when working with professional flash systems for the suppression of ambient light or as fill lighting in bright settings when using larger apertures. This offers even more scope for exploring your creative limits.

THE CHOICE IS YOURS

Photographers using a Leica S can choose between the fast metal focal plane shutter in the camera body and a top speed of 1/4000th of a second, and the special benefits of the central shutter integrated in CS lenses. All they have to do is simply select either "Focal Plane Shutter" (FPS) or "Central Shutter" (CS) with the main switch on the camera body. When using flash, the shortest sync speed with the focal plane shutter is 1/125th of a second. In contrast, the central shutter offers flash sync up to its fastest speed of 1/1000th of a second and thus expands the working range by a whole three stops.

FAST FOCAL PLANE SHUTTER

The focal plane shutter designed especially for the Leica S is extremely fast and offers a top speed of 1/4000th of a second. This offers photographers a wide range of options – not only for freezing fast-moving subjects, but also the opportunity to use larger apertures in brightly lit situations. When using flash with lenses without a central shutter, the focal plane shutter offers flash sync speed of up to 1/125th of a second.





The Leica central shutter is so compact that it was easily integrated into all S-Lenses.



The central shutter is completely vibration-free and incredibly fast. Its high-performance construction enables shutter speeds of up to 1/1000th of a second and full flash system synchronization at all shutter speeds. The use of cutting-edge materials in combination with painstaking construction and assembly procedures guarantees extreme reliability and a long service life.

SUPERIOR CONSTRUCTION

The Leica central shutter is a masterpiece of mechatronics and a product that owes much to the decades of precision engineering, microtechnology, electronics, and materials expertise of our design engineers. Even though it employs the classic solution of mechanical springs for the efficient storage of potential energy, the central shutter is a piece of cutting-edge technology. The tensioned-spring principle employed contributes significantly to the extremely compact dimensions that allow the integration of the central shutter in all S-Lenses.

The springs are tensioned by a specially developed electric motor with a high-precision overrunning clutch and release their stored energy to activate the shutter blades when the shutter release is depressed. A specially constructed solution ensures that the blades are prevented from rebounding when the shutter is opened or closed. A microprocessor-controlled pawl and ratchet mechanism controls the shutter cycle via two electromagnetically activated plungers.

CUTTING-EDGE MATERIALS

Lubricants and oils are as out of place in an optical system as dust and abrasion particles. In view of this, the Leica central shutter is constructed exclusively from state-of-the-art high-tech materials and with manufacturing methods that ensure the practically frictionless interaction of all moving parts without the need for lubricants. For instance, the shutter blades are made from precision-engineered carbon fiber. Several of the shutter's control elements are manufactured from high-performance ceramics, while other components are made from special synthetic materials. The surfaces and drilled holes of all components are elaborately machined with extreme precision and polished in a way that ensures that there is practically no friction and, in turn, no wear.

This consistent use of the latest high-tech materials, manufacturing and finishing methods that push the limits of the technically possible, is unique in the production of a mass-produced element like the Leica central shutter.

EXTREME RELIABILITY

A professional camera like the Leica S must be absolutely dependable in every situation. Due to the sometimes enormous stresses on their components, central shutters are among the most sensitive components of a camera system. All the more reason for our design engineers to concentrate on the enduring reliability and robustness of the central shutter for our S-Lenses. It stands up to at least 100,000 cycles without any issues and is therefore just as reliable as every other component of the Leica S-System.

Above all, the design and construction of the central shutter makes this possible: wherever there is contact between moving parts, carefully selected combinations of materials, precise fitting, and surface finishing that pushes the limits of the technically possible ensure practically frictionless operation. And where there's no friction, there's no wear – so consistent performance is guaranteed. A Leica central shutter guarantees shutter-speed precision, day in, day out – for its first exposure, and after many years of demanding professional use.

MADE IN GERMANY

The Leica central shutter is a completely new design that owes much in its technical realization to the most modern of high-tech materials and manufacturing methods, which have mostly only become available in the recent past. Only in this way is it possible to combine the ingeniously simple and exceedingly compact operating principle of the Leica central shutter with outstanding reliability and utmost precision.

Nevertheless, the true secret of the central shutter may well be found in its construction and assembly, because here the finishing of surfaces and fitting of components require the highest levels of precision, which demand so much from our highly qualified teams of experts. Each shutter is assembled in a clean-room environment after thorough cleaning of every single component. Each assembled shutter must then pass through a series of stringent testing and calibration processes before it can be installed in a CS lens. Only these meticulous procedures can provide the absolute guarantee that the shutter will accurately maintain its speeds without any variations – for many, many years to come.

LEICA S-LENSES

S-Adapters for third-party lenses.



The S-Adapter H supports all the original functions of Hasselblad HC and HCD lenses.

The Leica S-Adapters allow Hasselblad H and V lenses and lenses from the Mamiya 645 and Pentax 67 systems to be mounted on the Leica S. This offers users of these systems the chance to discover the extraordinary image quality and compact size of the Leica S while maintaining their earlier investment in lenses. At the same time, it also means that the Leica S can be used with the largest selection of lenses in the medium-format segment.

THE LEICA S-ADAPTER H

The S-Adapter H allows all Hasselblad H System lenses to be mounted on the Leica S. Thanks to an integrated microprocessor, the adapter allows photographers to use all the original functions of both Leica S and the Hasselblad lenses. The autofocus system and manual override functions of the lenses are preserved with absolute precision. The integrated central shutters of the lenses can be used up to the maximum shutter speed of 1/750th of a second as an alternative to the focal plane shutter of the Leica S. Full electronic aperture control allows the use of aperture priority, shutter speed priority, and program AE modes.

Thanks to the electronic communication between the S and the Hasselblad lenses, the camera also registers the selected aperture, shutter speed, and other parameters in the EXIF data of each image file. Leica has also computed lens profiles for the digital correction of optical errors in Adobe® Photoshop® Lightroom® and Camera Raw. The S-Adapter H is fully compatible with all Hasselblad HC and HCD lenses. It is, however, not compatible with the extension tubes for close-up photography, the teleconverters, or the tilt/shift converter.

THE LEICA S-ADAPTER V, M645, AND P67

Purely mechanical lens adapters are also available for the Hasselblad V, Mamiya 645, and Pentax 67 systems. As no electronic communication for aperture control or potentially available central shutters is provided, these lenses may only be used in conjunction with the focal plane shutter of the Leica S. In such cases, the aperture is set on the lens and the Leica S provides the corresponding shutter speed in aperture priority mode. All Leica S-Adapters are manufactured from high-quality materials such as anodized aluminum or chrome-plated brass.

