



# LEICA SL3-S

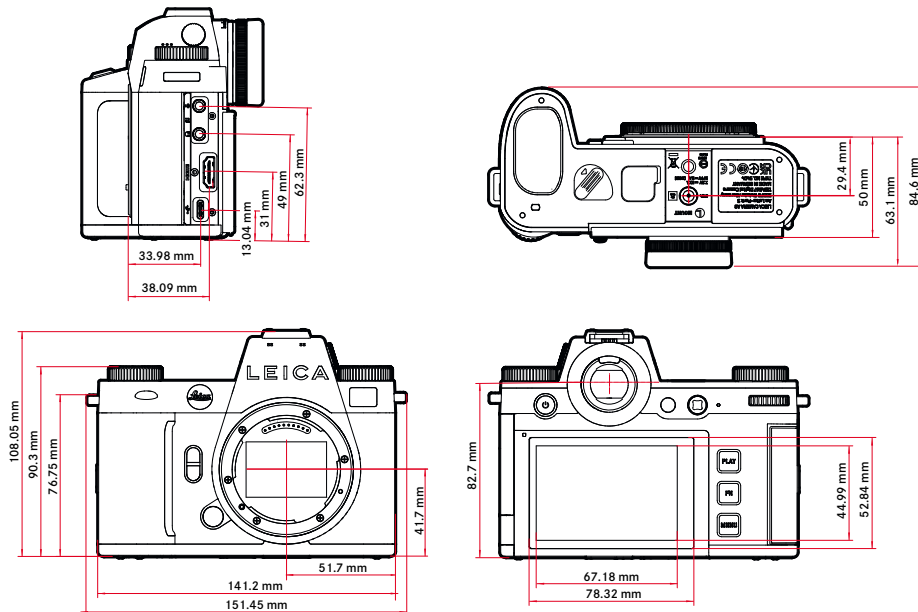
Technical Data.



<b>Designation</b>	<b>Leica SL3-S</b>																								
Camera type	Mirrorless full-frame system camera																								
Type No.	4506																								
Order No.	10 643 (EU/US/CN), 10 644 (JP), 10 645 (ROW)																								
Buffer memory	8 GB, capacity, depending on frame rate and picture format, estimated quantity (number of possible images in the buffer memory)																								
	<table border="1"> <thead> <tr> <th>Continuous shooting</th> <th>DNG</th> <th>DNG + JPG</th> <th>JPG</th> </tr> </thead> <tbody> <tr> <td>2 fps, 14 bit, AF</td> <td>1000</td> <td>1000</td> <td>1000</td> </tr> <tr> <td>5 fps, 14 bit, AF</td> <td>1000</td> <td>345</td> <td>1000</td> </tr> <tr> <td>7 fps, 12 bit, AF</td> <td>680</td> <td>255</td> <td>1000</td> </tr> <tr> <td>15 fps, 12 bit, AF</td> <td>175</td> <td>175</td> <td>175</td> </tr> <tr> <td>30 fps, 12 bit, AF</td> <td>175</td> <td>175</td> <td>175</td> </tr> </tbody> </table>	Continuous shooting	DNG	DNG + JPG	JPG	2 fps, 14 bit, AF	1000	1000	1000	5 fps, 14 bit, AF	1000	345	1000	7 fps, 12 bit, AF	680	255	1000	15 fps, 12 bit, AF	175	175	175	30 fps, 12 bit, AF	175	175	175
Continuous shooting	DNG	DNG + JPG	JPG																						
2 fps, 14 bit, AF	1000	1000	1000																						
5 fps, 14 bit, AF	1000	345	1000																						
7 fps, 12 bit, AF	680	255	1000																						
15 fps, 12 bit, AF	175	175	175																						
30 fps, 12 bit, AF	175	175	175																						
Storage medium	UHS-II (recommended), UHS-I, SD/SDHC/SDXC card + CFexpress card type B (recommended)																								
Material	Full metal housing; magnesium and aluminum, leatherette covering, splash water protected in accordance with IEC Standard 60529 (protection type IP54)																								
Lens mount	Leica L bayonet with contact strip for communication between lens and camera																								
Operating conditions	-10 to +40°C																								
Interfaces	ISO accessory shoe with additional control contacts, synch jack/timecode interface, HDMI jack 2.1 Type A, USB-C USB3.1 Gen2, Audio-Out 3.5 mm/Audio-In 3.5 mm, communication interface in the bottom cover for multifunction handgrip																								
Tripod thread	A 1/4 DIN 4503 (1/4") with stainless steel in the base																								

The values depend on the type of memory card used (SD or CFexpress) / resolution

## Dimensions



Weight	Approx. 768 g (without battery, SD card, body cap)
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# LEICA SL3-S

