

Mamiya®

M645

6x4.5cm Single-Lens
Reflex Camera System



The M645 System . . . Size it up!

Step Up to Medium Format

Go Beyond 35mm Photography! If you've learned to appreciate the responsiveness, handling ease, and compact nature of 35mm SLR's but often need the larger negative of a medium-format camera for professional enlargements, the M645 series cameras were made for you. Utilizing the best features of both formats, Mamiya designed the M645 system to handle and perform like the finest 35mm SLR. The useable image area of the M645, however, measures 2.7 times larger than 35mm negatives. This larger negative size offers truer enlargements than 35mm photography.

The M645 camera system includes three bodies, fifteen lenses, five viewfinders, five focusing screens, and an array of accessories to accommodate virtually every photographic challenge. A power drive is also available to enhance the flexible nature of these cameras. And every element is designed and built with the precision craftsmanship that has helped Mamiya become the world's largest manufacturer of professional, medium-format cameras.

Many features are Mamiya exclusives. The moving-coil electronic focal-plane shutter consumes 1/10th the power of a conventional electromagnetic shutter, yet permits accurate exposures from 8 to 1/500 second (1/1000 on the M645 1000S and 1 to 1/500 on the M645J). All three bodies accept interchangeable 120 and 220 roll-film inserts that load in about 15 seconds.



Photograph by Carmen Porto





This simple comparison illustrates the advantages of the 6x4.5cm medium format.

Illustrated are actual-size examples of the 6x4.5cm and 35mm formats. Because the 6x4.5cm format (actual image 56x41.5mm) has an image area 2.7 times greater than the 35mm format (actual image 36x24mm), the quality of resulting prints is particularly apparent in enlargements. The most striking example of this advantage can be seen in the fact that an 8x10"

enlargement taken from a 6x4.5cm negative will actually produce approximately the same quality as a 4x5" enlargement from a 35mm negative. In addition, the 1:1.33 width-to-length ratio of the 6x4.5cm negative size is ideal for enlarging as it comes closest to duplicating the proportions of common enlargement paper sizes and popular magazine illustration formats.

Mamiya M645J, M645, and M645 1000S Features

High-Precision Moving-Coil Electronic Shutter

The moving-coil, electronically controlled focal-plane shutter developed by Mamiya (patents pending) is an important feature of the M645 system. The new shutter features accurate exposure times, stable, long exposures (1 second on the M645J and up to 8 full seconds on other models), increased exposure resistance to wear, and improved response. Because the moving coil method also keeps power consumption constant (independent of exposure times) battery life is extended as much as tenfold.

Power Source

The camera uses a single 6V silver-oxide battery which, under normal temperature conditions and, when using a prismfinder or waist-level finder, can be expected to deliver up to 100,000 exposures.

Slack-Free Film

The system utilizes specially-developed film inserts in a film-loading system that keeps film at correct tension. Double lock safety system prevents unintentional opening of door to film chamber.

Flash Synchronization

Two types: X (electronic flash), and FP (FP-type flashbulbs). Electronic flash can be synchronized up to 1/60 second. With the special 70mm leaf shutter lens, electronic flash can be synchronized with shutter speeds from 1/30 to 1/500 second.

Double-Exposure Prevention and Multiple Exposures

Prevents accidental double exposures in normal operation. Special multi-exposure lever permits the same film area to be re-exposed any number of times when desired.

Mirror-up Locking Device

Particularly helpful in avoiding even the slightest mirror shock when slow shutter speeds are used.

Power Drive (available as an accessory)

Automatically transports the film and cocks the shutter in one action.

Additional features include: Battery check, interchangeable film-advance crank (on the M645 1000S only) and knob, two shutter release buttons (one on the M645J), bayonet lens mount, and five interchangeable focusing screens (see Accessories pg. 7).

The M645 1000S includes all the features listed, plus:

1/1000 sec. Shutter Speed (1/500 on M645)

Electronically controlled shutter assures accurate exposures even at speeds as fast as 1/1000 second.

Depth-of-Field Preview

Shows the image and the actual depth-of-field that will be obtained with the set aperture when lever is pushed up.