COMPATIBILITY



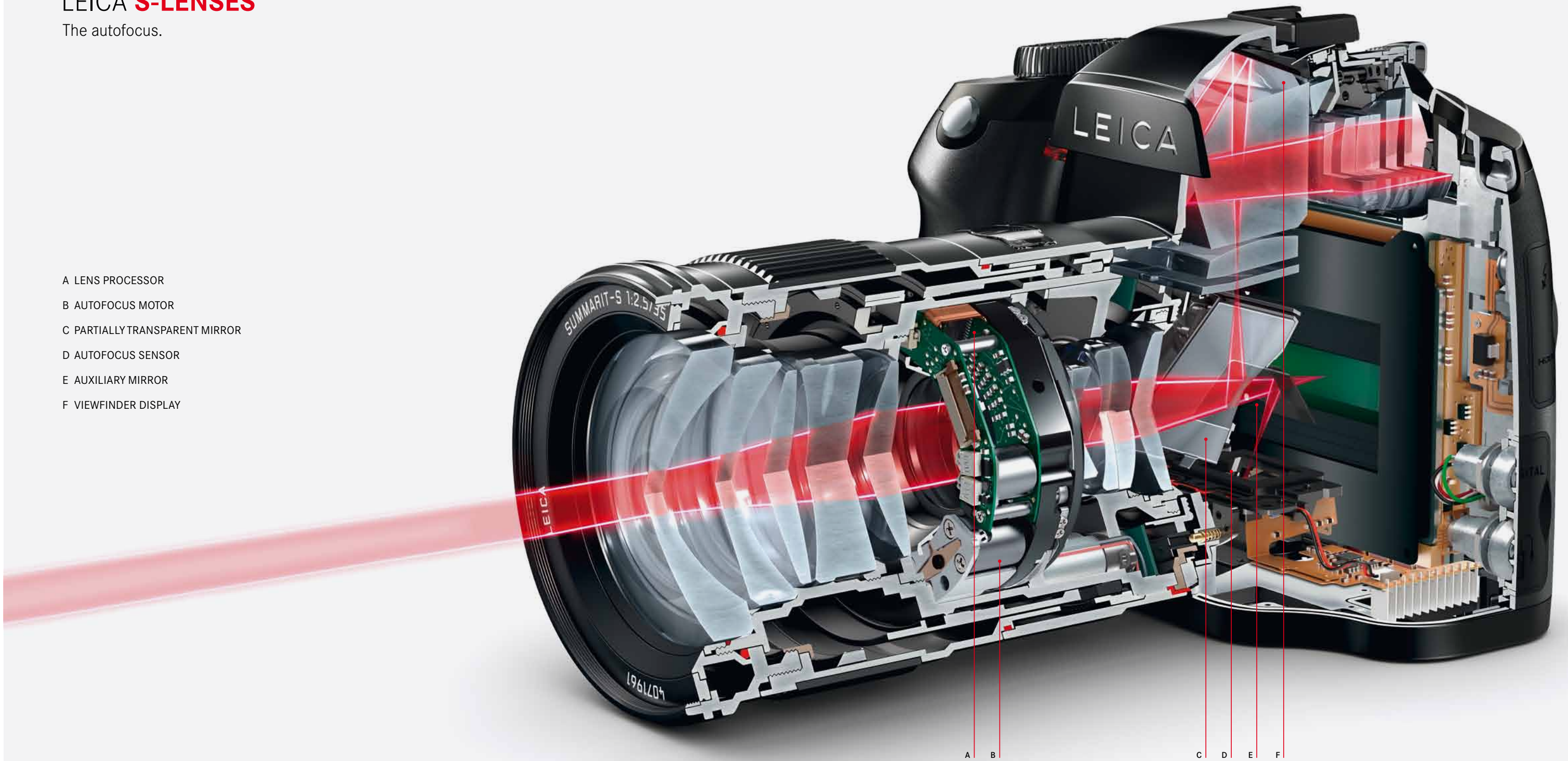
Lenses compatible with S-Adapters

Hasselblad H		
HCD 28 mm f/4	HC 35 mm f/3.5	HC 50 mm f/3.5 II
HC 80 mm f/2.8	HC 100 mm f/2.2	HC Macro 120 mm f/4 II
HC 150 mm f/3.2	HC 210 mm f/4	HC 300 mm f/4.5
HC 50-110 mm f/3.5-4.5	HCD 35-90 mm f/4-5.6	
Hasselblad V		
Zeiss Distagon Cfi 30 mm f/3.5	Zeiss Distagon CFE 40 mm f/4	Zeiss Distagon Cfi 50 mm f/4
Zeiss Distagon Cfi 60 mm f/3.5	Zeiss Planar Cfi 80 mm f/2.8	Zeiss Planar Cfi 100 mm f/3.5
Zeiss Makro-Planar CFE 120 mm f/4	Zeiss Sonnar Cfi 150 mm f/4	Zeiss Sonnar CFE 180 mm f/4
Zeiss Sonnar Cfi 250 mm f/5.6		
Pentax 67		
SMC 67 35 mm f/4.5 Fish-Eye	SMC 67 45 mm f/4	SMC 67 55 mm f/4
SMC 67 75 mm f/2.8 AL	SMC 67 90 mm f/2.8 LS	SMC 67 90 mm f/2.8
SMC 67 105 mm f/2.4	SMC 67 165 mm f/4 LS	SMC 67 200 mm f/4
SMC 67 300 mm f/4	SMC 67 400 mm f/4	SMC 67 500 mm f/5.6
SMC 67 600 mm f/4	SMC 67 800 mm f/4	SMC 67 800 mm f/6.7 EDIF
SMC 67 1000 mm f/8	SMC 67 Macro 135 mm f/4	SMC 67 Shift 75 mm f/4.5
SMC 67 100 mm f/4 Macro	SMC 67 120 mm f/3.5 Soft	SMC 67 165 mm f/2.8
SMC 67 300 mm f/4 ED IF	SMC 67 400 mm f/4 ED IF	SMC 67 55-100 mm f/4.5
SMC 67 90-180 mm f/5.6		
Mamiya 645		
24 mm f/4	35 mm f/3.5	45 mm f/2.8
50 mm f/4 Shift	55 mm f/2.8	55 mm f/2.8 LS
80 mm f/1.9	80 mm f/2.8	80 mm f/4 Macro
120 mm f/4 APO	150 mm f/2.8	150 mm f/3.5
150 mm f/3.8 LS	200 mm f/2.8 APO	210 mm f/4
300 mm f/5.6	300 mm f/2.8 APO	500 mm f/5.6
500 mm f/4.5 APO	55-110 mm f/4.5	105-210 mm f/4.5
TS 120 mm f/5.6		

LEICA S-LENSES

The autofocus.

- A LENS PROCESSOR
- B AUTOFOCUS MOTOR
- C PARTIALLY TRANSPARENT MIRROR
- D AUTOFOCUS SENSOR
- E AUXILIARY MIRROR
- F VIEWFINDER DISPLAY



Only when the image is focused with absolute precision is the full performance potential of the S-Lenses revealed. To achieve this, Leica has developed an extremely high-performance autofocus system for the S-System that stands out from conventional systems in this camera class by incorporating the latest advances in AF technology. For example, additional sensors ensure that variations in temperature and color balance have no influence on its measuring accuracy, so photographers can always rely completely on its focusing precision.

The AF system in the Leica S guarantees optimum productivity by ensuring more precisely focused exposures under all conditions, and it does so seamlessly, without making the immense technical effort involved noticeable: all photographers have to do is select the AF mode or take advantage of focus control in manual focusing mode – whichever they choose – and the resulting images will always be brilliant and pin-sharp in every detail.

LEICA S-LENSES

The autofocus.



Flexible changeover from autofocus with focus or release + focus priority and manual focusing (full-size view).

ENHANCED PRECISION

In comparison with conventional AF systems, the size of the Leica ProFormat and its fast S-Lenses, with their correspondingly shallow depth of field, demand significantly greater autofocusing precision. This level of precision has been further enhanced by the outstanding performance AF module built into the Leica S. Every S-Lens measures the current camera-to-subject distance determined by an integrated magnetoresistive sensor and communicates the value to the camera's AF module. This constant feedback guarantees that the calculated point of focus is always absolutely precise. Consistently precise autofocus under all lighting conditions is ensured by a color temperature sensor that determines optimum focusing precision in daylight or the quite different spectral composition of studio lighting. The precise and robust design and construction of the autofocus motor itself are also significant factors in ensuring consistently perfect focusing.

FLEXIBLE FOCUSING CONTROL

With a Leica S, photographers always have complete control over the focusing process. They can choose between release + focus or focus priority AF modes, or can switch to manual focusing to select whatever plane of focus they desire. A specially constructed mechanism in the lens ensures a reassuringly comfortable level of damping when focusing manually and a fine focusing helical allows small adjustments to be made more accurately, thus enhancing focusing precision. The autofocus system also assists photographers working in manual mode. The focus confirmation indicator in the viewfinder is an ideal visual aid in determining the correct focusing distance. If the easily accessible AF/AE memory button is set to the AF-L position, the autofocus system can be temporarily activated even when the camera is set to manual focus mode.

In the S-System, focusing is controlled by the built-in 'brain' of each lens.



FASTER THAN ANY SUBJECT

Even though the AF module measures the momentary camera-to-subject distance with absolute precision, there is always a slight time lag between the last value measured and the instant when the mirror flips up and the shutter fires to make the exposure. Since the subject may have moved from its last recorded position in this short space of time, the autofocus works predictively and calculates the expected position of the subject at the moment of exposure that occurs milliseconds later. Focusing the lens on the predicted instead of the last determined position of the subject ensures that subjects moving towards or away from the camera are captured with reliable focusing precision, even when shooting with long focal-length lenses or at wide apertures that provide a shallow depth of field.

HIGH SPEED

The innovative Leica autofocus concept with its central cross sensor combines speed with precision. For instance, the camera automatically varies the size of the AF metering field within a split second to meet the needs of the photographic situation. One factor in the choice of the size of the AF metering field is the camera-to-subject distance determined by the magnetoresistive sensor installed in the lens. For capturing subjects at greater distances, the measuring process begins with a somewhat wider AF metering field to ensure the fastest-possible determination of the distance, before narrowing it down automatically to precisely locate the details important to the composition. At shorter shooting distances, the system automatically selects a narrower AF metering field from the start. This metering strategy enables a simultaneously fast and accurate determination of the actual plane of focus.

INTELLIGENT LENSES

Every Leica S-Lens has its own "brain" in the form of a microprocessor with its own firmware that autonomously controls the focusing process. This immensely significant technology ensures that the focusing control can be ideally harmonized with each individual lens and its mechanical system. The focusing driver system itself comprises a high-precision motor and is designed and constructed to ensure low noise and a long service life. This sophisticated drive concept guarantees utmost precision and sufficiently high torque to focus even the larger Leica S-Lenses with outstanding speed and precision.

LEICA S

Versatile, practical, ideal handling.