## Sensor

Sensor size CMOS sensor, 25.3 MP/24.6 MP (total/effective)

Image stabilization 5-axis image stabilization up to 5-stops

Filter RGB color filter, UV/IR filter, no low-pass filter

Processor Leica Maestro series (Maestro IV)

File formats Photo: DNG™ (raw data), DNG + JPG, JPG (DCF 2.0, Exif 3.00)  
Video:

<b>MP4</b>	h.265	AAC	48 kHz/16 bit
	h.264	AAC	48 kHz/16 bit
<b>MOV</b>	h.265	LPCM	48 kHz/24 bit
	h.264	LPCM	48 kHz/24 bit
	ProRes	LPCM	48 kHz/24 bit
<b>RAW</b>		LPCM	48 kHz/24 bit

Image resolution

35 mm	JPG		DNG	
<b>L</b>	6000x4000	24 MP	6000x4000	24 MP
APS-C	JPG		DNG	
<b>L</b>	3936x2624	10.3 MP	3936x2624	10.3 MP

Color depth DNG™: 14 bit (12 bit also possible depending on the continuous shooting mode), JPG: 8 bit

Color space Photo: sRGB  
Video: Rec. 709/Rec. 2020 (HLG/L-Log)

File size DNG™: approx. 40 MB, depending on resolution and image content, JPG: depending on resolution and image content  
Video: max. length depending on ambient temperature and available memory space

Video recording mode Video mode: P - A - S - M  
Cine mode: M

Video Resolution

	RESOLUTION	Aspect ratio
<b>6K OG</b>	5952 x 3968	3:2
<b>C6K</b>	5952 x 3136	17:9
<b>6K</b>	5888 x 3312 (h.265)	16:9
	5776 x 3056 (ProRes)	
<b>C4K</b>	4096 x 2160 (MOV/MP4)	17:9
	4128 x 2176 (RAW)	
<b>4K</b>	3840 x 2160	16:9
<b>3.5K</b>	3536 x 2656	4:3 (RAW)
<b>Full HD</b>	1920 x 1080	16:9

Video frame rate

File Format	Resolution	Frame rate	Bit rate	YUV / Bit	Compression	Codec
<b>MP4</b>	<b>4K</b> <b>3840 x 2160</b>	59.94 fps	100 Mpbs	4:2:0 / 10 bit	Long GOP	h.265
		50.00 fps	100 Mpbs	4:2:0 / 10 bit	Long GOP	h.265
		29.97 fps	100 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
		25.00 fps	100 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
	<b>FHD</b> <b>1920 x 1080</b>	23.98 fps	100 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
		59.94 fps	28 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
		50.00 fps	28 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
		29.97 fps	20 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
		25.00 fps	20 Mpbs	4:2:0 / 8 bit	Long GOP	h.264
		23.98 fps	24 Mpbs	4:2:0 / 8 bit	Long GOP	h.264



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MOV	<b>6K OG (3:2)</b> <b>5952 x 3968</b>	29.97 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		25.00 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		24.00 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		23.98 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	<b>C6K (17:9)</b> <b>5952 x 3136</b>	29.97 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		25.00 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		24.00 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		23.98 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	<b>6K (16:9)</b> <b>5888 x 3312</b>	29.97 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		25.00 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		24.00 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
		23.98 fps	200 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	<b>C4K (17:9)</b> <b>4096 x 2160</b>	59.94 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		59.94 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		50.00 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		50.00 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		48.00 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		48.00 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		47.95 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		47.95 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		29.97 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		25.00 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		24.00 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		23.98 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	<b>4K</b> <b>3840 x 2160</b>	59.94 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		59.94 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		50.00 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		50.00 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		48.00 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		48.00 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		47.95 fps	800 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		47.95 fps	600 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		29.97 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		25.00 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		24.00 fps	400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
		<b>FHD</b> <b>1920 x 1080</b>	119.88 fps	400 Mbps	4:2:2 / 10 bit	ALL-I
	100.00 fps		400 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	59.94 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	50.00 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	48.00 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	47.95 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	29.97 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	25.00 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	24.00 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	23.98 fps		200 Mbps	4:2:2 / 10 bit	ALL-I	h.264
	Sensor: 179.82 fps Recording: 29.97 fps		100 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	Sensor: 150.00 fps Recording: 25.00 fps		100 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	Sensor: 119.88 fps Recording: 29.97 fps		100 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	Sensor: 100.00 fps Recording: 25.00 fps		100 Mbps	4:2:0 / 10 bit	Long GOP	h.265
	<b>C6K (17:9)</b> <b>5776 x 3056</b>		29.97 fps	1939 Mbps	422HQ	
25.00 fps			1618 Mbps	422HQ		ProRes
24.00 fps		1553 Mbps	422HQ		ProRes	
23.98 fps		1551 Mbps	422HQ		ProRes	
<b>C4K (17:9)</b> <b>4096 x 2160</b>	59.94 fps	1944 Mbps	422HQ		ProRes	
	50.00 fps	1622 Mbps	422HQ		ProRes	
	29.97 fps	972 Mbps	422HQ		ProRes	
	25.00 fps	811 Mbps	422HQ		ProRes	
	24.00 fps	779 Mbps	422HQ		ProRes	
<b>FHD</b> <b>1920 x 1080</b>	23.98 fps	778 Mbps	422HQ		ProRes	
	59.94 fps	454 Mbps	422HQ		ProRes	
	50.00 fps	378 Mbps	422HQ		ProRes	
	29.97 fps	227 Mbps	422HQ		ProRes	
	25.00 fps	189 Mbps	422HQ		ProRes	
	24.00 fps	182 Mbps	422HQ		ProRes	
23.98 fps	181 Mbps	422HQ		ProRes		