Self-Timer

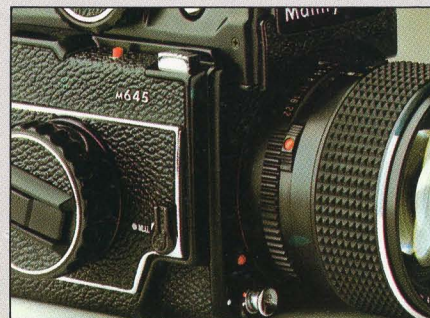
Can be set from 5 seconds to 10 seconds.



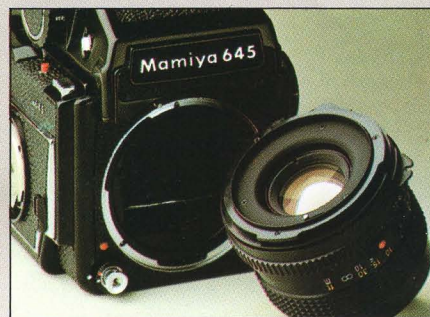


M645 Illustrated

1. Power Drive (optional)
2. Film Advance Crank
3. Mirror-Up Lever
4. Two Shutter Release Buttons
5. Interchangeable Lenses
6. Strap Lug
7. Eyepiece
8. PD Prism Finder
9. Flash Sync Terminals
10. Shutter Speed Dial with Lock
11. Hot-Shoe
12. Meter Switch CdS Prism Finder
13. Shutter Speed Dial
14. ASA Dial



Two shutter-release buttons (M645-M645 1000S)



Bayonet lens mount



Interchangeable film advance cranks

Mamiya M645 Viewfinders

The M645 system allows the individual to build a system custom-designed to meet his or her specific photographic challenge. The specially designed double lock system serves as a safety device against unexpected removal of the finder.

Prism Viewfinder

Gives an upright, laterally correct image. The pentaprism is divided into two prisms, one large and one small, resulting in a very compact viewfinder. Because the reflecting surfaces of the two prisms are silver-coated by the vaporization process, all parts of the image are bright. Moreover, since the finder image is upright and laterally correct, it is ideal for both fast-moving subjects and general photography.

CdS Prism Viewfinder

Incorporates a through-the-lens exposure meter with a cadmium-sulfide (CdS) photoelectric cell. Provides accurate, open-aperture, center-weighted readings simply by turning the lens diaphragm ring to center the needle seen in the viewfinder. The proper shutter speed shows on the prism shutter dial. Other features include meter "ON/OFF" switch, a cordless X sync flash accessory shoe on the top, and a rubber eyecup. Uses one 1.5V battery.

PD Prism Viewfinder

Built-in IC-controlled TTL exposure meter uses a high-sensitivity, silicon photo-electric cell and red and green LED's for precise visual indication of proper exposure setting. When switched on, exposure meter stays ON for 15 seconds, switches off automatically to prolong battery life. Also has an accessory shoe with X sync flash contacts and a rubber eyecup. Has 1/500 second meter.

PD Prism Viewfinder-S (not illustrated)

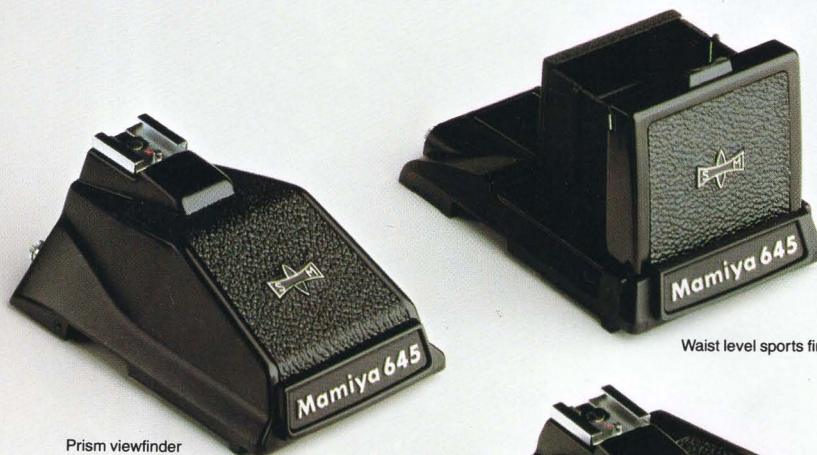
Same as PD Viewfinder except has 1/1000 second meter.

