Mamiya MÓ45

THE MEDIUM-FORMAT SLR WITH TOTAL-SYSTEM POWER



EXPAND YOUR CREATIVITY

Mamiya's medium-format M645 in three specialized bodies







Until Mamiya perfected the compact, lightweight M645 System, your choice was limited: 35 mm convenience versus the bulk and complications of larger formats. For most serious photographers, this was no choice at all. Mamiya's answer revolutionized the art of photography with a sleek, high-

precision medium-format camera of outstanding versatility.

The M645 is a responsive camera. Easy to handle. Able to provide high-density negatives fully 2.7 times larger than the 35 mm camera format without sacrificing convenience or flexibility. It has no peer in design and utility, nor any challenger in technical engineering and impeccable craftsmanship.

Total-system power is increased with 17 Mamiya-Sekor lenses and a wide selection of interchangeable finders, screens and grips, even a Power Drive. Now the choice is yours. Make it in favor of the Mamiya M645, from the world's largest manufacturer of professional, medium-format cameras.

The Mamiya M645J (1 to 1/500 sec.) is a simplified, economy version of the popular M645 (8 to 1/500 sec.), while the M645 1000S is the deluxe model with an even wider range of shutter speeds (8 to 1/1000 sec.). Each has the remarkable Mamiya Moving-Coil Focal-Plane Shutter which consumes 1/10 th the power of a conventional electromagnetic shutter, yet offers very high precision and accuracy.

GET THE BIG PICTURE

High-density negatives 2.7 times the size of 35 mm



Photography, the most imaginative of arts, is also one of the most technically demanding. High-density negatives are a must when enlargements go beyond the usual "cabinet" size. The Mamiya M645 medium-format camera offers a full $6\times4.5\,\mathrm{cm}$ negative (actual image $56\times41.5\,\mathrm{mm}$) which has an image area 2.7 times greater than the 35 mm format (actual image $36\times24\,\mathrm{mm}$), as illustrated here. In general, an $8\times10^{\,\prime\prime}$ enlargement taken from the larger negative will yield approximately the same quality as a "cabinet" $(4\times5^{\,\prime\prime})$ enlargement from a 35 mm negative. In addition, the 1:1.35 width-to-length ratio of the $6\times4.5\,\mathrm{cm}$ negative

