



# LEICA M (Typ 240) E Edition

## Technical Data.



Camera	Leica M (Typ 240) E Edition
Order no.	10 981
Camera type	compact digital view and range finder system camera
Lens attachment	Leica M bayonet with additional sensor for 6-bit coding
Lens system	Leica M lenses from 16 - 135mm
Picture format / Image sensor	CMOS chip, active area approx. 23.9 x 35.8mm (corresponds to usable format of analog Leica M models)
Resolution	DNG™: 5976 x 3992 pixels (24MP), JPEG: 5952 x 3968 pixels (24MP), 4256 x 2832 pixels (12MP), 2976 x 1984 pixels (6MP), 1600 x 1072 pixels (1.7MP); For video recordings: 640 x 480 pixels (VGA), 720P, 1080P
Data formats	DNG™ (raw data), either uncompressed or compressed (lossless), 2 JPEG compression levels
File size	DNG™: Compressed 20-30MB, uncompressed 48.2MB, JPEG: Depending on resolution and picture content
Video recording format	Motion JPG/Quicktime
Video frame rates	24B/s, 25B/s, 30B/s (with VGA resolution only)
Buffer memory	Leica M [M-E]: 1GB [2GB] / 8 [16] pictures in series
Color spaces	Adobe® RGB, sRGB
Sound recording	Mono, stereo using microphone adapter, choice of automatic or manual modulation during recording or fixed "Concert" setting
White balance	Automatic, manual, 7 presets, color temperature entry
Storage medium	SD cards up to 2GB / SDHC cards up to 32GB / 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	For 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	(with ISO 200/24) At room temperature and normal humidity, corresponds to ISO 200 at aperture 1.0 EV0 to EV20 at aperture 32. Flashing of the left triangular LED in the viewfinder indicates values below the metering range
Sensitivity range	ISO 200 to ISO 6400, adjustable in $\frac{1}{3}$ ISO increments, choice of automatic control or manual setting, PULL 100
Exposure mode	Choice of automatic shutter speed control with manual aperture preselection - aperture priority A, or manual shutter speed and aperture setting
<b>Flash exposure control</b>	
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 time	☑ = $\frac{1}{180}$ s; slower shutter speeds can be used, if working below sync speed: Automatic switching to TL 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/Leica SF 58) Control with center-weighted TTL pre-flash metering
Flash measurement cell	2 silicon photo diodes with collection lens on the camera base
Flash exposure compensation	$\pm 3\frac{1}{3}$ EV adjustable in $\frac{1}{3}$ EV; on Leica SF 58 $\pm 3$ EV adjustable in $\frac{1}{3}$ EV increments in all modes
Displays in flash mode (in viewfinder only)	Ready: Constant illumination of flash symbol LED in viewfinder. Confirmation: Continued illumination or brief rapid flashing of LED after exposure. Underexposure indicator: LED temporarily goes out.
<b>Viewfinder</b>	
Viewfinder principle	Large, bright line frame viewfinder with automatic parallax compensation.
Eyepiece	Calibrated to -0.5 dpt.; corrective lenses from -3 to +3 diopter available.

Image field limiter	By activating two bright lines each: for 35 and 135mm, 28 and 90mm or 50 and 75mm; automatic switching when lens is attached; frame color (red/white) selectable in menu.
Parallax compensation	The horizontal and vertical difference between the viewfinder and the lens is automatically compensated according to the relevant distance setting, i.e. the viewfinder bright-line automatically aligns with the subject detail recorded by the lens.
Matching viewfinder and actual image	At a range setting of 2m, the bright-line frame size corresponds exactly to the sensor size of approx. 23.9 x 35.8mm; at infinity setting, depending on the focal length, approx. 7.3% (28mm) to 18% (135mm) more is recorded by the sensor than indicated by the corresponding bright line frame and slightly less for shorter distance settings than 2m
Magnification (For all lenses)	0.68 x
Large-basis range finder	Split or superimposed image range finder shown as a bright field in the center of the viewfinder image
Effective metering basis	47.1 mm (mechanical measurement basis 69.25mm x viewfinder magnification 0.68x)
Displays	
In the viewfinder	Four-digit digital display with dots above and below, displays
On back	3" color TFT LCD monitor with 16m colors and 921,600 pixels, approx. 100% image field, max. 170° viewing angle
<b>Shutter and shutter release</b>	
Shutter	Metal blade focal plane shutter with vertical movement
Shutter speeds	For aperture priority: (A) continuous from 32s to $\frac{1}{4000}$ s., For manual adjustment: 8s to $\frac{1}{4000}$ s in half steps, B: For long exposures up to maximum 60s (in conjunction with self-timer T function, i.e. 1st release = shutter opens, 2nd release = shutter closes). $\left(\frac{1}{180}\text{s}\right)$ : Fastest shutter speed for flash synchronization, HSS linear flash mode possible with all shutter speeds faster than $\frac{1}{180}$ s with HSS-compatible Leica system flash units); for video recordings (aperture priority and manual mode): $\frac{1}{30}$ to $\frac{1}{4000}$ 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, $\leq 12$ pictures in series
Shutter release	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 2s (aperture priority and manual exposure setting) or 12s, 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	Power supply 1 lithium ion battery, rated voltage 7.4V, capacity 1800mAh, capacity indicated in top panel display, when shutter held open (for sensor cleaning) additional acoustic warning of low capacity, maximum charging current/voltage: DC, 1100mA/ 8,25V. Model no.: BP-SCL2. Manufacturer: VARTA Microbattery, made in Indonesia
Charger	Inputs: 100-240V AC, 50/60Hz, automatic switching, or 12V DC, 1.3A; Output: DC, 7.4V, 1000mA. Model no.: BC-SCL2. Manufacturer: Guangdong PISEN Electronics Co., Ltd., made in China
Spirit level	Measurement by 3-level acceleration sensor, measuring range: inclination (about transverse axis) and tilt (about longitudinal axis) each $\pm 90^\circ$ , measuring accuracy / display sensitivity: $\leq 1^\circ$ at 0-40°C and horizontal alignment, display in monitor
<b>Camera body</b>	
Material	All-metal die cast magnesium body, leather covering. Brass top panel and base, black or steel gray lacquered finish
Tripod thread	A $\frac{1}{4}$ ( $\frac{1}{4}$ " ) DIN stainless steel in bottom
Operating conditions	0-40°C
Interfaces	ISO flash shoe, accessory socket
Dimensions	(Width x Depth x Height) Approx. 138.6 x 42 x 80mm
Weight	Approx. 680g (with battery)
Package contents	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 flash shoe / accessory socket