The Leica S-System was conceived from the ground up as a purely digital camera system and was built with the precise needs of professional photographers in mind. This meant that it was possible to create a camera system with a freely selectable format to enable an ideal symbiosis of excellent imaging quality and ideal handling. Perfect image quality has always been a good reason for choosing a Leica. At the same time, fast, uncomplicated, and simple handling is an equally important factor in the everyday work of professional photographers. Photographers must be able to have an intuitive feel for the camera and its settings at all times, and particularly in hectic situations. The system must be light and compact enough to be used handheld for long periods without stress or strain. And, last but not least, it must be designed and constructed for a long and reliable service life, under even the toughest conditions.

The Leica S fulfills all these requirements: despite its large sensor format, it has an extremely compact body with dimensions that are reminiscent of a 35 mm SLR rather than a medium-format camera. It features a unique operating concept that relies on only a minimum of buttons and switches to enable fast and convenient access to all settings and functions. Thanks to the extremely robust construction of all its components, the system retains its residual value over many years of constant use. A further reason for this is the consistent protection of the camera and all its lenses against dust and water spray, meaning practical elements are as important as image quality when choosing such an essential working tool.



LEICA S

Intuitive handling.



Full-size view



Full-size view

When you hold a Leica S in your hands, you find the controls exactly where you expect them to be. Their layout and design, similar to that of a classic 35mm SLR, is based on the maxims of ensuring intuitive handling in every respect, for instance by the ergonomic placement of familiar elements like the shutter speed dial and employing state-of-the-art control components. Everything about the Leica S is dedicated to providing photographers with everything they need to work freely and spontaneously.

- 1 CONCENTRATION AND MINIMIZATION
- 2 BRIGHT AND CLEAR DISPLAY
- 3 PERFECT ERGONOMICS
- 4 PROFESSIONAL GPS POSITIONING
- 5 CONNECTIVITY
- 6 PERFECT ENERGY EFFICIENCY
- 7 SD AND COMPACTFLASH

You can find out more online at www.s.leica-camera.com and www.s-league.net.

LEICA S

Perfect ergonomics.



Full-size view

In the design of the camera control elements, Leica intentionally concentrated on the principle of “less is more.” In addition to the click wheel and the main switch, also used for selecting the focal plane or central shutter, the controls on the back of the S are limited to the menu navigation buttons grouped around the monitor and a five-way switch in the form of a mini-joystick.

1 CONCENTRATION AND MINIMIZATION

Although a digital system camera offers numerous functions and settings, everyday professional photography demands one thing in particular – the ability to concentrate on the picture you want to capture. With this in mind, Leica developed an incomparably intuitive operating concept for the Leica S that relies on an absolute minimum of control elements. Instead of the typical “one button, one function” concept, which demands an extensive learning curve, the Leica S relies on the consistent use of easily accessible menus on its generously dimensioned monitor. These are subdivided into three categories: Camera, Image, and Setup, each of which is activated by one of the buttons grouped around the monitor. The central control elements of the S are the click wheel and the five-way switch, both of which are ideally placed for operation by the photographer’s right thumb. With their help, the photographer can easily control the aperture setting and navigate through the menus. The other control elements are the shutter speed dial and the main switch, which is simultaneously the switch for selecting focal plane or central shutter operation, and a programmable stop-down button. The most important exposure and camera data are also displayed by an exceptionally bright and clear OLED panel on the top deck.

Anyone holding a Leica S in their hands for the first time can rely completely on their intuition when getting to know its extensive range of functions. In fact, it sets entirely new standards in user-friendliness.

2 BRIGHT AND CLEAR DISPLAY

With 920,000 pixels covering the 16.7 million colors of the sRGB color space, the large 3” TFT monitor panel on the back delivers a bright, clear viewing image that’s easy to see and assess even in brightly lit environments including outdoor settings. It is not only ideal for checking image sharpness, but can also, if desired, display the exposure parameters and a transparent brightness or RGB histogram on the monitor to allow more efficient overall assessment of the image being viewed – a unique special feature of Leica digital cameras. The monitor panel of the impressively robust Leica S is protected by a virtually indestructible cover made of Corning® Gorilla® glass.

3 PERFECT ERGONOMICS

The Leica S combines the dimensions of a 35 mm SLR with the imaging quality of a medium format camera. The ergonomically formed handgrip, mass centralization, and favorable center of gravity of the Leica S ensure superior handling and make it ideal for fatigue-free photography. What’s more, despite its extremely rigid magnesium alloy chassis, it has an all-up operational weight of only 1260 g – considerably lighter than many smaller format professional DSLRs. In comparison with traditional medium-format system cameras, where a digital element had to be combined with an existing analog camera, the S has the enormous advantage in that all its components are perfectly placed. The result: perfect ergonomics.

4 PROFESSIONAL GPS POSITIONING

The Leica S is currently the only professional camera to feature an integrated GPS (Global Positioning System) module for optional geotagging of image files. As long as the GPS module is activated and its integrated receiver is picking up signals from at least four of the 24 GPS satellites, the camera continuously determines the longitude, latitude, and height above sea level of the current geographical location and records the positioning information in the EXIF metadata of JPEG and DNG files. The GPS module has a further useful feature: it synchronizes the camera’s internal clock with the extremely precise atomic clock time of the GPS satellites and determines the local time and time zone. The limitations of the GPS system are only found when signals transmitted by the satellites cannot be received, within buildings or in countries in which the use of GPS is forbidden. In such cases, the function automatically deactivates itself. The map module in Adobe® Photoshop® Lightroom® can show the results of geotagging immediately after images are imported and display capture locations in a map view. This makes it particularly easy to find all images shot in one location or region at a later date, without the laborious process of assigning key words. Geotagging is particularly useful for photojournalists, documentary photographers, and outdoor and wildlife photographers, who often work so far off the beaten track that the actual exposure location would otherwise be almost impossible to determine.

LEICA S

Perfect ergonomics.



Full-size view

Connectivity is another key strong point of the Leica S. For instance, it can simultaneously record on SD and CompactFlash memory cards. Its sockets for USB, the optional remote cable release, and flash sync are designed for heavy use and, if desired, an HD TV can be connected to its HDMI interface for large-screen image assessment.

5 CONNECTIVITY

The robustly built, dust- and splash-proofed interfaces of the Leica S set entirely new standards in manageability. Data is transferred from the camera to a Mac or PC via a LEMO® USB socket with an integrated strain mechanism that makes it particularly robust and waterproof. The appropriate cable is of course included in the S package. The USB socket can be used not only for reading data from the memory cards, but also for tethered shooting from a computer with the aid of the Leica Image Shuttle and the Adobe® Photoshop® Lightroom®.

Photographers can also connect an HD TV to the camera via its standardized micro-HDMI port to allow fast and efficient image assessment. A particularly secure LEMO® socket with strain relief allows synchronization with studio flash systems; the cable required is provided with the camera. As a compact alternative, flash units like the Leica SF58 or units with a SCA3002 adapter may be mounted on the accessory shoe.



Thanks to an integrated strain-relief mechanism, the sockets for USB connection, remote release, and flash synchronization are extremely robust and ideal for the heavy demands of studio work.

6 PERFECT ENERGY EFFICIENCY

A good example of a small detail with a significant benefit is the battery of the Leica S: thanks to an additional safety catch, it doesn't simply drop off the camera after unlocking. What's more, despite its compact size, each battery has sufficient reserves for around 1,000 exposures – an extremely welcome advantage for longer shoots. A run-down battery can be recharged with the charger supplied with the camera within around three hours. The professional charger available as an optional accessory can not only charge two batteries simultaneously, but can also be connected to the 12 V cigarette lighter socket of any vehicle, or a remote power adapter, for shooting in a specific location.

7 SD AND COMPACTFLASH

Opening the protective flap on the Leica S reveals two slots for memory cards: the photographer can choose between robust CompactFlash cards and much smaller SD cards. The CF slot supports the UDMA-7 standard for data transfer rates of up to 166 MB/s; the SD slot is compatible with SDHC and SDXC cards with capacities up to 2 TB.

The availability of two card slots offers much more than a simple choice of two card types and extra storage capacity. The S can simultaneously write the RAW data file of an image in DNG format to one card and the corresponding JPEG file in a choice of three resolutions (37.5, 9.3, or 2.3 MP) to the other. This means you have immediate access to the JPEGs for quick assessment on the set and, at the same time, the RAW data files in DNG format for optimization in postprocessing after the shoot.



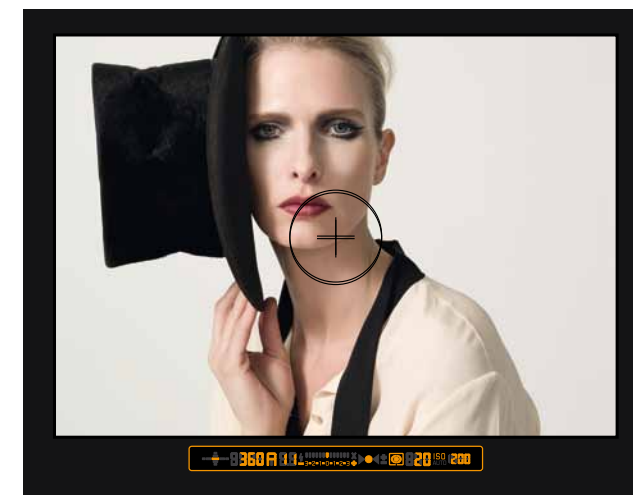
In combination with only four programmable buttons and a mini-joystick, the clearly structured menu guarantees fast and intuitive control of all camera functions. (Full-size view)

STRUCTURED MENU

During a photo shoot, all camera functions must be instantly accessible. The Leica S works with an unrivaled concept that is custom-designed for quick and intuitive control: instead of linking as many functions as possible to one single control element, which unavoidably leads to overwhelming complexity, the Leica S possesses an ingenious and logical menu system that allocates all settings and parameters to one of three distinct categories.