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<b>RAW</b>	<b>6K (16:9)</b> <b>5888 x 3312</b>	29.97 fps				
		25.00 fps				
		23.98 fps				
	<b>C4K (17:9)</b> <b>4128 x 2176</b>	59.94 fps				
		50.00 fps				
		29.97 fps				
		25.00 fps				
		23.98 fps				
	<b>3.5K (4:3)</b> <b>3536 x 2656</b>	50.00 fps				
		29.97 fps				
		25.00 fps				
		23.98 fps				

Bit rate 8 bit/10 bit for recordings on SD and CFexpress card, 10 bit for HDMI output

Video Gamma Rec. 709, L-Log Rec. 2020, HLG Rec. 2020  
Further information can be found in the "L-Log Reference Manual" for download on the Leica homepage.

## Viewfinder/LCD panel

Viewfinder (EVF) Resolution: 5,760,000 dots, 60 fps or 120 fps, magnification: approx. 0.76x at aspect ratio: 3:2 / approx. 0.78x at aspect ratio: 4:3, frame coverage: 100%, exit pupil position: 21 mm, setting range -4/+2 dpt, with eye sensor for automatic switchover between viewfinder and LCD panel, time delay 0.005 s

LCD panel 3.2" (backlight LED) with anti-fingerprint and anti-scratch coating, 2,332,800 dots, format 3:2, touch panel

Top display 1.28" highly reflective trans-reflective monochrome LCD, 128 x 128 pixels, viewing angle 120°, anti-fingerprint coating

## Shutter

Shutter type Electronically controlled focal plane shutter

Shutter speeds Mech. shutter: 30 min to 1/8000 s, electr. shutter function: 60 s to 1/16000 s, flash synchronization: up to 1/200 s

Shutter button Two-stage  
(1st stage: Activation of the camera electronics including autofocus and exposure metering, 2nd stage: Taking the picture)

Self-timer Delay time: 2 s, 6 s, 12 s or 30 s

Drive Mode [Single](#), [Continuous Shooting](#), [Interval Shooting](#), [Exposure Bracketing](#), [Multi-Shot](#)  
Continuous shooting:

Setting	Shutter type	Autofocus mode for continuous shooting
2 fps, 14 bit, AF	Mech. or electr. shutter	AFc, even if AFs or Intelligent AF is selected
5 fps, 14 bit, AF		
7 fps, 12 bit, AF		
15 fps, 12 bit, AF	Electr. shutter	
30 fps, 12 bit, AF		

## Focusing

Focus mode Automatic or manual  
With manual setting: optional magnifying glass function ([Magnification](#)) and edge marking ([Focus Peaking](#)) available as focus assist

Autofocus system Hybrid-AF due to combination of contrast metering, depth mapping, and phase comparison metering with AF metering points in the sensor.

Autofocus modes [Intelligent AF](#) (automatically refocuses as soon as something changes in the scene), [AFs](#), [AFc](#), AF setting can be saved, optional [Touch AF](#)

Autofocus metering methods [Multi-field](#), [Spot](#) (can be shifted), [Field](#) (can be shifted and scaled), [Zone](#) (can be shifted and scaled), [Tracking](#), [Eye/Face/Body Detection](#), [Animal Detection \(Beta\)](#)

Autofocus metering fields Contrast-AF: 315/Phase detection-AF: 779



# LEICA SL3-S

## Exposure

Exposure metering	TTL (exposure metering through the lens)
Exposure metering methods	Spot, Center-Weighted, Highlight-Weighted, Multi-Field
Exposure modes	Program AE mode (P), aperture-priority mode (A): manual aperture setting, shutter-priority mode (S): manual shutter speed setting, Manual (M): manual setting for shutter speed and aperture
Exposure compensation	±3 EV in 1/3 EV increments or 1/2 EV increments
Automatic bracketing	3 or 5 frames, graduations between shoots up to 3 EV, in 1/3 EV increments, additional optional exposure compensation: up to ±3 EV