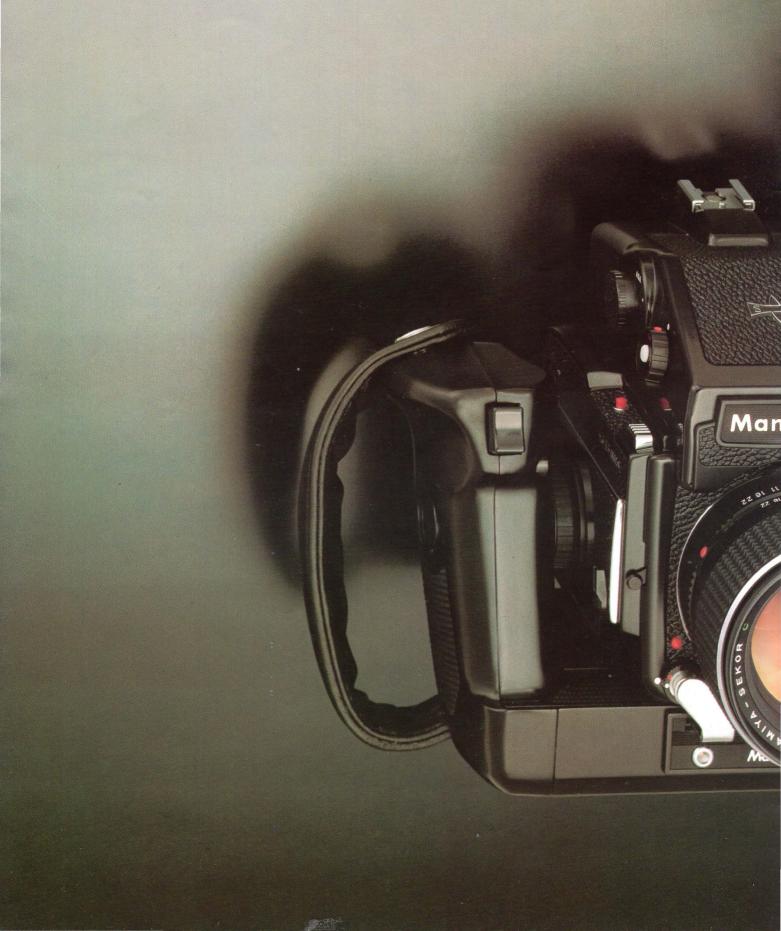


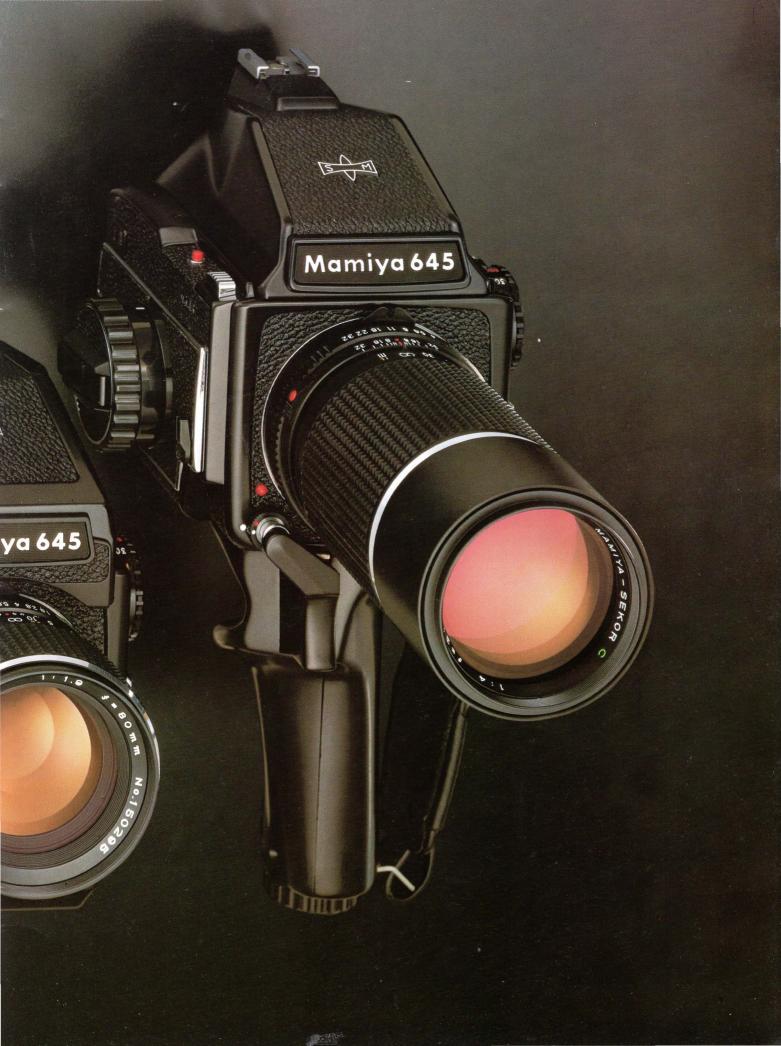
size comes closest to matching the proportions of common enlargement paper sizes and popular magazine illustration formats, eliminating the trim waste in the still larger 6 cm square format.