The buttons around the monitor lead directly to these categories: Camera, Image, and Setup. The monitor displays the current function of the four buttons on toolbars at the top and bottom of the screen that make it immediately clear which button calls up the function required. The click wheel or the mini-joystick can then be used to navigate through the menus.

Key camera functions like AF mode, exposure metering mode, or exposure compensation are located in the Camera menu. The Image menu contains, for example, setting options for ISO sensitivity or file formats and in Setup, the less frequently changed basic camera settings are found. In addition, all four buttons and the stop-down button can be programmed with custom functions that can then be accessed by maintaining pressure on the appropriate button. Thanks to this intuitive menu concept, familiarization with the handling of the Leica S is an extremely fast process and soon allows its users to concentrate on what's essential – photography.



The large, bright viewfinder of the Leica S shows a brilliantly clear image and displays exposure information, the camera status, and camera orientation.

BRIGHT AND CLEAR VIEWFINDER

For users familiar with 35 mm DSLRs, the first look through the impressively large and bright viewfinder of the Leica S is a convincing argument for the advantages of the larger Leica ProFormat. The brilliant clarity of the viewfinder image, a result not only of the mirror and prism unit, but also the speed of the lenses, offers perfect qualities for assessing image composition and precise manual focusing.

A single-line display along the bottom edge of the viewfinder image shows the most important exposure parameters such as the shutter speed and aperture, the ISO value, the focus confirmation indicator, and camera settings including the exposure metering mode, exposure correction, and camera mode, as well as the flash-ready symbol. The viewfinder also provides information on remaining image capacity on memory cards and, in continuous-shooting mode, in the buffer memory. An electronic leveling aid allows the orientation of the camera to be checked and aligned along two axes with a precision of +/- 1° on each axis. So photographers can always see everything they need – without having to remove their eye from the viewfinder.

TOP-DECK DISPLAY

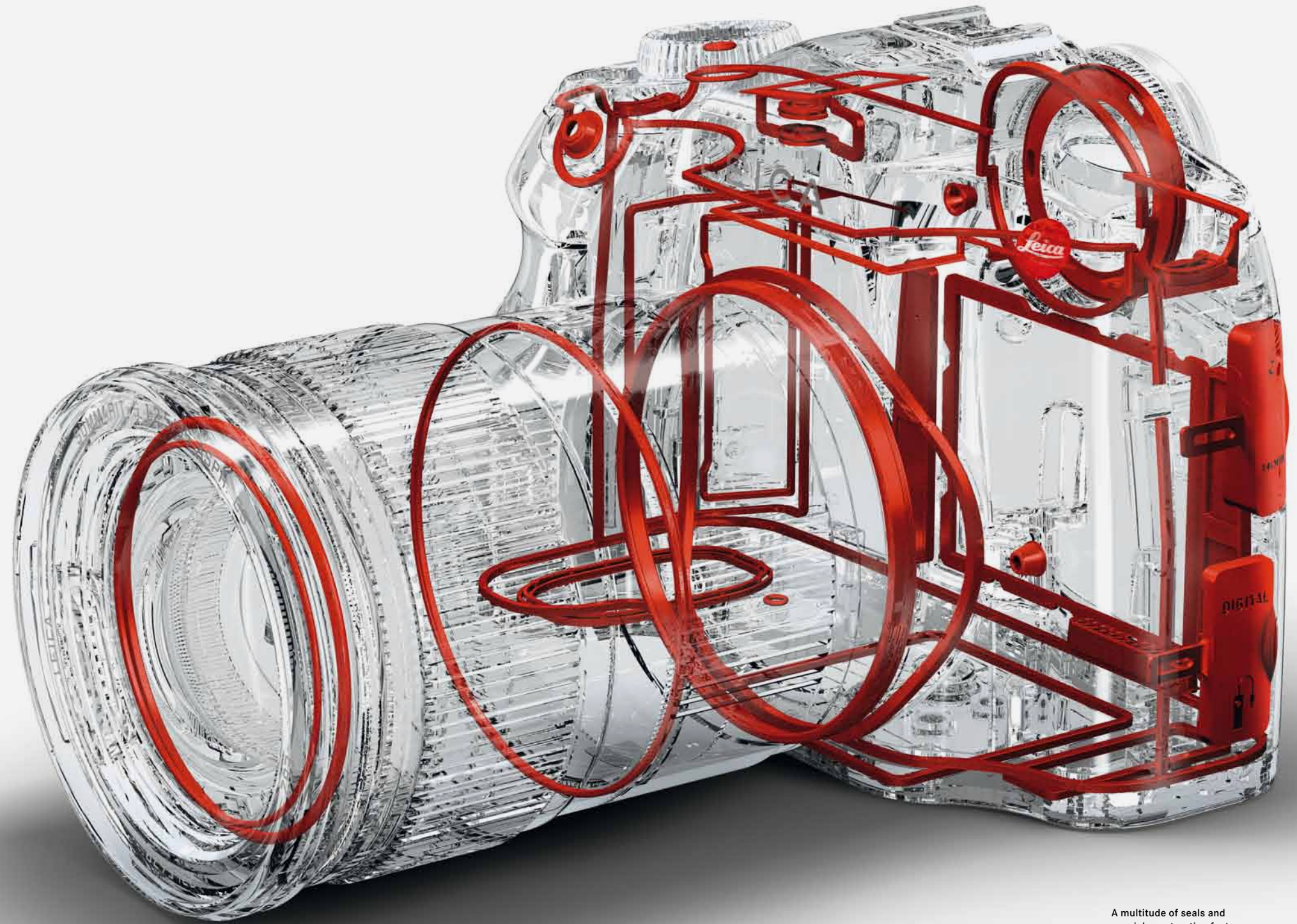
The information display panel on the top deck of the Leica S shows important parameters such as the shutter speed, aperture, exposure mode, ISO sensitivity, battery charge level, and the remaining image capacity if installed memory cards. The self-illuminating OLED (Organic Light-Emitting Diode) panel, is distinguished by consistently outstanding legibility, even in unusually bright shooting conditions.



A glance at the OLED panel on the top deck of the Leica S shows its user the most important camera settings with commendable clarity. (Full-size view)

LEICA S

Ready for any situation.



A multitude of seals and special construction features guarantee perfect protection against dust and water.

PERFECTLY SEALED

Not all photos are shot in perfect weather or a safely protected studio. This is why all components of the S-System are protected against dust and water spray, to keep them working perfectly even in rainy weather or tough shooting conditions. The exposed surfaces of the lenses are treated with Leica's resilient AquaDura™ coating, which means raindrops just roll off the glass. This extreme protection not only safeguards the enduring value of the camera and lenses, but also makes them easier to clean.

No other camera system on the market offers such perfect all-around protection, not only for the camera but also for every lens - for instance, when shooting in the rain, the focusing rings let no trace of moisture enter the lens barrel. The technical effort required for this is immense: all control elements and all covers for output sockets or memory card slots are fitted with completely waterproof and dustproof seals.

ROBUST CONSTRUCTION

In the world of professional photography, cameras are often faced with enormous challenges. Thanks to its particularly robust construction, the Leica S takes them all in its stride: the entire body and the top plate are manufactured from die-cast magnesium, a tough and resilient metal that protects the valuable inner systems of the camera, even against hard knocks. At the same time, magnesium is extraordinarily light, and contributes significantly to the comfortable handling of the Leica S.

This extreme resilience applies not only to the camera body, but also to all attachments, control elements, and compartment covers.

LEICA **S-SYSTEM**

Outstanding image quality.

The best images are always created on the spot, not in postprocessing on a computer. With its excellent lenses and an ideal sensor format in terms of both handling and image quality, the Leica S offers photographers everything they need to express their skills and creativity in images with maximum data volume.

Nevertheless, a camera is only truly versatile when it leaves the options completely open to the photographer. The Leica S employs a universal raw data format that offers photographers no end of options for getting the best out of their images in computer-based postprocessing. Furthermore, it can generate a fully developed image in the camera immediately after exposure. With an S, photographers can even choose to record DNG and JPEG files of the same image simultaneously on two different memory cards. This is made possible by Leica's independently developed, high-performance Maestro processor that sets entirely new standards in fast image data processing.



LEICA S-SYSTEM

Outstanding image quality.



