RICOH

Interchangeable unit camera system

GXR

More GXR enjoyment: New wide-angle zoom with large-format CMOS sensor

RICOH LENS A16 24-85mm F3.5-5.5

GR LENS A12 28mm F2.5

GR LENS A12 50mm F2.5 MACRO

RICOH LENS S10 24-72mm F2.5-4.4 VC

RICOH LENS P10 28-300mm F3.5-5.6 VC

GXR MOUNT A12

For your next camera, accept no creative limitations.

RICOH LENS A16 24mm-85mm F3.5-5.5, 1/55sec, F9.0, ISO200, EV-1.7, WB：MANUAL, no trimming, medium telephoto 85mm

Interchangeable unit camera system

GXR

Camera unit
RICOH LENS A16 24-85mm F3.5-5.5

16.20 million pixels	CMOS 23.6mm×15.7mm	24-85mm wide-angle zoom	25cm minimum shooting distance

Camera unit
GR LENS A12 28mm F2.5

12.30 million pixels	CMOS 23.6mm×15.7mm	28mm fixed focal length	20cm minimum shooting distance

Camera unit
RICOH LENS S10 24-72mm F2.5-4.4 VC*

10.00 million pixels	CCD 1/1.7-inch	24-72mm optical zoom	1cm minimum shooting distance

Camera unit
GR LENS A12 50mm F2.5 MACRO

12.30 million pixels	CMOS 23.6mm×15.7mm	50mm fixed focal length	7cm minimum shooting distance

Camera unit
RICOH LENS P10 28-300mm F3.5-5.6 VC*

10.00 million pixels	CMOS 1/2.3-inch Back-illuminated	28-300mm High magnification zoom	1cm minimum shooting distance

Lens Mount Unit
GXR MOUNT A12

M mount compatible	1/4000 high-speed shutter*	12.30 million pixels	CMOS 23.6mm×15.7mm

*When the electronic shutter is used, maximum speed is 1/8000 sec.

Compact, high-performance lens design at a level only possible with the interchangeable unit system

It is the lens that gives life to the photograph. In interchangeable lens camera systems up to now, the distance from the mount and the back of the lens to the sensor image plane was subject to requirements for flange back distance and back focal length. This made it difficult to achieve both compactness and high optical performance. Eliminating the lens mount, however, means that the back focal length can be freely defined for the GXR, enabling it to use the most optically efficient lens designs with the minimum size. In addition, combining the lens and image sensor increases design flexibility so camera units can be developed based on a variety of concepts.

A highly airtight system so no worrying about dust when changing lenses

GXR camera units eliminate a problem that plagues interchangeable lens digital cameras: dust adhering to the image sensor. With the GXR's highly airtight structure, the inside of the camera is not exposed when lenses are changed. Even in difficult shooting environments where sand and other particles are a concern, camera units can be changed without hesitation.
*This does not apply to lens mount unit GXR MOUNT A12.

The "VC" designation indicates that this unit has the Vibration Correction function developed independently by Ricoh. *All lens focal lengths in this catalog are converted into 35 mm camera equivalents.

RICOH LENS A16 24mm-85mm F3.5-5.5, 1/410sec, F5.0, ISO200, EV+1.5, WB：MANUAL, no trimming, wide-angle 24mm

Camera unit
RICOH LENS A16 24-85mm F3.5-5.5

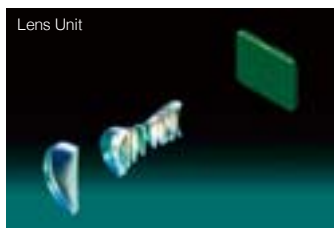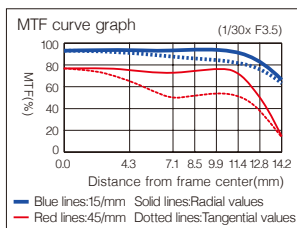| **16.20** million pixels | **CMOS** 23.6mm×15.7mm | **24-85mm** wide-angle zoom |
| **25cm** minimum shooting distance | **HD movies** 1280×720P | **Max 3 frames** RAW continuous shooting |

A large-format CMOS sensor with approx. 16.20 million effective pixels.
A 3.5x optical zoom perfect for everything from portraits to landscapes.