The Mamiya AE (Automatic Exposure) Prism Finder

Converts the camera into an aperture-preferred automatic-exposure camera. The metering will be open aperture, center-weighted, with an ASA range of 25-6400 and an EV range of 2.85-17 (ASA 100 film and f/1.9 lens). It operates in a shutter speed range of 2 seconds to 1/1000 and the selected shutter speed is visible in the viewfinder along with an over- and underexposure warning indicator.

Waist-Level Viewfinder S—Sports Finder

Lightweight, easy-to-use waist-level sports finder flicks open with just one action. Completely light-tight for reflection-free viewing. Ideal for low-angle, close-up, and reproduction work. Finder image is exceptionally bright since the focusing screen is viewed through a magnifying lens. A special viewing frame and sight, attached outside the hood of the waist-level finder S, can be quickly and simply turned into a sports finder. Combined use with the waist-level finder opens up a wide range of possibilities, including fast-moving or aerial photography with a free choice of vertical or horizontal framing.



Prism viewfinder

Waist level sports finder S



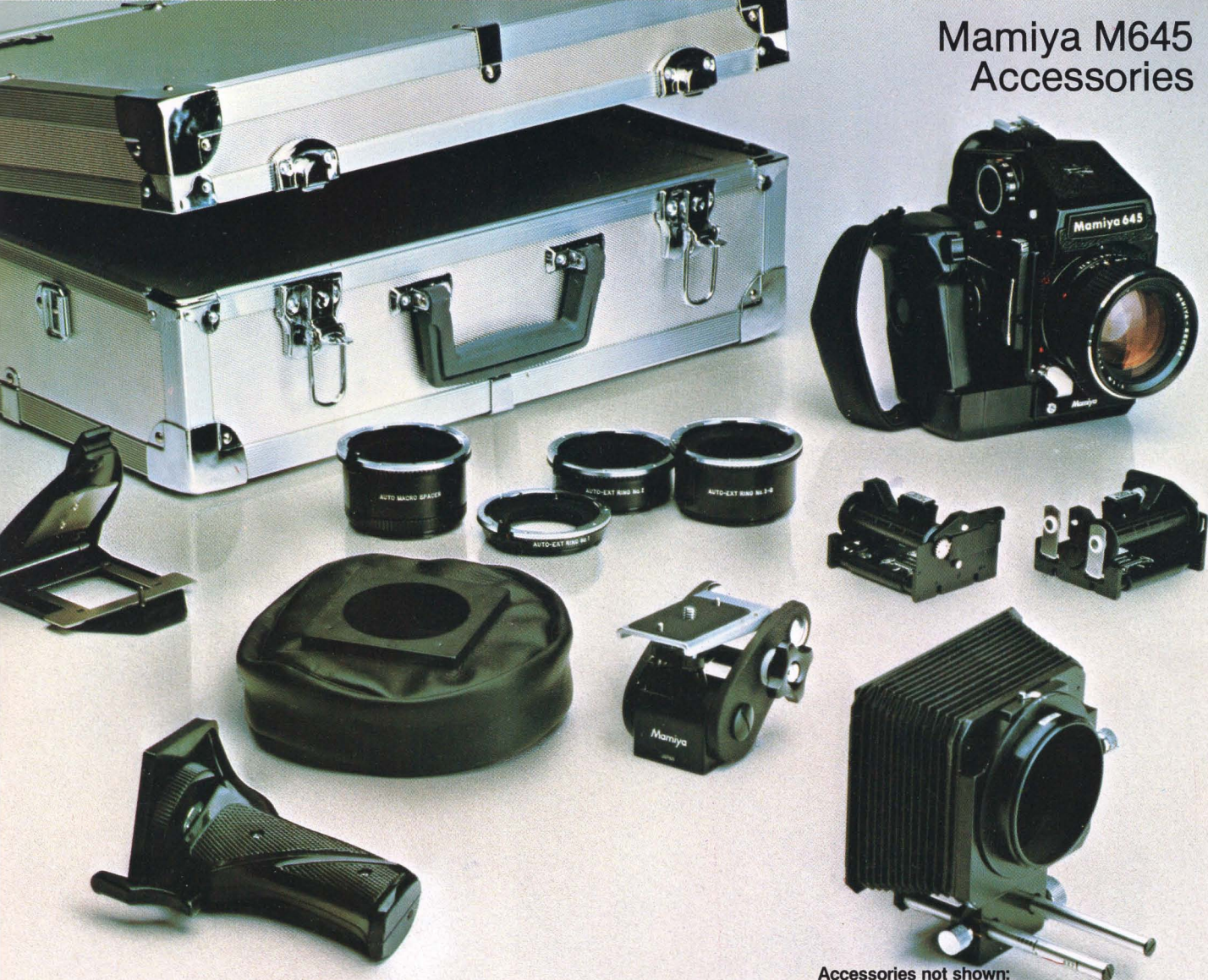
AE (automatic exposure) viewfinder

CdS Prism viewfinder



PD Prism viewfinder

Mamiya M645 Accessories



Power drive automatically transports film after shutter is released.

Film inserts are available to 120 or 220 roll film.

Super Slide Cutter with special mask allows for mounting transparencies in super slide format for projection in standard 35mm slide projectors.