The CCD image sensor of the S accepts no compromises in its dedication to ultimate imaging quality (full-size view).

The outstanding image quality of the Leica S is not attributable to only a limited number of components built into the system. Every single component is optimized to perfection, but its true powers are manifested only by their seamless interaction.

Decisive proof of this can be seen in the 37.5-megapixel CCD image sensor with offset microlenses and an infrared blocking filter, specially designed by Leica, that works together with the extremely high performance of the Maestro processor to ensure that every creative idea leads to a correspondingly excellent image.

OPTIMUM HARMONIZATION

Image quality is not measured merely by megapixels alone, but is rather the result of careful attention to numerous factors and perfect harmonization with the optical components of the system. The high resolution, enormous dynamic range, and extremely low susceptibility to image noise of the CCD image sensor designed especially for the Leica S guarantee outstanding imaging quality. For instance, the optical properties of the glass screen in front of the sensor and the significantly more precise definition of the focal plane than in film photography, are factors included in the calculation of the lenses. The outstanding image quality the S-System delivers is only possible because it was conceived and optimized from its inception as a purely digital camera system.

IDEAL RESOLUTION

With its 37.5 million pixels, the CCD sensor of the Leica S offers a resolution that possesses comfortable reserves for cases when an image needs to be cropped in postprocessing and still output or printed in large format. However, the decisive factor is not the pixel count alone, but its optimum use within the framework of an overall concept dedicated solely to superlative image quality. With a pixel pitch of six micrometers, the sensor of the Leica S strikes a particularly harmonious balance between high resolution and a pixel size that captures more information and minimizes susceptibility to noise. The S-Lenses are fine-tuned for ultimate contrast rendition and are perfectly attuned to the resolving power of the image sensor. As the antialiasing filter for the prevention of moiré effects has been deliberately omitted from Leica professional digital cameras, photographers can make full use of the theoretical maximum sensor resolution in actual practice. Thanks to the consistent optimization of the entire process, from the instant the light enters the lens to its capture by the sensor and the reading of the digital data, it is assured that every single pixel of a digital image captured with a Leica S contains all the crucial information required for outstanding image quality and that no significant losses occur.

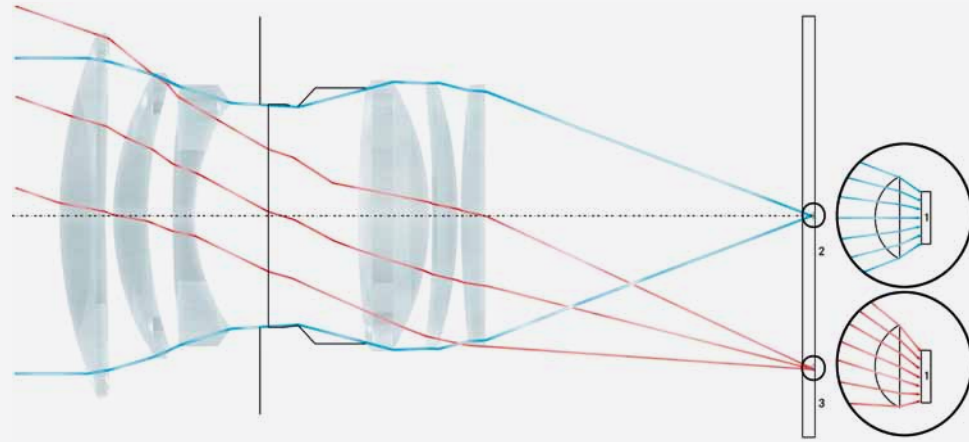
LOW NOISE - HIGH DYNAMIC RANGE

In order to cope with extreme contrast, the camera needs extensive reserves in terms of dynamic range. The secret of a wide dynamic range is, first of all, low image noise, and the resulting assurance that dark areas of the image show as much definition as possible. The image sensor of the Leica S was designed for particularly low susceptibility to image noise. At the same time, the physical interface between the sensor board and the camera chassis is also an important factor. Since warming of the sensor increases image noise, the entire metal chassis of the S is employed as a heat sink for efficient sensor cooling.

The S employs extremely precise analog-digital converters to achieve its high dynamic range and particularly accurate and finely nuanced brightness and color information. This guarantees not only superior definition in the highlights and shadows, but also precise and natural colors. This all contributes to the camera's ability to master even the most demanding photographic situations. Thanks to more uniform reading from the sensor's four channels, noise levels have been further reduced, while the dynamic range benefits from the reduction of the native sensitivity to ISO 100. At ISO 100 and in good light, it is now possible to work at maximum aperture without having to activate a pull function and accept limitations to the dynamic range. An additional benefit of this noise reduction is that the sensitivity range can now be extended upwards to ISO 1600 whenever lighting conditions demand.

LEICA S-SYSTEM

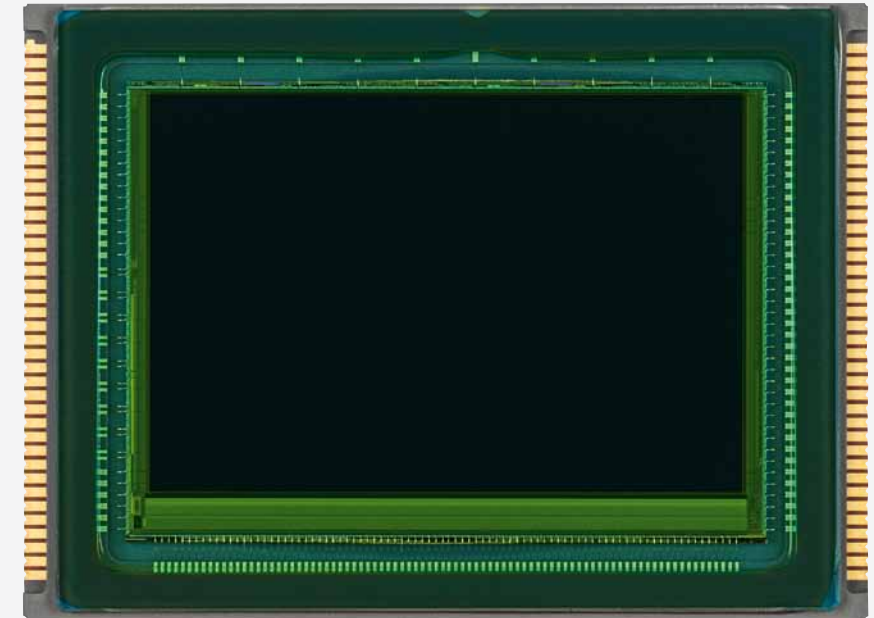
Sensor with offset microlenses.



As the microlenses at the edges of the frame are offset towards the center, they are better able to capture oblique light, and thus avoid vignetting.

OFFSET MICROLENSSES

In the Leica S, a grid of microlenses on the sensor increases its sensitivity to light. The distinctive feature here is that the greater the distance of individual pixels from the center of the sensor, the greater the relative offset of the microlenses. This compensates for the fact that image sensors are less sensitive to obliquely arriving rays of light at the edges of the image field, and that no lens can guarantee that incoming light rays are exclusively perpendicular to the sensor surface. The offset microlens solution was designed into the S-System concept from the beginning and is a feature that ensures that all Leica S-Lenses are virtually free of vignetting.