	Photo	Video	L-Log	HLG
Auto ISO	ISO 100– ISO 200 000	ISO 100– ISO 200 000	ISO 400– ISO 100 000	ISO 400– ISO 200 000
Manual	ISO 50– ISO 200 000	ISO 50– ISO 200 000	ISO 400– ISO 100 000	ISO 400– ISO 200 000

	Photo	Video	L-Log	HLG
Low Basis-ISO	ISO 50– ISO 560	ISO 50– ISO 560	ISO 400– ISO 2200	ISO 400– ISO 2200
High Basis-ISO	ISO 640– ISO 200 000	ISO 640– ISO 200 000	ISO 2500– ISO 100 000	ISO 2500– ISO 200 000

White balance	Automatic (Auto), default (Daylight, Cloudy, Shadow, Tungsten, HMI, Fluorescent (warm), Fluorescent (cool), Flash), manual metering (Gray Card (pipette), Gray Card), manual color temperature settings (Color Temperature, 2000 K to 11500 K)
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## Flash

Flash unit connector	Via the accessory shoe
Flash synchro socket	For flash synchronization (photo mode only)
Flash sync time	↔ : 1/200 s, slower shutter speeds available, automatic switchover to TTL linear flash mode with HSS-compatible Leica system flash units if sync time is undercut
Flash exposure metering	Using center-weighted TTL pre-flash metering with Leica flash units (SF 26, SF 40, SF 58, SF 60, SF 64) or with system-compatible flash units, remote controlled flash SF CI
Flash exposure compensation	SF 40: ±2 EV in 1/2 EV increments SF 60: ±2 EV in 1/3 EV increments

## Equipment

Microphone	Stereo internal + microphone input 3.5 mm stereo jack
Speaker	Mono internal + headphones output 3.5 mm stereo jack

WLAN The Leica FOTOS app is required to use the WLAN function. The Leica app is available from the Apple App Store™ or the Google Play Store™.

	2.4 GHz	5 GHz
EU/ US/ CN	IEEE802.11b/g/n: Channel 1–11 (2412–2462 MHz)	Client mode: (For indoor use only) IEEE802.11a/n/ac: Channel 36–64 (5180–5320 MHz)
JP		Access point + client mode: (For indoor use only) IEEE802.11a/n/ac: Channel 36–48 (5180–5240 MHz)
ROW		Client mode: (For indoor use only) IEEE802.11a/n/ac: Channel 52–144 (5260–5720 MHz)

Encryption method: WLAN-compatible WPA2™

Bluetooth	Bluetooth 5.0 LE: Channel 0–39 (2402–2480 MHz)
GPS	Not available everywhere due to country-specific legislation; can be added via the Leica FOTOS app. Data is written to Exif header of the picture files.
Menu languages	English, German, French, Italian, Spanish, Portuguese, Russian, Japanese, Simplified Chinese, Traditional Chinese, Korean



# LEICA SL3-S

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## Power supply

Rechargeable battery  
(Leica BP-SCL6)

Lithium-ion rechargeable battery, rated voltage: 7.2V (DC); capacity: 2200 mAh (min.), 315 shots (based on CIPA standard), 1042 shots (based on CIPA standard with adapted shooting cycle\*) Manufacturer: Panasonic Energy (Wuxi) Co. Ltd., Made in China

\***Cycle 1:** Switch on, 1st shutter release after 5 s, one shot every 3 s, the camera switches off after 10 shots (Auto Power Off) and switched back on after a waiting time of 5 min.

\***Cycle 2:** Switch on, 1st shutter release after 5 s, one shot every 3 s, the camera switches off after 50 shots (Auto Power Off) and switched back on after a waiting time of 5 min.

These cycles are repeated alternately until the battery is empty.

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USB-C power adapter  
(Leica ACA-SCL6)  
(optional)

Input: AC 100–240V, 50/60Hz, 0.25A, automatic switchover; Output: DC 5V/9V, 3A; Manufacturer: Salom Electric (Xiamen) Co., Ltd., Made in China

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Dual Charger  
(Leica BC-SCL6)  
(optional)

Input: DC 5V/3A, 9V/3A, automatic switchover; Output: DC 8.4V, 850 mA/1000 mA; Manufacturer: Salom Electric (Xiamen) Co., Ltd., Made in China

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Charging via USB

During operation: 9V/3A (min. 27W)  
With camera switched off: 5V/1500 mA (2.5W or greater)

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QuickTime