Rotating tripod adapter quickly changes camera position from vertical to horizontal without changing the lens axis.

Three types of grips include pistol grip (with trigger). Not shown: deluxe L-grip (permits camera to be held in left hand, has accessory shoe and shutter release), and grip holder (version of L-grip but no shutter release button).

Custom aluminum case with foam-lined compartments for camera, lenses and accessories.

Accessories not shown:

2X magnifier for precise focusing.

Angle finder permits low-angle and close-up shots to be taken from a comfortable position.

Focusing handle attaches to lens for easier and faster focusing.

Quick-shoe model 2 facilitates speedy mounting or removal of camera from tripod.

Close up accessories include: auto bellows unit, auto extension tubes (shown), reversing rings, balloon bellows, and slide copier.

Other accessories include: five types of filters, lens hood, diopter correction lenses and magnifiers, film-advance knob with crank, hand and neck straps, and camera case.

Interchangeable focusing screens, includes Microprism, Matte, Checker, Split-Image and Micro/Split-Image 45°.

Mamiya M645 Lens Series

Your choice of interchangeable lenses from ultra wide-angle to telephoto and everything in-between—for every kind of photography. Mount the 80mm f/1.9C lens on the M645 1000S, set the shutter at 1/1000 second and you have one of the fastest medium-format cameras in the world. All Mamiya-Sekor C lenses are multi-coated to minimize flare and ghosts and assure you of crystal-clear images with outstanding color fidelity.

55mm f/2.8 C(S)

45mm f/2.8 C(S)