RICOH LENS A16 24mm-85mm F3.5-5.5, 1/153sec, F8.0, ISO200, EV±0, WB：MANUAL, no trimming, medium telephoto 85mm

Perfect as your regular lens.
A 24mm-85mm lens boasting superior resolution

For both expansive landscapes and narrow interior shots, 24mm is a powerful setting. For an intent look at another person, 85mm gives you the perspective of a focused gaze. This 3.5x optical zoom can handle almost all the subjects you encounter from day to day. The optics feature a 9-group, 11-element configuration. The optimized lens placement—integrating three aspherical lenses (six surfaces)—effectively corrects for various types of distortion across the entire zoom range. The result is high resolution from edge to edge. In addition, the configuration of nine rounded aperture blades enables both highly precise aperture control and beautiful bokeh.

MTF curve graph (1/30x F3.5)

MTF(%)

Distance from frame center(mm)

Blue lines:15/mm　Solid lines:Radial values
Red lines:45/mm　Dotted lines:Tangential values

Lens Unit

Catch every shutter chance. Finely honed shooting functions

With ISO bracketing you can record three images with different ISO sensitivities. This lets you capture the moment together with multiple exposure variations. There is also a function for maintaining the same shooting settings. By keeping the shutter release button pressed halfway after taking a picture, you can continue shooting with the same settings (focus, exposure, white balance, etc.). For example, when you want to shoot portraits by clicking the shutter each time someone's expression changes, this function makes it easy by eliminating focus and AE time lags for each shot.

Large-format CMOS sensor
with 16.20-million-pixel high resolution

This is the first time a large-format 23.6mm×15.7mm CMOS sensor has been used in a lens in the RICOH LENS series. The approximately 16.20 million effective pixels provide superior resolving power for reproducing the finest details of your subject. Image processing engine Smooth Imaging Engine IV gives rich tonal gradations and effective noise processing for high image quality.

More shooting freedom and pleasure.
Enhanced functions for shooting/expression

This unit brings together all of the key functions that Ricoh has developed to date for image quality, shooting flexibility, and photo expression. At the same time, it greatly expands those functions with "RAW only" image recording, electronic level movement direction support, addition of copyright information, etc. The result is a high level of perfection and freedom when used as your regular camera unit.

*RICOH LENS A16 24-85 F3.5-5.5 does not have macro shooting, macro target, auto macro, or macro minimum shooting distance display functions. *The internal flash cannot be used because vignetting would occur at the bottom of the image. For flash shooting, use the GF-1 external flash unit.

RICOH LENS A16 24-85mm F3.5-5.5 – Other Major Specifications

Item		Specifications
Effective pixels		Approximately 16.20 million
Image sensor		23.6 mm×15.7 mm CMOS (total pixels: approximately 16.50 million)
Lens	Focal length	15.7mm – 55.5mm (35 mm format equivalent: 24-85mm)
	Aperture(f-number)	F3.5 – F5.5
	Focus range	Approx. 25cm – infinity *From front of lens
	Construction	11 elements in 9 groups
	Filter size	55 mm
Zoom		Optical zoom: 3.5x, Digital zoom: photographs 4.0x, movies 3.6x, Auto resize zoom: approx. 6.8x (VGA)
ISO sensitivity (Standard Output Sensitivity)		AUTO, AUTO-HI, ISO-LO, ISO200, ISO250, ISO320, ISO400, ISO500, ISO640, ISO800, ISO1000, ISO1250, ISO1600, ISO2000, ISO2500, ISO3200
Flash		Use of GF-1 recommended
Shutter speed		Photographs: 1/3200 – 180 sec., Movies: 1/30 – 1/2000 sec.
Number of pictures shot in Continuous (Picture size: RAW)		Noise reduction off: 3 pictures / Noise reduction on: 2 pictures
Number of pixels recorded		Photographs: 4928×2768, 4352×3264, 4928×3264, 3264×3264, 3456×1944, 3072×2304, 3456×2304, 2304×2304, 2592×1944, 2048×1536, 1280×960, 640×480 / Movies: 1280×720, 640×480, 320×240
Battery life		Based on CIPA standard DB-90: Approx. 400 shots
Dimensions (W × H × D)		Camera unit only: 71.4mm(W)×70.5mm(H)×93.3mm(D) (excluding projections; according to CIPA guidelines) / When mounted on camera body: 113.9mm(W)×74.7mm(H)× 98.5mm(D) (excluding projections; according to CIPA guidelines)
Weight		Camera unit only: Approx. 350g Mounted on camera body: Approx. 550g (including battery, SD memory card)