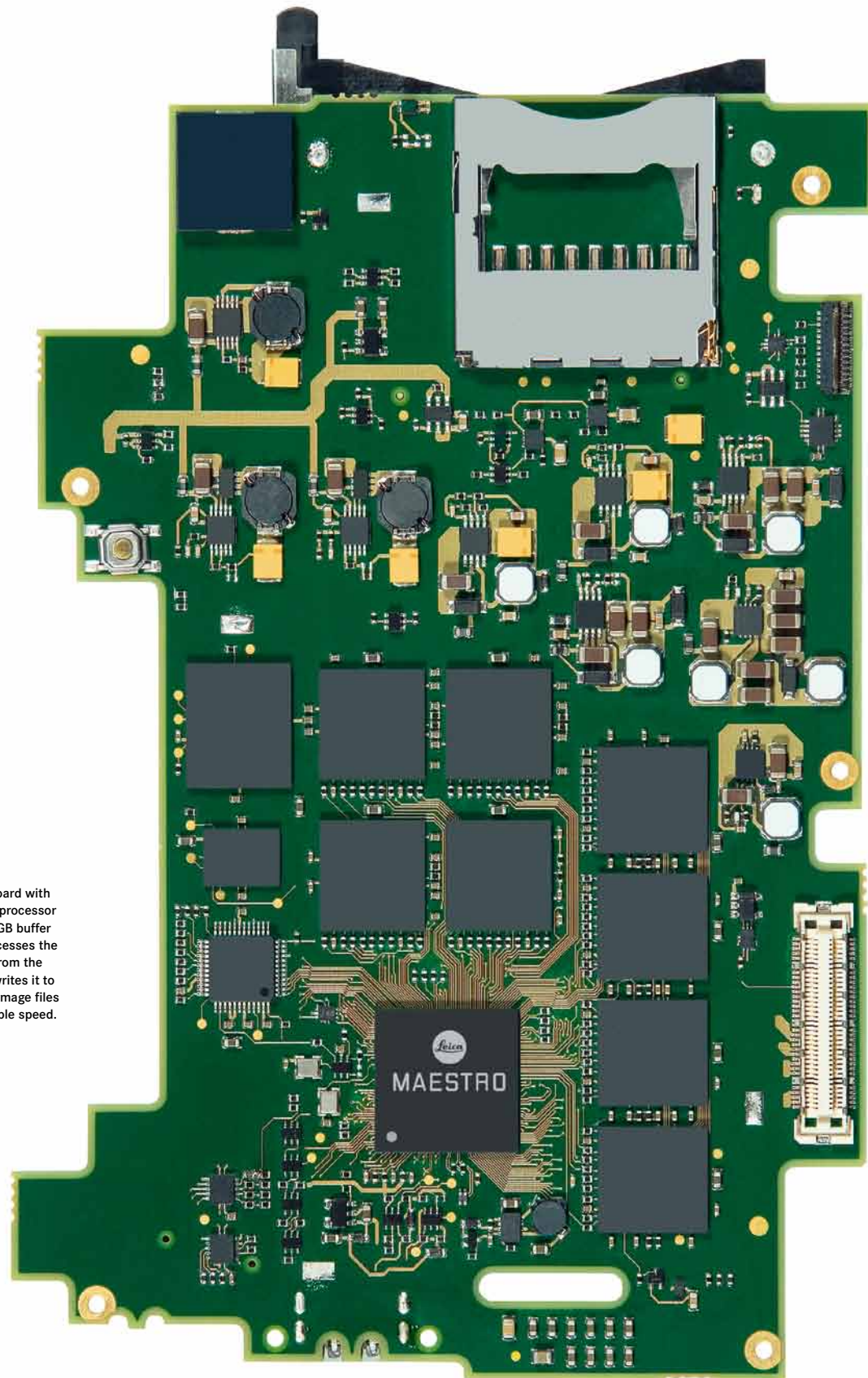
The sensor board of the S is installed in the camera with extreme precision. The solid metal frame serves as a heat sink and helps to prevent image noise.

PERFECT PROTECTION

The specially designed and constructed sensor features an infrared blocking filter that prevents the corruption of its natural color rendition by infrared radiation. The same special coating as used for the lenses is also applied to both sides of this wafer-thin glass screen. Together with the coating of the rear elements of the lenses this not only prevents reflections, but is also extremely hard and resistant to abrasion, dust and smears. This means that the large sensor of the Leica S can be conveniently cleaned with readily available sensor-cleaning products.

LEICA S-SYSTEM

The Maestro image processor.



The image board with the Maestro processor and a fast 2 GB buffer memory processes the image data from the sensor and writes it to high-quality image files at an incredible speed.

ULTIMATE PROCESSING PERFORMANCE

If we consider the sensor to be the eye of the Leica S, then the Maestro processor is its brain – a brain that processes the image data coming from the sensor at an enormous speed and transforms it into image files. This elaborately designed and constructed image processor not only makes the Leica S much faster than other digital cameras, it also makes possible some truly unique capabilities.

FAST MEMORY

A fast processor alone is not enough to ensure high data transfer speeds. A fast and large buffer memory is also needed to allow efficient processing of all the various steps of the image processing sequence. Otherwise, a slow process could easily act as a bottleneck, slowing down the effective capture rate. The buffer memory of the Leica S, now enlarged to 2 GB, accelerates the entire image processing sequence. Nevertheless, its key function is to allow longer sequences of images in continuous-shooting mode. The Leica S has the ability to capture up to 32 images with lossless compression or 28 uncompressed DNG images at its maximum frame rate of 1.5 fps before the memory is full, while in JPEG-only mode, the number of images in sequence is limited only by memory card capacity.

PARALLEL COMPUTING

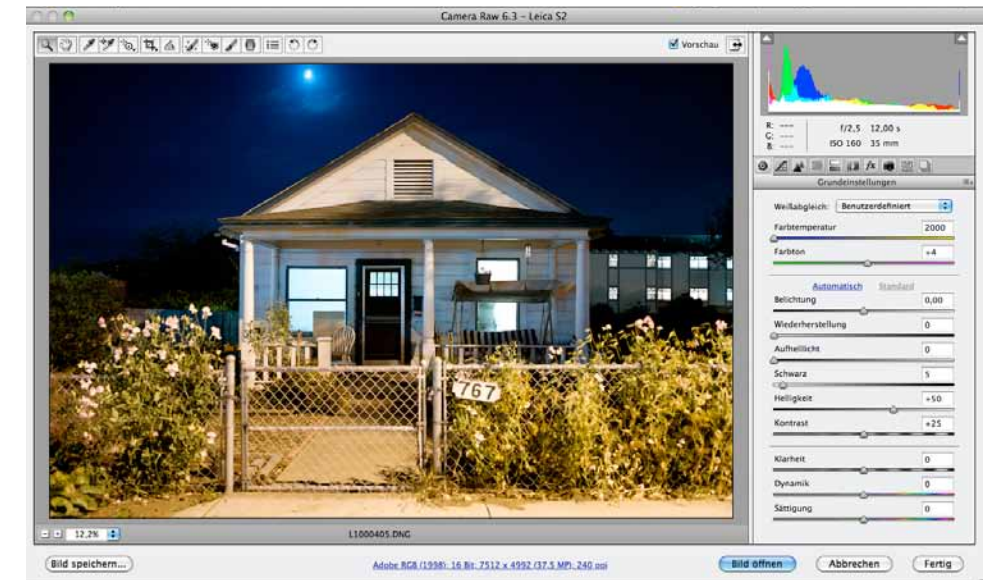
Jointly developed with Fujitsu, the Maestro processor custom-designed for the Leica S features several, in part independently active, functional units that allow it, for example, to process one image while simultaneously writing the data of the previous one to the memory card. Thanks to its special functions, dedicated exclusively to the needs of image processing, it can also perform complex processing steps at extremely high speed. At the same time, its power consumption is amazingly low, which in turn contributes to the long battery life of the Leica S. Because a separate processor takes care of classic camera functions like exposure and autofocus, these functions are not slowed by capacities demanded for the complexities of image processing, and the Maestro processor only draws power when it's actually needed.

FAST IMAGE REVIEW

Despite the exceptionally high resolution of the sensor, the extremely high performance of the image processor allows the Leica S to simultaneously generate a high-quality JPEG file and a DNG raw data file destined for final optimization on a computer. The JPEG image is ideal when a small file is needed for immediate image assessment or fast transmittal, as it can be viewed almost anywhere without any special software. What's more, since image properties like sharpness, contrast, and color saturation are still freely definable, the quality of the JPEG files is also more than adequate for high-quality post-processing. As an alternative to the full sensor resolution of 37.5 MP, users may also choose 9.3 or 2.2 MP – the advantage here is that smaller, lower-resolution JPEG files are ideal for reviewing immediately after capture by clients, while the full-resolution DNG files containing all sensor data remain intact for the development of the images ultimately selected for use.

LEICA S-SYSTEM

Professional work flow.



DNG files from the Leica S can be imported directly into Adobe® Camera Raw.

ABSOLUTE FLEXIBILITY

A camera should be flexible enough to allow a photographer to work in the way they prefer. The Leica S employs a universal raw data format that does not require one particular raw converter, that can, if required, generate high-quality JPEG files, supports two different memory card types, and can be remotely controlled from a computer. For photographers, this means the ability to react rapidly and flexibly to changing situations, and maximum freedom in the choice of tools for the task at hand. Nevertheless, no one is faced with difficult decisions, as the professional work flow solution Adobe® Photoshop® Lightroom®.

UNIVERSAL IMAGE DATA FORMAT

The raw data from the sensor is the basic material from which images in optimum quality can be created with maximum flexibility in postprocessing. For the S, Leica chose the DNG (Digital Negative) format developed by Adobe® – the only standardized raw data format that safely preserves all image information and is recognized by all manufacturers. The majority of programs for raw data conversion or digital image processing, including Adobe® Photoshop®, allow the direct input and interpretation of DNG data, so S owners have almost unlimited freedom of choice if they wish to use their preferred work flow solution.

The Leica S takes advantages of all the benefits of the current DNG 1.3 standard, which generates files that contain all color and image information, along with metadata such as the distance, aperture, etc. This in turn allows processing with all programs that support this standard – without the need for specific conversions or profiles – to achieve the optimum image quality of the S files. The S can record DNG files with around 75 megabytes per image in uncompressed format, or in absolutely lossless compressed format that requires only around half the memory space.