80mm f/1.9 C

Standard
and
Wide-Angle

80mm f/2.8 C

35mm f/3.5 C

110mm f/2.8 C

150mm f/3.5 C

210mm f/4.0 C

300mm f/5.6 C

500mm f/5.6 C

Telephoto



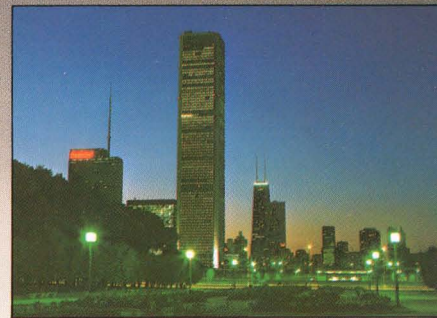
Soft Focus
145mm f/4.0 C



Macro
80mm f/4.0 C



Standard



Telephoto

Fish Eye
24mm f/4.0 ULD C

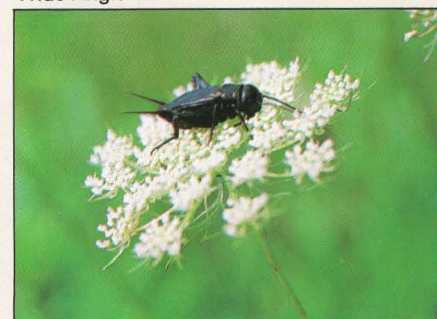


Wide Angle

Special



Zoom
105-210mm f/4.5 C



Macro

Lens Shutter
70mm f/2.8 C

Lens	SPECIAL					WIDE-ANGLE			STANDARD		TELEPHOTO				
	Macro	Built-in Shutter	Fish Eye	Soft Focus	Zoom	35mm f/3.5	45mm f/2.8S	55mm f/2.8S	80mm f/1.9	80mm f/2.8	110mm f/2.8	150mm f/3.5	210mm f/4.0	300mm f/5.6	500mm f/5.6
Angle of view	47°	53°	180°	27°	36°-19°	90°	76°	65°	47°	47°	35°	26°	19°	13°	8°
Minimum aperture	f/22	f/22	f/22	f/32	f/32	f/22	f/22	f/22	f/22	f/22	f/22	f/32	f/32	f/32	f/45
Number of elements	6	6	10	7	15	9	9	8	7	6	5	5	5	6	6
Minimum focusing distance	*.60'	2.75'	1'	5'	8.3'	1.48'	1.5'	1.5'	2.3'	2.25'	4'	5'	8'	13'	30'
Filter size	67mm	58mm	BUILT-IN	77mm	77mm	77mm	67mm	58mm	67mm	58mm	58mm	58mm	58mm	58mm	105mm
Equivalent 35mm camera lens	50mm	44mm	15mm	90mm	65-130mm	21mm	28mm	34mm	49mm	49mm	68mm	95mm	129mm	184mm	309mm
Weight	585g	395g	785g	900g	1,220g	445g	470g	333g	420g	255g	390g	415g	715g	710g	2,280g

*.5X (1/2 life-size) lens alone, 33' (1X, life-size) with Auto-Muto-Macro Spacer.

Mamiya M645J, M645, and M645 1000S

The M645J, M645, and the M645 1000S—the "G" mark cameras.

The "G" mark is awarded to products selected by Japan's Ministry of Trade and Industry on the basis of excellence in design, including the aspects of appearance, function and quality. The presence of the "G" mark has become one of the criteria consumers look for in choice between products.

The Mamiya M645 Series has been awarded the "G" mark, and thousands of serious photographers have purchased these cameras, reflecting their conscious decision to choose excellence. Around the world, the Mamiya name appears on more professional medium-format cameras than on any other. The highest compliments come from the individual professional trusting it for a livelihood and the M645 cameras have truly earned them all.