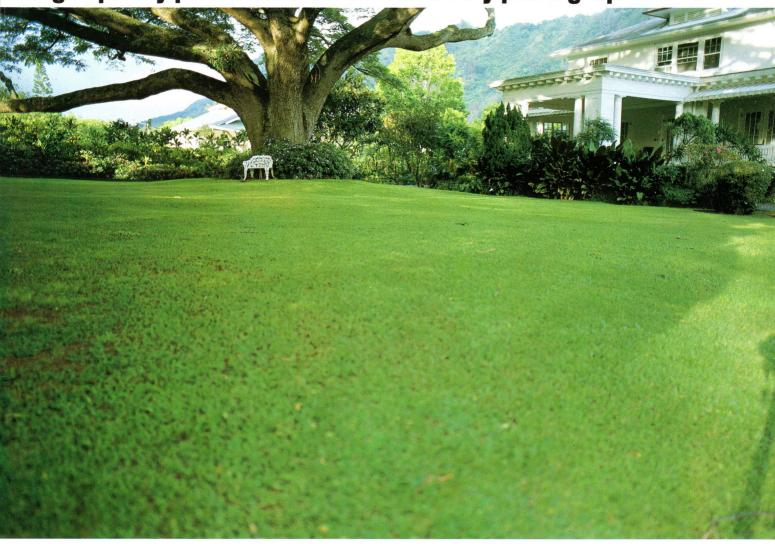
THE TOTAL-SYSTEM CONCEPT

Convenience, flexibility and precision without sacrifice





High-quality prism viewfinders for every photographic use



Versatility is the key to creative photography when it comes to a powerful total-system camera like the Mamiya M645. The interchangeable viewfinders and focusing screens introduced here and in

the next two pages offer maximum flexibility to meet virtually any photographic challenge. Of particular interest is the unique doublelock design of the finders, providing safety without hindering use.



AE (Automatic Exposure) Prism Finder

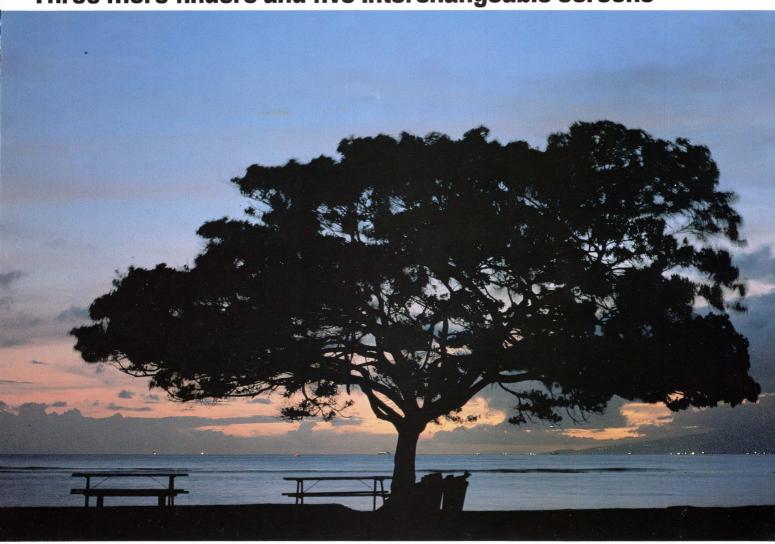
Your camera is ready for TTL aperture-priority AE operation with this precision finder. Metering is center weighted, averaged (open aperture); ASA range is 25-6400 and EV range is 2.85-17 (ASA 100 film and f/1.9 lens). Shutter speed range is 2 to 1/1000 sec., with a new, IC-computer shutter control mechanism. You see a correct, upright image in the screen, along with selected shutter speed and over-/under-exposure warning. Manual compensation for correct exposure in backlighted and other difficult conditions is easy with the

PD Prism Finder S

This precision, eye-level finder has a builtin, IC-controlled TTL exposure meter (to 1/1000) using a rapidly reacting, highly sensitive SPD (silicon photo-diode). Red and green LEDs give precise indication of proper exposure setting. Auto-OFF (after 15 seconds) prolongs battery life. An accessory shoe with X sync flash contact, and a rubber eyecup, are included.



Three more finders and five interchangeable screens



CdS (Cadmium-sulfide) Prism Finder

This easy-to-use, eye-level finder incorporates a TTL meter (CdS) to provide accurate, open-aperture, center-weighted readings (zero method). It couples to the camera's aperture mechanism, so you simply set desired speed, then rotate lens' aperture ring until indicator needle is centered. Features include meter ON/OFF switch, a cordless X-sync flash accessory shoe on the top, and a rubber eyecup.





Prism Finder

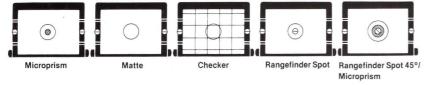
The pentaprism is divided into two prisms, one large and one small, resulting in a very compact finder giving an upright, laterally correct image. It is thus ideal for both fastmoving subjects and general photography. And because the reflecting surfaces of the two prisms are silver-coated by the vaporization process, all parts of the image are bright. A hot shoe and an eyecup are included.

