



LEICA M MONOCHROM (TYP 246)

Technical data.



Product	Leica M Monochrom (Typ 246)
Order no.	10 930
Camera type	Compact digital view and rangefinder system camera with a dedicated black-and-white image sensor.
Lens mount	Leica M bayonet with additional sensor for six-bit coding.
Lens system	Leica M lenses from 16 to 135 mm.
Picture format/ image sensor	B/W CMOS chip, active area approx. 23.9 × 35.8 mm (corresponds to usable format of analog Leica M models) without color and low-pass filter.
Resolution	DNG™: 5976 × 3992 (24 megapixels), JPEG: 5952 × 3968 (24 megapixels), 4256 × 2832 (12 megapixels), 2976 × 17984 (6 megapixels), 1600 × 1072 (1.7 megapixels). For video recordings: 720 P, 1080 P.
Data formats	DNG™ (raw data), either uncompressed or compressed (lossless), JPEG.
File size	DNG™: compressed 20-30 MB, uncompressed 34.5 MB, JPEG: depending on resolution and picture content.
Video recording format	24 fps, 25 fps.
Buffer memory	2 GB/30 pictures in series.
Sound recording	Mono, stereo using microphone adapter, choice of automatic or manual modulation during recording or fixed "Concert" setting.
Storage media	SD cards up to 2 GB, SDHC cards up to 32 GB, SDXC cards.
Menu languages	German, English, French, Spanish, Italian, Japanese, traditional Chinese, simplified Chinese, Russian, Korean.
Compatibility	Windows® Vista® SP2 / 7® / 8®; Mac® OS X (10.5 or higher).
Exposure metering	Through-the-lens (TTL) metering, with variable aperture, center-weighted TTL metering for flash exposure with system-compliant SCA-3000/2 standard flash units.
Metering principle/ method	By metering the light reflected by light blades of the 1st shutter curtain onto a measuring cell: strong center-weighted; for metering on the sensor: spot, center-weighted, multi-field metering.
Metering range	(to ISO 320, room temperature and normal relative humidity:) EV 0 (with aperture 1.0) to EV 20 (with aperture 32). Flashing of the left-hand triangular LED in the viewfinder signals that the exposure meter reading is below the working range.
Sensitivity range	ISO 320 to ISO 25000, adjustable in 1/3 ISO increments, choice of automatic control or manual setting.
Exposure mode	Choice of automatic shutter speed control with manual aperture preselection – aperture priority A, or manual shutter speed and aperture setting.
Flash exposure control	
Flash unit attachment	Using accessory shoe with center and control contacts or using SCA adapter set.
Synchronization	Optionally triggered at the 1st or 2nd shutter curtain.
Flash sync speed	↔ = 1/180 s; slower shutter speeds can be used, if working below sync speed: automatic changeover to TTL linear flash mode with HSS-compatible Leica system flash units.
Flash exposure metering	(with SCA-3502-M5 adapter or SCA-3000 standard flash unit, e.g. Leica SF 26) Control with center-weighted TTL pre-flash metering.
Flash measurement cell	Two silicon photodiodes with collection lens on the camera base.
Flash exposure correction	±3 1/3 EV, adjustable in 1/3 EV steps via the menu, and when using correspondingly equipped Leica system flash units.
Displays in flash mode	Ready: constant illumination of flash symbol LED in viewfinder only.
Viewfinder	
Viewfinder principle	Large, bright, combined bright-line viewfinder with automatic parallax compensation.