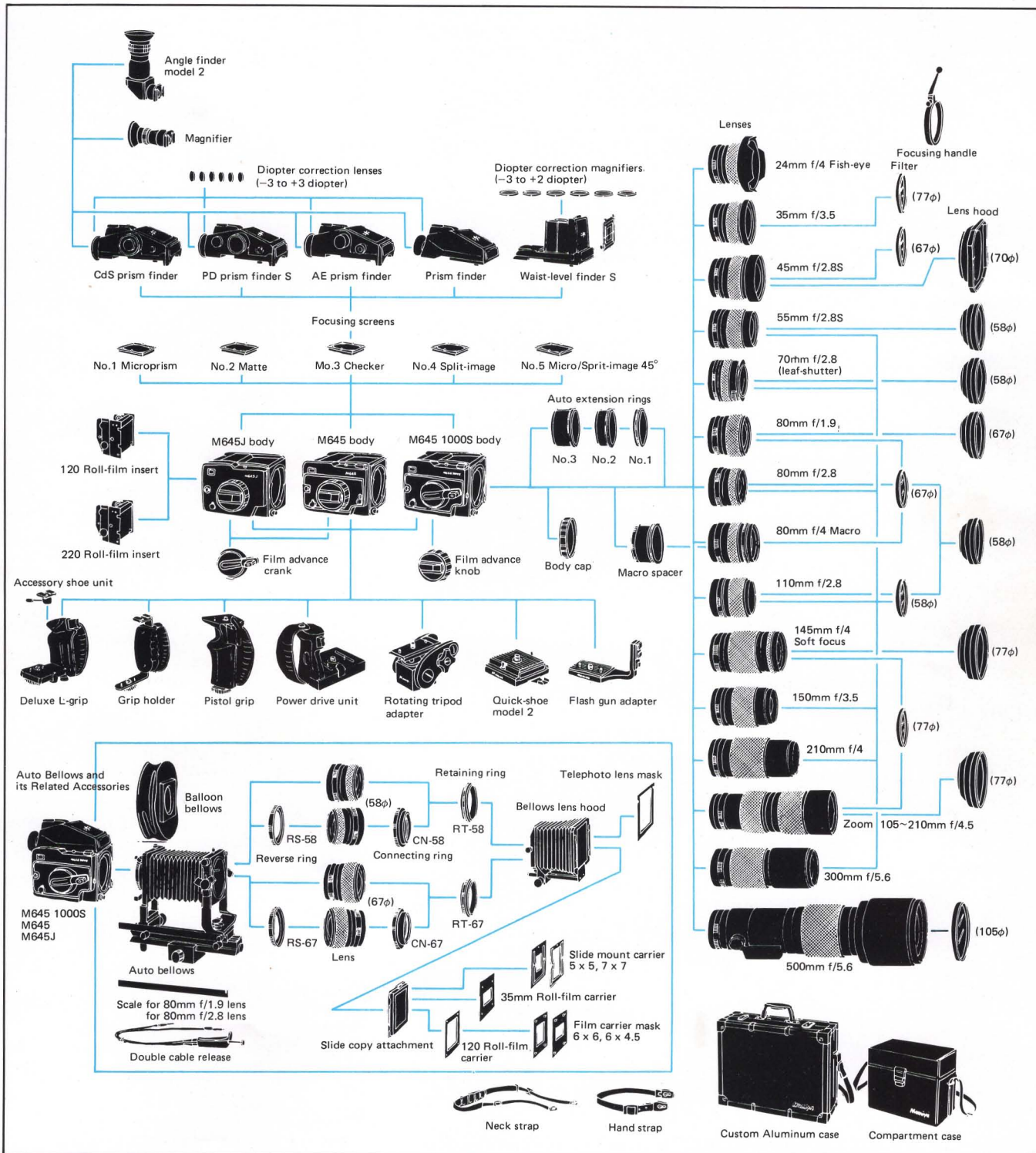
All three are system cameras. A complete line of lenses and accessories are available to meet virtually all current photographic challenges or those that may come up in the future. Versatility, craftsmanship and quality are the results of Mamiya's extensive high-precision technology and experience gained in the field of manufacturing professional cameras.

Lightweight and compact, these cameras handle like 35mm cameras but with one very important advantage—they deliver results of superior quality. Best of all, it need not cost a fortune to move up to what could well be the ultimate camera system.



Good Design Award
of the Japanese Government

Mamiya M645 System Chart



Specifications of the Mamiya M645J, M645 1000S and M645

	M645 1000S	M645	M645J
Camera type	6 x 4.5cm format, electronically controlled focal-plane shutter, single-lens reflex		
Actual film image size	56 x 41.5mm		
Film	120 roll film (15 exposures), 220 roll film (30 exposures)		
Standard lenses	Mamiya-Sekor C 80mm f/2.8 lens, Mamiya-Sekor 80mm f/1.9 lens		
Lens mount	Mamiya M645 bayonet mount		
Shutter	Moving coil, electronically controlled focal-plane shutter		
Interchangeable viewfinders	Waist-level finder-S, Prism finder, CdS prism finder, P.D. Prism finder S, AE Prism finder		
Exposure counter	Self-resetting; automatic adjustment for 120/220 films		
Multiple exposure	Possible		
Battery	One 6V silver-oxide battery		
Self-timer	5 - 10 sec. delay	None	None
Film advance	Crank (interchangeable)	Knob (interchangeable)	Knob (interchangeable)
Depth of preview	Body lever provided	Auto/Manual switch on each lens	Auto/manual switch on each lens
Mirror-up lock	Possible	Possible	None
Flash synchronization	X (1/60) and FP	X (1/60) and FP	X (1/60) only
Tripod socket	1/4 inch and 3/4 inch	1/4 inch and 3/4 inch	1/4 inch only
Shutter release	2 buttons	2 buttons	1 button in front
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
Focusing screen	Micro/split image 45°; 4 other types	Microprism; 4 other types	Micro/split image 45°; 4 other types
Weight	965g (body only)	920g (body only)	910g (body only)
Body dimensions	99.3mm(W) x 84mm(H) x 109mm (L)	99.3mm(W) x 84mm(H) x 109mm(L)	94.5mm(W) x 84mm(H) x 109mm(L)

Specifications are subject to change without notice.