Waist-Level Finder S

Your image is exceptionally bright since the focusing screen is viewed through a $1.3 \times$ magnifying lens with this lightweight, easy-to-use waist-level sports finder that flicks open at a touch. Completely light-tight for reflection-free viewing, it is ideal for low-angle, close-up, and reproduction work. A special viewing frame and sight, easily attached, turns it into a handy sports finder.



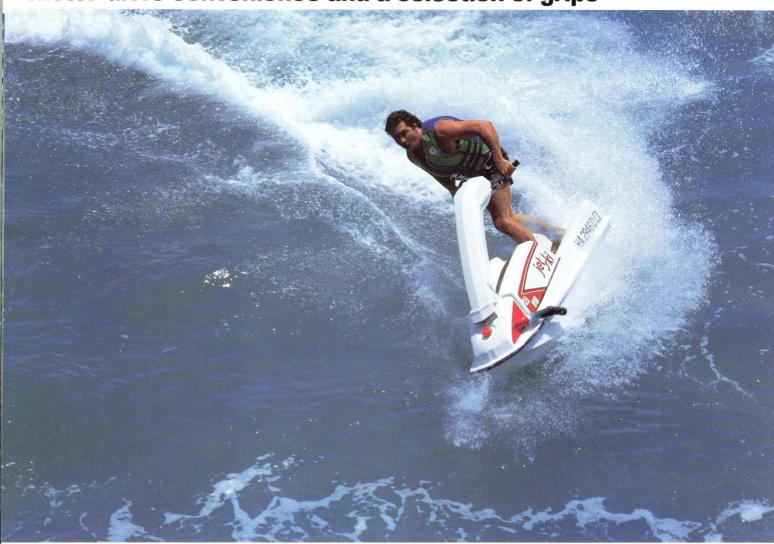
Five Interchangeable Focusing Screens



The Mamiya M645 total-system flexibility is furthered with the five interchangeable focusing screens: **Microprism** for rapid, accurate focusing in general use; **Matte** for close-up work, checking depth-of-field, and use with slow lenses such as the 500 mm f/5.6.; **Checker,** useful in composition and as reference for perfect registration in

multiple-exposure work; **Rangefinder Spot** to assure accurate focus even with wide-angle lenses; **Rangefinder Spot** 45°/**Microprism**, matte, with fresnel lens, diagonal wedge (45°) in spot for pinpoint focusing in horizontal and vertical planes, a microprism ring and an outer ground glass ring for easier focusing at small apertures.

Motor-drive convenience and a selection of grips



Because your camera is an extension of your eye, so to speak, total control is vital at all times. The selection of specialized grips for the Mamiya M645 System gives you that control, helping to eliminate "camera shake" to assure the best possible photographic results. All

are designed for comfort and utility, and fit your hand with ease. The Power Drive with grip combined with the Mamiya AE Prism Finder forms an even stronger bond between you and the fast-moving world around you.

Power Drive

Maximizes your shutter chances by permitting consecutive exposures at the rate of approximately one every second. After the shutter has been released and your finger is removed from the button, the film is automatically advanced and the shutter is cocked. A comfortable, padded grip is included, and the power source is six penlight (AA) batteries.





Deluxe L-Grip Holder

Includes a shutter-release button for convenience. Optional accessory shoe accepts bounce flash.



Grip Holder

An economical, lightweight grip, complete with accessory shoe.



Pistol Grip

Attaches securely to the bottom of the camera. The built-in trigger-type shutter release button couples to the shutter release mechanism of the camera.

Total-system accessories for special applications



Naturally, the larger negative size of the medium-format Mamiya M645 opens up excellent opportunities for making very high-quality photographs for specialized use. Macrophotography and copy work are easier and more practical with these fine accessories, designed for

maximum system flexibility. For instance, by combining the Bellows Lens Hood with the Auto Bellows and Slide Copier, any slide or filmstrip from $35\,\mathrm{mm}$ to $6\times7\,\mathrm{cm}$ can be copied.





Auto Extension Rings Nos. 1, 2, 3S

Designed for use with $80\,\mathrm{mm}$ f/1.9 and f/2.8 lenses; diaphragm automation and meter coupling are retained. Combine the three for life-size shots with $80\,\mathrm{mm}$ lenses.