High resolution and high contrast all the way to the edge.
A wide-angle lens with a large image sensor to make full use of GR imaging power.

GR LE

Camera unit
GR LENS A12 28mm F2.5

| **12.30** million pixels | **CMOS** 23.6mm×15.7mm | **28mm** fixed focal length |
| **20cm** minimum shooting distance | **HD movies** 1280×720P | **Max 4 frames** RAW continuous shooting |

NS A12 28mm F2.5, 1/50sec, F5.6, ISO200, EV±0, WB: MANUAL, no trimming

Sharp resolution across the entire image. Uncompromising optics

Shoot pan-focus utilizing the deep depth of field characteristic of a wide-angle lens. Create dynamic compositions by moving in close to the subject to emphasize perspective. Combining rapid shooting ability and power of expression, GR LENS A12 28mm F2.5 will also excel as your regular camera unit. The optics feature a newly developed 6-group, 9-element configuration. The use of two aspherical lenses as well as a special low-dispersion lens has made it possible to effectively correct for various types of aberrations. The result is images with superb center-to-edge sharpness worthy of a GR LENS. In addition, the adoption of a floating lens structure has made it possible to achieve superior optical performance at all focal distances.
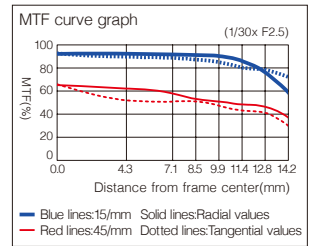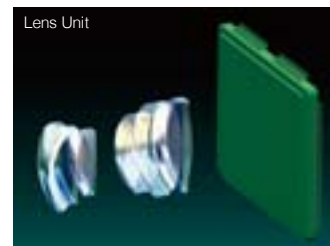
Use all the power of the lens. Large CMOS sensor

The 23.6 × 15.7 mm CMOS sensor has approximately 12.30 million effective pixels. This ample size will give a superior sense of atmosphere and three-dimensionality to your images in addition to providing the bokeh you want from a wide-angle lens. With the GR ENGINE III image processing engine also featured, this camera unit can shoot high-quality images with excellent tone gradations and resolution as well as low noise.

Quickly catch the subject. High-speed, high-precision AF

The speed of the reading of the CMOS sensor signal has been accelerated. These specs are well suited to the contrast AF technique in which the image sensor does the focus detection. The adoption of a new drive mode has also contributed to this camera unit's quick, satisfying AF. When spot AF is selected, a "pinpoint" setting can be utilized for the AF area. The resulting smaller-than-normal AF area lets you precisely focus on a single point.

Manual focus ring enables subtle focus adjustments

With the manual focus ring, you can smoothly make fine focus adjustments after AF focusing is done. Focus quickly and easily even when moving up close to the subject and shooting at a wide-open F2.5 aperture to get beautiful bokeh.

*GR LENS A12 28mm F2.5 does not have macro shooting, macro target, auto macro, or macro minimum shooting distance display functions.