Eyeiece	Calibrated to -0.5 dpt. Corrective lenses from -3 to +3 diopter available.
Image field indication	By activating two bright-line frames each: for 35 and 135 mm, or for 28 and 90 mm, or for 50 and 75 mm. Automatic switching when lens is attached. Frame color (red/white) selectable in menu.
Parallax compensation	The horizontal and vertical differences between the viewfinder and the lens are automatically compensated for in according to the relevant distance setting, i.e. the viewfinder bright-line frame automatically aligns with the subject detail recorded by the lens.
Matching viewfinder and actual image	At a focusing distance of 2 meter, the bright-line frame size corresponds exactly to the sensor size of approx. 23.9 × 35.8 mm. At infinity setting, depending on the focal length, approx. 7.3 % (28 mm) to 18 % (135 mm) more is recorded by the sensor than indicated by the corresponding bright line frame and slightly less for shorter distance settings than 2 meter.
Magnification	0.68 x (for all lenses).
Long base rangefinder	Split or superimposed image range finder shown as a bright field in the center of the viewfinder image.
Effective metering base	47.1 mm (mechanical measurement base 69.25 mm × viewfinder magnification 0.68 x).
Displays	
In the viewfinder	Four-digit digital display with dots above and below, displays.
On back	3" TFT LCD monitor with 16 million colors and 921,600 pixels, approx. 100% image field, max. 170° viewing angle, glass cover of extremely hard, scratch-resistant sapphire crystal for LiveView and review mode.
Shutter/ shutter release button	
Shutter	Metal blade focal plane shutter with vertical movement.
Shutter speeds	For aperture priority: (A) continuous from 60 s to 1/4000 s. For manual adjustment: 8 s to 1/4000 s in half steps. B: for time exposures up to max. 60 s (in conjunction with self-timer T function, i.e. 1st release = shutter opens, 2nd release = shutter closes). ↔ (1/180 s): fastest shutter speed for flash synchronization, HSS linear flash mode possible with all shutter speeds faster than 1/180 s with HSS-compatible Leica system flash units); for video recordings (aperture priority and manual mode): 1/30 to 1/4000 s, for manual mode possible override of specified shutter speed to ensure correct exposure.
Activation of shutter	By integrated motor, low noise operation.
Picture series	Approx. 3 pictures/s, ≈ 30 pictures in series.
Shutter release button	For single pictures: two-stage, 1. Activation of exposure metering and exposure lock (in aperture priority mode), 2. Shutter release; standard thread for cable release integrated.
Self-timer	Delay optionally 2 s (aperture priority and manual exposure setting) or 12 s, set in menu, indicated by flashing LED on front of camera and corresponding display in monitor.
Turning the camera on/off	Using main switch on top of camera; optional automatic shutdown of camera electronics after approx. 2/5/10 minutes; reactivated by tapping the shutter release
Power supply	1 lithium ion battery, rated voltage 7.4V, capacity 1800 mAh, capacity indicated in top panel display, when shutter held open (for sensor cleaning) additional acoustic warning of low capacity, maximum charging current/voltage: DC, 1100 mA/8,25V. Model no.: BP-SCL2, Manufacturer: VARTA Microbattery, made in Indonesia
Charger	Inputs: 100 - 240V AC, 50/60 Hz, automatic switching, or 12V DC, 1.3A; Output: DC, 7.4V, 1000 mA. Model no.: BC-SCL2, Manufacturer: Guangdong PISEN Electronics Co., Ltd., made in China.
GPS	Optional (only with multifunction hand grip attached, not available everywhere due to country-specific legislation, i.e. enforced automatic shutdown in those countries), data written to EXIF header in picture files.
Level indication	Measurement using 3-level acceleration sensor, measuring range: inclination (about transverse axis) and tilt (about longitudinal axis) each ± 90°, measuring accuracy/display sensitivity: ≤ 1° at 0-40°C / 32-104°F and horizontal alignment, display in monitor.
Camera body	
Material	All-metal die cast magnesium body, synthetic leather covering. Brass top panel and base, black chrome plated finish.
Frame selector	Allows the bright-line frame pairs to be manually activated at any time (e.g. to compare detail).
Tripod thread	A 1/4 (1/4") DIN, stainless steel in bottom.
Operating conditions	0 to +40°C/32 to 104°F.
Interfaces	ISO hot shoe, accessory socket, contact strip for Multifunction Hand Grip M.
Dimensions (L × H × D)	Approx. 138,6 × 42 × 80 mm (5.45 × 1.65 × 3.15 in).
Weight (with battery)	Approx. 680 g (24 oz).
Scope of delivery	Charger 100-240V with 2 mains cables (Euro, USA, varies in some export markets) and 1 car charging cable, lithium ion battery, carrying strap, body bayonet cover, cover for accessory shoe/accessory socket.

Subject to changes in design, production and availability.