Auto Macro Spacer

Used with the 80 mm f/4 Macro Lens, it allows close-up photography from one-half to life-size. Diaphragm automation and meter coupling widen its versatility.



Angle Finder Model 2

Makes low-angle, close-up and copy work more comfortable. Unlike waist-level finder, it provides rightside-up image. Has click stops and built-in diopter unit (-4 to +4).



Magnifies central portion of screen $(2 \times)$ for precise focusing and easier use. Built-in -5 to +5 diopter correction.



Auto Bellows

The ultimate tool for macrophotography, with several unique and useful features for depth-of-field and perspective control, horizontal to vertical rotation, and more.



Necessary for reverse-mounting of lenses for macro-photography; sized to fit either 58 mm or 67 mm diameter filter threads.



Bellows Lens Hood & Slide Copy Attachment

Freely adjustable for use with 55 mm to 300 mm lenses. Slot for 7.6 cm gelatin filters. Slide copier fits on hood to copy film strips and $35 \, \text{mm}$, 4×4 , 6×4.5 , 6×6 or 6×7 slides.

Connecting Rings CN-58 & CN-67

CN rings, sized to fit 58mm and 67mm filter threads, are used to attach the Bellows Lens Hood when you reverse your lens for greater magnification, such as for 35mm slide copying, etc.

LENSES UNLIMITED

17 Mamiya-Sekor lenses of outstanding quality



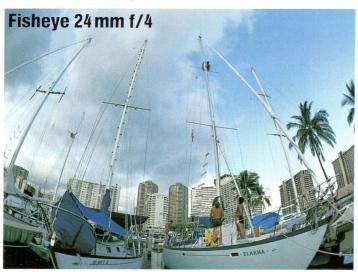
The focal-plane-shutter format of the M645 permits greater freedom in lens design than possible in lens-shutter types, thus each of these 17 Mamiya-Sekor lenses, from fisheye to a compact 500 mm reflex tele, offers excellent intrinsic contrast, high resolution, rich color saturation, and clear definition. Each is multi-coated to reduce flare and ghost images to a minimum, even under highly unfavorable lighting conditions. These high-precision tools for the creative photographer are divided into four groups: **Wide-Angles** with dynamic perspective

for exciting panoramics; **Standards** for utility and dependability; **Telephotos** featuring reduced size and weight; and **Specials** including the macro 80 mm, the soft-focus 145 mm, two compact zooms (105-210 mm and 75-150 mm) and the remarkable reflex 500 mm. Their outstanding color fidelity and sharp resolution contribute significantly to the advantages of the larger negative size offered in the Mamiya M645 System. For your reference, focal lengths equivalent to lenses for 35 mm cameras are given in parentheses.

Creative tools for the exacting craftsman

Fisheye 24mm f/4 ULD-C (Equiv. 14mm)

Your angle of view is a wide 180° (diag.) and the image produced is full-frame ($56 \times 41.5 \,\mathrm{mm}$), with the distance from the picture center to any given point always proportional to the angle from the optical axis to that point (equidistance projection). Ultra-low dispersion glass further reduces lens flare, and four filters are built in.





Macro 80 mm f/4 (Equiv. 49 mm)

Its high resolving power is especially appreciated in close-up and copy work. A built-in floating system automatically compensates for increased aberration most other macros suffer at close focusing distances, and you obtain edge-to-edge sharpness every time. The optional Auto Macro Spacer extends range from half-life-size to life-size.

45 mm f/2.8S (Equiv. 28 mm)

Superb optical quality and a newly perfected compact design make this a smooth and convenient wide-angle lens for general-use photography. Mamiya-Sekor's improved floating lens system automatically adjusts the lens for maximum corner and edge sharpness, even at minimum focusing distances.





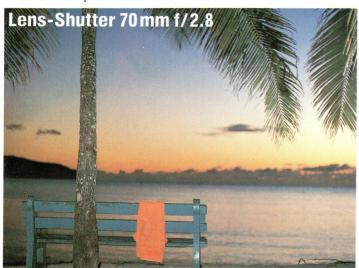
Soft-Focus 145mm f/4 (Equiv. 87mm)

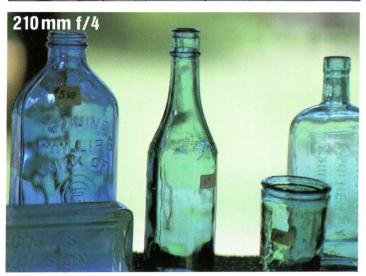
Fashion and portraiture situations are easier to handle thanks to the convenient Softness Control collar on this versatile lens. Pull back on the collar to automatically stop down to f/8 for focusing; release it and you preview soft-focus composition. Up to 65 different softness values may be obtained.