GR LENS A12 28mm F2.5 − Other Major Specifications

Item		Specifications
Effective pixels		Approximately 12.30 million
Image sensor		23.6x15.7mm CMOS (total pixels: 12.90 million)
Lens	Focal length	18.3 mm (35 mm format equivalent: 28 mm)
	Aperture(f-number)	f/2.5 – f/22 (ND filter used for apertures of f/22 in auto shooting mode)
	Focus range	Normal shooting: Approx. 20 cm – infinity (maximum magnification 1/2x)
	Construction	9 elements in 6 groups (2 aspherical lens elements with 2 surfaces)
	Filter size	40.5 mm
Zoom		4.0x digital zoom (3.6x for movies), 5.9x auto resize zoom (VGA)
ISO sensitivity (Standard Output Sensitivity)		AUTO, AUTO-HI, ISO200 / ISO400 / ISO800 / ISO1600 / ISO3200
Flash Range (built-in flash)		Approx. 20 cm – 3.0 m (ISO auto)
Shutter speed		Photographs: 1/3200 – 180 sec. Movies: 1/30 – 1/2000 sec.
Number of pictures shot in Continuous (Picture Size: RAW)		Noise Reduction off or on (Weak): 4 pictures, Noise Reduction on (Strong): 3 pictures
Continuous shooting capacity		Photographs: 4288 × 2416, 3776 × 2832, 4288 × 2848, 2848 × 2848, 3456 × 1944, 3072 × 2304, 3456 × 2304, 2304 × 2304, 2592 × 1944, 2048 × 1536, 1280 × 960, 640 × 480 Movies: 1280 × 720, 640 × 480, 320 × 240
Battery life		Based on CIPA standard, DB-90: approx. 320 shots
Dimensions (W × H × D)		Camera unit only:68.7 mm × 57.9 mm × 50.4 mm (excluding projections; according to CIPA guidelines) When mounted on the camera body:113.9 mm × 70.2 mm × 55.6 mm(excluding projections; according to CIPA guidelines)
Weight		Camera unit only: Approx. 210g Mounted on camera body: Approx. 410g (Including battery, SD memory card)

Paired with a 23.6 mm×15.7 mm image sensor,
this GR LENS is a standard macro boasting superb definition and refined bokeh.
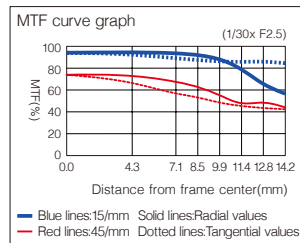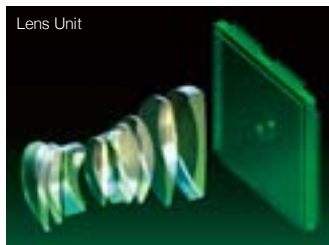
Camera unit
GR LENS A12 50mm F2.5 MACRO

| **12.30** million pixels | **CMOS** 23.6mm×15.7mm | **50mm** fixed focal length |
| **7cm** minimum shooting distance | **HD movies** 1280×720P | **Max 4 frames** RAW continuous shooting |

New system enables higher dimension of optical performance

The lens configuration has 8 groups and 9 elements. Making good use of the new system's advantage of not having to accommodate back focal length, we were able to design the refractive capabilities of each element in a more efficient and practical manner than is possible for SLR interchangeable lenses. Partly thanks to the use of a large-diameter aspherical element, this lens achieves a superior level of edge-to-edge resolution and image quality unimaginable for its small size. In addition, there is little vignetting so richly luminous, natural-form bokeh extends to the edge. The floating structure corrects various types of aberrations that tend to occur in close-up photography. Even at the minimum shooting distance, this lens gives excellent definition and sharpness worthy of the GR LENS name.
*There is a built-in extendable hood.