THE RAW WORK FLOW

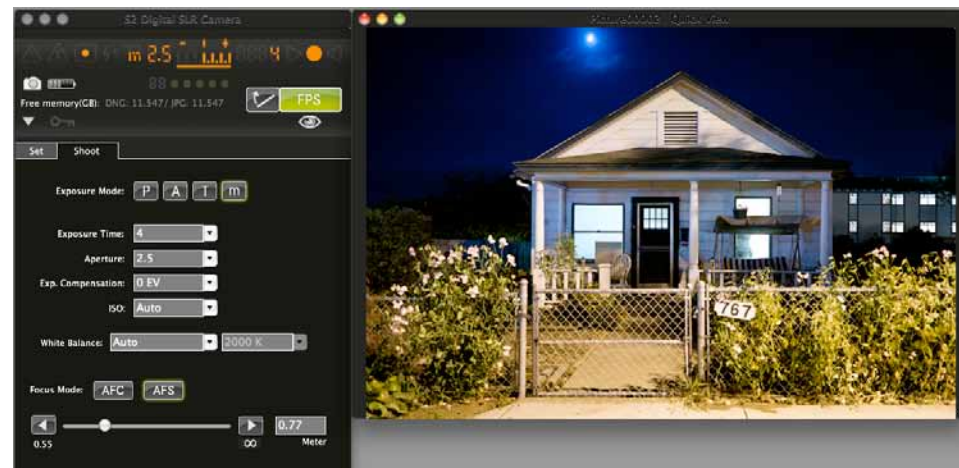
Adobe® Photoshop® Lightroom® is compatible with both Apple Macintosh and Microsoft Windows, and is fully equipped to serve as a control center for all digital image processing needs: with Lightroom they have thought of everything, from importing files from memory cards, sorting (including definition of keywords), and image manipulation, to exporting images for e-mailing or directly to the Web. The extremely powerful digital image processing tools in Lightroom are perfectly designed for processing images for further use. Lightroom offers the particular advantage of a nondestructive raw work flow that leaves the original data untouched and stores all edits in a separate file. A new file with all edits applied is only created in the export phase, so there is no risk of overwriting the original data when creating several versions of the same image. Classic digital image processing software like Adobe® Photoshop® can be integrated into the work flow for further processing.

AUTOMATIC CORRECTION

The lenses of the Leica S-System are distinguished by an extraordinarily high degree of correction and are practically free of perceptible optical errors. Nevertheless, optical errors can never be completely eliminated. For the rare cases in which extremely critical images display phenomena such as slight curving of straight lines at the edges, Leica has calculated lens profiles especially for use in Adobe® Photoshop® Lightroom® and Adobe® Camera Raw, on the basis of the construction data of the S-Lenses and extensive practical testing, that allow automatic correction of residual distortion and chromatic aberration effects (color fringing). The technical prerequisites for the corrections to be applied are precisely registered and listed image data in the DNG files, such as the focal length, aperture, and the actual focusing distance communicated by the lens. These lens profiles can save considerable time in the postprocessing phase and achieve consistently perfect imaging results under all subject-relevant circumstances.

LEICA S-SYSTEM

Professional work flow.



The Leica Image Shuttle software enables full remote control of the camera via a USB cable connected to a computer. It even allows manual focusing control from the computer.



Image Shuttle can export images directly to Adobe Bridge.

LEICA IMAGE SHUTTLE

In studio work, it is often advantageous to control and operate the camera from a computer (tethered shooting). This setup, with automatic image transfer and the opportunities it offers for precise image assessment, can make the entire procedure much more efficient. The Image Shuttle software developed by Leica, and available in versions for Microsoft Windows and Apple Mac OS X, is an ideal solution for such situations. Connecting a computer to the special strain-relieved and robust USB port of the Leica S provides full remote control of the camera with Image Shuttle. Photographers can then choose between normal or tethered shooting with the Leica S. The images are displayed immediately on the computer monitor and allow more precise image assessment than would be possible with the camera's built-in monitor. In addition, Image Shuttle offers full tethered remote control of all exposure parameters, such as the shutter speed, aperture, and even lens focusing, directly from the computer keyboard. Photographers can define a specific folder for saving the incoming image files to the computer and can, for instance, automatically import images to the work flow software with the folder monitoring function.

EXTENDED SOFTWARE SUPPORT

Tethered shooting, whereby the camera is connected to a computer by a USB cable, can be facilitated either with the Leica Image Shuttle software or with Adobe® Photoshop® Lightroom®. After each exposure by remote control using the software or with the camera shutter release, the image is transferred directly to the Lightroom catalog and displayed for assessment. In addition to an extended range of control functions, users of Leica Image Shuttle also have the option to transfer images straight to Adobe® Bridge® and, in turn, then have direct image access from an Adobe® Photoshop-based work flow.

Photographers who prefer to use CaptureOne from PhaseOne rather than Lightroom can download a special color profile for the Leica S from the Leica Web site that ensures optimum color rendition in this software package. CaptureOne does not support the Leica S, but it does recognize DNG-format files. Image Shuttle also permits tethered shooting in conjunction with CaptureOne.

LEICA S-SYSTEM

Accessories.

Multifunctional handgrip S

Order no. (handgrip): 16028

Order no. (hand strap): 16004

The multifunctional handgrip S has a dual function: first, it has a compartment for an extra battery to improve power reserves and, second, it offers comfortable handling when shooting in portrait (vertical) format. A second shutter release button, a second click wheel, and an additional AF/AE lock button make portrait-format shooting much easier. An additional optional accessory is the Leica hand strap S. This neoprene strap with an innovative Velcro quick-fastening system guarantees a perfect grip and enhanced handling security.



S-Adapters

Order no. (Adapter H): 16030

Order no. (Adapter V): 16024

Order no. (Adapter M645): 16025

Order no. (Adapter P67): 16026

Remote release cable

Order no.: 16029

The 0.6-meter remote release cable for the S enables photographers to release the shutter without vibration, and is a valuable aid in numerous situations that arise when the camera is mounted on a tripod.



Focusing screens

Order no. (focusing screen): 16000

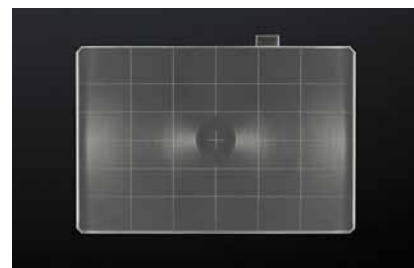
Order no. (focusing screen with grid): 16002

Order no. (focusing screen with split-image indicator and microprism spot): 16001

Users can exchange the focusing screen in the viewfinder of their Leica S with an absolute minimum of effort. Two alternative focusing screens are available in addition to the standard version provided with the camera: one with an engraved grid as an aid to precise camera alignment, and one matte screen with a split image and a microprism ring. These are particularly useful for S photographers who prefer to use manual focusing, and are also particularly helpful when using third-party lenses with S-Adapters on an S body.



Standard focusing screen.



Focusing screen with grid.



Focusing screen with split-image indicator and microprism spot.

Replacement battery

Order no.: 14429

High-performance, rechargeable lithium-ion battery, developed especially for the Leica S. Constant monitoring of relevant battery data guarantees safe and convenient operation.

Power adapter S

Order no.: 16 022

Whenever the Leica S is used for shooting in a fixed location for extended periods, the camera can be powered by the AC power adapter S to avoid unnecessary battery drain.

Professional charger S

Order no.: 16011

The Professional charger S is designed for the rapid, simultaneous, and independent recharging of two batteries. The charger can also be powered from a standard vehicle cigarette lighter socket.



Leica SF 58 flash unit

Order no. (flash unit): 14488

Order no. (diffusor): 14489

The Leica SF 58 is an extremely high-performance professional flash unit offering a multitude of features. Its zoom reflector adapts automatically to cover the angle of view of all Leica S-Lenses with focal lengths from 30 to 120 mm.



Case S

Order no.: 16 010

The case not only offers ample space for an S-Camera and five lenses, but also accommodates Leica S-System accessories such as the Leica multifunctional handgrip, rapid charger, professional charger, USB cable, focusing screen, two batteries, and the remote cable release. The compact dimensions of the case make it ideal for use as carry-on baggage when flying since it's compliant with IATA recommendations, and also features a relief valve for automatic pressure compensation. When packed in the case S, all system components are safely protected against dust and spray – even when shooting on location under extreme conditions.



More Accessories

Rapid Charger S order no.: 16009

Camera Carrying Strap S order no.: 16006

Eyepiece Cap S order no.: 16015

Bayonet Cap S order no.: 16021

Leica USB Cable S order no.: 16014

Leica Synchronization Cable S order no.: 16031

Leica AC Adapter S order no.: 16022

HDMI Cable Order no.: 14491 (JP und TW 14492)

Leica S2 Accessories

Multifunction Handgrip S2 order no.: 16003

Remote Release Cable S2 order no.: 16012

LEICA S-SYSTEM

Technical data.