Medium-Zoom & Compact Tele

Lens-Shutter 70mm f/2.8 (Equiv. 43mm)

Its built-in, between-the-lens shutter lets you synchronize electronic flash at all speeds from 1/30 to 1/500 sec. easily. The lens-shutter speed is set on the collar at the front of the lens. Or, bypass the between-the-lens shutter and set the collar to the appropriate position to use the focal-plane shutter of the camera itself.





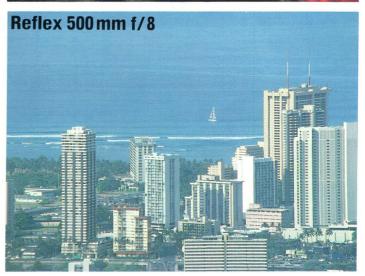
210 mm f/4 (Equiv. 126 mm)

The uses of this medium tele are unlimited and its dependability is unrivalled. The compact design has reduced the weight to a mere 715 grams. It has a built-in lens hood to make it still more useful in all outdoor shooting situations—sports, nature, etc. The five lens elements are arranged in four groups.

Zoom 75-150 mm f/4.5 (Equiv. 47-94 mm)

Mamiya M645 owners long have been asking for a zoom-tele of this type, and now they have their wish. Its new and highly compact design, and its smoothly operating zoom system, make it extremely useful in all sorts of photographic situations, including candid portraiture, snapshots, nature studies and general travel shots.





Reflex 500 mm f/8 (Equiv. 300 mm)

Because this extra-compact tele is a reflex (mirrored) type, chromatic aberration is minimized. The ringed pattern in out-of-focus highlights caused by luminous flux of incident light can be used to advantage in creative photography. Where maximum "reach" and total mobility are important, this is the lens for you and your Mamiya M645.

POWERFUL AND PRACTICAL

A guide to the Mamiya-Sekor lens lineup











80_{mm} f/1.9



80_{mm} f/2.8



150 mm f/3.5



Soft-Focus 145 mm f/4

Lens	Fisheye 24mm f/4	35 mm f/3.5	45mm f/2.8S	55mm f/2.8S	Lens-Shutter 70mm f/2.8	80mm f/1.9	80 mm f/2.8	Macro 80 mm f/4	110 mm f/2.8
Optical construction	10 elements, 8 groups	9 elements, 7 groups	9 elements, 7 groups	8 elements, 6 groups	6 elements, 4 groups	7 elements, 6 groups	6 elements, 5 groups	6 elements, 4 groups	5 elements, 5 groups
Angle of view	180°	90°	76°	65°	53°	47°	47°	47°	35°
Minimum aperture	22	22	22	22	22	22	22	22	22
Diaphragm	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Minimum focusing distance	1ft. or 0.3 m	1.5 ft. or 0.45 m	1.5ft. or 0.45m	1.5ft. or 0.45m	2.75ft. or 0.8m	2.25ft. or 0.7 m	2.25ft. or 0.7m	1.25ft. or 0.375m	4ft. or 1.2m
Filter size	Built-in	77 mm	67mm	58 mm	58mm	67mm	58mm	67mm	58mm
Lens hood	None required	None required	Slip-on	Screw-in	Screw-in	Screw-in	Screw-in	None required	Screw-in
Weight	27.7 oz. (785 g)	15.7 oz. (445 g)	16.8 oz. (475 g)	11.8 oz. (335 g)	13.9 oz. (395 g)	14.8 oz. (420 g)	8.8 oz. (250 g)	20.6 oz. (585g)	13.8 oz. (390 g

Design and specifications are subject to change without notice.



45 mm f/2.8S



 $55\,\mathrm{mm}\,\mathrm{f}/2.8S$





Macro 80 mm f/4



110 mm f/2.8



Zoom 75-150 mm f/4.5



Reflex 500 mm f/8



Soft Focus 145 mm f/4	150 mm f/3.5	210 mm f/4	300mm f/5.6	500mm f/5.6	Reflex 500 mm f/8	Zoom 75-150 mm f/4.5	Zoom 105-210 mm f/4.5
7 elements, 5 groups	5 elements, 5 groups	5 elements, 4 groups	6 elements, 5 groups	6 elements, 5 groups	7 elements, 5 groups	11 elements, 10 groups	15 elements, 11 groups
27°	26°	19°	13°	8°	8°	50-26°	36-19°
32	32	32	32	45	8	32	32
Automatic	Automatic	Automatic	Automatic	Automatic	Fix	Automatic	Automatic
5ft. or 1.5m	5ft. or 1.5m	8ft. or 2.5 m	15 ft. or 4 m	30ft. or 9m	15 ft. or 4 m	6ft. or 1.8m	8ft. or 2.5 m
77 mm	58mm	58mm	58mm	105 mm	Drop-in	77 mm	77 mm
Screw-in	Built-on	Built-on	Built-on	Built-on	Built-on	Slip-on	Screw-in
31.7 oz. (900 g)	14.6 oz. (415 g)	25.2 oz. (715 g)	25.0 oz. (710 g)	80.4 oz. (2280 g)	31.0 oz. (880 g)	34.4 oz. (975g)	43.0 oz. (1220 g)



210 mm f/4



 $300\,\mathrm{mm}\,\mathrm{f/5.6}$





Zoom 105-210 mm f/4.5



500 mm f/5.6



A "G" for Good Design

The coveted "G" mark is awarded to products selected by Japan's Ministry of Trade and Industry (MITI) on the basis of excellence in design. Because the criteria include aspects of appearance, function and quality, the mark represents high value and utility to consumers in Japan and around the world. We are proud that the Mamiya M645 System has been recognized with the "G" mark and we give you our assurance that our products will continue to live up to the promise it represents.

Mamiya M645 Specifications

	M645 1000S	M645	M645J			
Camera Type	6×4.5cm format, electronically controlle	d focal-plane shutter, single-lens reflex				
Actual Image Size	56×41.5 mm					
Film	120 roll film (15 exposures), 220 roll film (30 exposures)					
Standard Lenses	Mamiya-Sekor C 80mm f/2.8, Mamiya-Se					
Lens Mount	Mamiya M645 bayonet mount					
Viewfinders	Interchangeable type, Waist-level-finder S, Prism finder, CdS prism finder, P.D. prism finder S, AE prism finder					
Focusing Screen	Rangefinder spot 45°/microprism; 4 other types	Microprism; 4 other types	Rangefinder spot 45°/microprism; 4 other types			
Shutter	Moving coil, electronically controlled foc-	al-plane shutter				
Shutter Speed	B, 8-1/1000 sec. Shutter speed dial lock provided	B, 8-1/500 sec. No lock	B, 1-1/500 sec. No lock			
Shutter Release	· 2 bu	uttons	1 button in front			
Mirror	Instant-return type					
Mirror-up Lock	Pos	None				
Self-Timer	5-10 sec. delay None					
Depth-of-Field Preview	Body lever provided Auto/Manual switch on each lens					
Film Advance	Crank (interchangeable)	Knob (inte	erchangeable)			
Exposure Counter	Progressive type, automatic reset, autom	atic changeover with insertion of 120/220	roll-film inserts			
Multiple Exposure	Possible; exposure counter does not move	ve during multiple-exposures				
Flash Synchronization	X (1/60 se	ec.) and FP	X (1/60 sec.) only			
Tripod Socket	1/4 inch a	1/4 inch only				
Power Source	One 6V alkaline battery or silver-oxide battery					
Battery Check	Depressing B.C. button illuminates green LED if battery condition is satisfactory					
Weight	965g (body only)	920g (body only)	910g (body only)			
Dimensions 99.3mm (W) × 84mm (H) × 109mm (L) (body only)		99.3mm (W)×84mm (H)×109mm (L) (body only)	94.5 mm (W)×84 mm (H)×109 mm (L) (body only)			

^{*} Specifications and design are subject to change without notice.