Product	Leica S
Order no.	Leica S schwarz 10 803, Leica S-P schwarz 10 804
Camera type	Digital medium-format single lens reflex camera for use with Leica S-Lenses
Image sensor	
Type	Low-noise CCD sensor.
Size	45 × 30 mm (Leica ProFormat)
Aspect ratio	3:2
Resolution	37,5 megapixels
Pixel pitch	6 µm
Dynamic range	12 stops
Color depth	16 bit
Color spaces	sRGB / Adobe RGB / ECI RGB V2
White balance	Presets: Daylight, cloudy, shade, tungsten, HMI, fluorescent warm, fluorescent cool, flash, auto, gray card, color temperature (2000 to 13,100 K).
Low-pass filter / IR filter	No / on sensor
Sensitivity range	ISO 100 to ISO 1600 (manually or automatically controlled).
Lenses	
Lens mount	Leica S-Bayonet
Focal length	Dependent on Leica S-Lens attached, conversion factor to 35 mm film equivalent 0.8
Focusing	
Type	Predictive phase detection autofocus with central cross-sensor array, AF motor in lenses
Focusing modes	AFs (single) with focus priority, AFc (continuous) with release priority, manual focus
AF memory	Activated by pressing shutter release to second resistance point, or with five-way switch
Manual focus	Focusing on lens barrel or tethered with Image Shuttle software
Exposure setting	
Exposure metering	Multi-segment metering (five fields), center-weighted integral metering, selective (spot) metering (3.5% of image frame); AE lock by pressing shutter release to second resistance point or with five-way switch; metering range 1.2–20 EV (multi-segment and center-weighted) or 2.7–20 EV (spot)
Exposure control	Program AE (with shift function), aperture priority AE, shutter speed priority AE, manual
Exposure compensation	± 3 EV in half-EV increments
Bracketing (AEB)	3/5 exposures (automatic/manual) 1/2-, 1-, 2-, and 3-EV increments
ISO sensitivity	100, 200, 400, 800, 1600, auto
Shutter	
Type	Vertical metal focal plane shutter integrated in camera body (FPS)
Shutter speeds FPS	1/4000 s to 32 s and bulb (B) to 125 s, flash sync speed 1/125 s
Optional	Optional central shutter in Leica S-Lenses (CS versions)
Shutter speeds CS	1/1000 s to 8 s

Viewfinder	
Type	Pentaprism viewfinder with high-eyepoint eyepiece
Magnification	0.8 (with 70 mm lens at infinity)
Viewfinder coverage	Approx. 98%.
Diopter compensation	-3 to +1 diopter
Focusing screen	Ground glass with crosshairs (interchangeable)
Display	Top-deck display (OLED), control monitor: 3" TFT display with 920,000 pixels, sRGB color space, 16 million colors, 170° viewing angle, Corning® Gorilla® Glass
Flash	
Connector	Hot shoe with center and control contacts, LEMO® or standard flash connection sockets without control of flash power
Metering method/flash metering cell	TTL (multi-segment, spot, center-weighted) multi-segment photodiode
Compatibility	Fully compatible with Leica SF 58 and flash units with SCA3002 adapters
Synchronization	Up to 1/125 s (FPS), up to 1/1000 s with CS lenses / linear flash mode for sync speeds above 1/125 s and FPS with automatic TTL-HSS control
Flash exposure correction	± 3 EV in 1/3 EV increments
Second curtain sync	Yes
Exposure	
Exposure modes	Single frame, continuous, self-timer 2 s (with mirror prerelease), self-timer 12 s (with mirror pre-release)
Data recording	
Format	DNG (7500 × 5000 pixels, approx. 72 MB per image), lossless compressed DNG (7500 × 5000 pixels, approx. 42 MB per image), JPEG (37.5, 9.3, or 2.3 MP, basic or fine, 1–16 MB, dependent on image content and compression)
Maximum burst-rate capability	Max. 1.5 fps
Image buffer	2 GB; DNG max. 28 images, DNG compressed max. 32 images, JPEG no limit
Simultaneous recording of DNG and JPEG data	Yes, arbitrary combinations of DNG and JPEG, various formats on different memory cards (e.g. DNG on CF card, JPEG on SD card).
Recording options	CompactFlash card (UDMA7), SD card (also SDHC to 32 GB and SDXC to 2 TB), remote to PC
Other functions	
GPS	Optionally selectable integrated GPS module for saving geographical coordinates of exposure locations to EXIF metadata, automatic synchronization of camera to local time and time zone (GPS may not be available in all countries due to local legislation, and will be automatically deactivated in such cases)
Electronic leveling aid	Display of pitch (lateral axis) and tilt (longitudinal axis) ± 90°, accuracy 1° or better at 0–40°C (32–104°F) ambient temperature. The electronic leveling aid is displayed in the viewfinder or as an optional display on the monitor screen
Review formats	Single frame with exposure parameters, single frame, 4 thumbnails, 9 thumbnails, loupe function.
Zoom loupe function in review mode.	Four-step loupe function, pixel level magnification, magnification factor maintained when browsing
Delete protection	Delete protect for individual image
Menu categories	Camera, exposure, setup, play
Menu languages	Ten languages: English, German, French, Italian, Spanish, Russian, Japanese, traditional Chinese, simplified Chinese, Korean
Firmware updates	User upload and installation option (for camera and lenses)

LEICA S-SYSTEM

Service packages.

Interfaces	
PC	High-speed USB 2.0 (LEMO® socket with strain relief, cable included in package)
Other	ISO hot shoe with SCA3002 control contacts, standard flash sync socket, HDMI type-C socket, 7-pin LEMO® socket for remote control accessories/remote flash triggering (cable included in package), contact strip for multifunctional handgrip S.
OS compatibility	
	Windows XP®, Windows Vista®, Windows 7®, Apple Macintosh from Mac OS X 10.5®
Software	
Provided software	Adobe® Photoshop® Lightroom® and Leica Image Shuttle, downloadable from the Leica Owners Area after product registration
System requirements	Windows: Intel® Pentium® 4 or AMD Athlon® 64 processor, Microsoft® Windows Vista® with Service Pack 2 or Windows® 7 with Service Pack; Mac OS: Multicore Intel® processor with 64-bit support, Mac OS X v10.6.8
Power supply	
Battery	Rechargeable lithium-ion battery, nominal voltage 7.4 V, capacity 2100 mAh
Battery level display	On OLED panel on top deck
Power-saving options (sleep function)	Four steps: 2 min, 5 min, 10 min, off
Power supply and battery charger	Rapid charger S (with integrated US mains plug, interchangeable EU, UK, and AUS plugs, and vehicle adapter); inputs: 100–240 V AC, 50/60 Hz, automatic adaptation, or 12/24 V DC; output: 4.2 V DC, 800 mA
Body	
Body material	Magnesium, black enamel
Operating conditions	0 to +45°C, 15–80% relative humidity
Dimensions (W × H × D)	160 × 80 × 120 mm
Weight	Approx. 1260 g / 2.78 lbs (body only, with battery)
Dust/spray protection	Yes / yes
Tripod thread	1/4" and 3/8" with locator holes for mounting plate anti-twist locking pins
Package includes	
S-Camera	
Rapid charger S	
S-Camera battery	
LEMO® USB cable S (5 meters)	
LEMO®-flash connector cable	
Camera carrying strap S	
Bayonet cap	
Eyepiece cover S	
Adobe® Photoshop® Lightroom® and Leica Image Shuttle software as downloads after product registration	



THE S-SYSTEM UNIVERSE

The Leica S-System is distributed exclusively by a network of specially qualified S-Dealers and Leica Stores, where professional photographers can find the best advisory services and support possible. At Leica itself a global team is dedicated exclusively to the S-System and maintains direct contact with customers. Perfect support, efficient communication channels, and direct contact are a matter of course for a benchmark camera system such as this – a world-class professional camera system deserves perfect service support. All products in the S-System portfolio are supplied with a 12-month warranty from the date of purchase. Leica guarantees the availability of all replacement parts for at least six years after a product is discontinued.

A dedicated repair helpline, available to all S-Users, safeguards faster, more direct and efficient service channels, and guarantees rapid handling of repair orders. Free* telephone support is also available to our customers throughout the entire working life of their Leica equipment.

THE LEICA PROTECTION PLAN

The Leica S, its lenses, and its system accessories are designed to withstand all the risks typically encountered in the often challenging everyday lives of professional photographers. Nevertheless, maximum availability of a camera system can only be assured when it is protected against unforeseen risks. Should the worst-case scenario ever occur, the Leica Protection Plan (LPP) provides extended warranty services for three years following the date of purchase or, depending on which comes first, up to 100,000 shutter cycles. LPPs may be purchased separately for all S-System cameras and lenses.

One of the services offered by the LPP is a once-only inspection including product cleaning and adjustment. If the replacement of the shutter in the camera body or a CS-Lens proves to be necessary for technical reasons, this will be carried out in the course of the inspection. Should repairs become necessary at any time, Leica Service in most regions around the world offers a 24-hour replacement service and loans photographers replacement equipment to ensure that they can continue their work – after all, downtime is not factored into important assignments.

* Local fees may apply.

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