Lens Unit

MTF curve graph
(1/30x F2.5)

Distance from frame center(mm)

Blue lines:15/mm Solid lines:Radial values
Red lines:45/mm Dotted lines:Tangential values

Beautiful bokeh and imaging power.
23.6 mm × 15.7 mm CMOS sensor

The CMOS sensor boasts 23.6 mm × 15.7 mm size for rich bokeh and approximately 12.30 million effective pixels for superior resolution. Supporting the exceptional optical performance of the GR LENS, this image sensor enables the photographer to obtain both crisp details and refined bokeh, and the wide dynamic range gives rich tonal gradations. The result is high image quality that demands printing in large format.

Maximum 1/2x magnification and a focus ring for full-fledged close-up photography

Close-up photography at a maximum magnification of 1/2x is possible, with the minimum shooting distance approximately 7 cm from the front of the lens. A manual focus ring is also provided. If the body focus ring setting selected is AF+MF, after the AF focusing is done it is possible to turn the focus ring to make fine adjustments to the focus.

Beautifully shoot and relive the excitement.
High definition (HD) movie function

Enjoy shooting HD movies. Image size is 1280×720, aspect ratio 16:9, and frame rate 24 frames/sec. Utilizing the high sensitivity (maximum ISO 3200) and the beautiful bokeh made possible by the F2.5 aperture and the large image sensor, it is possible to create impressive movies with a different feel than those of standard video cameras. The GXR body has an HDMI connector so for large-screen movie viewing it can be connected to TVs supporting HDMI.

*HDMI cable sold separately. Note: When shooting movies of 1280 × 720 size, the use of an SD/SDHC memory card with an SD speed class of Class 6 or higher is recommended.

**GR LENS A12 50mm F2.5 MACRO – Other Major Specifications**

Item		Specifications
Effective pixels		Approximately 12.30 million
Image sensor		23.6×15.7mm CMOS (total pixels: 12.90 million)
Lens	Focal length	33 mm (35 mm format equivalent: 50 mm)
	Aperture(f-number)	f/2.5 – f/22 (ND filter used for apertures of f/22 in auto shooting mode)
	Focus range	Normal shooting: Approx. 30 cm – infinity, Macro shooting: Approx. 7 cm – infinity (maximum magnification 1/2x)
	Construction	9 elements in 8 groups
	Filter size	40.5 mm
Zoom		4.0x digital zoom (3.6x for movies), 5.9x auto resize zoom (VGA)
ISO sensitivity (Standard Output Sensitivity)		AUTO, AUTO-HI, ISO200 / ISO400 / ISO800 / ISO1600 / ISO3200
Flash Range (built-in flash)		Approx. 20 cm – 3.0 m (ISO auto)
Shutter speed		Photographs: 1/3200 – 180 sec. Movies: 1/30 – 1/2000 sec.
Number of pictures shot in Continuous (Picture Size: RAW)		Noise Reduction off or on (Weak): 4 pictures, Noise Reduction on (Strong): 3 pictures
Continuous shooting capacity		Photographs: 4288 × 2416, 3776 × 2832, 4288 × 2848, 2848 × 2848, 3456 × 1944, 3072 × 2304, 3456 × 2304, 2304 × 2304, 2592 × 1944, 2048 × 1536, 1280 × 960, 640 × 480 Movies: 1280 × 720, 640 × 480, 320 × 240
Battery life		Based on CIPA standard, DB-90: approx. 320 shots
Dimensions (W × H × D)		Camera unit only:68.7 mm × 57.9 mm × 71.9 mm (excluding projections; according to CIPA guidelines) When mounted on the camera body:113.9 mm × 70.2 mm × 77.1 mm (excluding projections; according to CIPA guidelines)
Weight		Camera unit only: Approx.263g Mounted on camera body: Approx.463g (including battery, SD memory card)

GR LENS A12 50mm F2.5 MACRO, 1/125, F2.5, ISO200, Exposure mode: Manual, WB: Multi-pattern AUTO, no trimming

For a diverse range of photo subjects.
"Everyday" zoom coverage from wide-angle to medium telephoto.
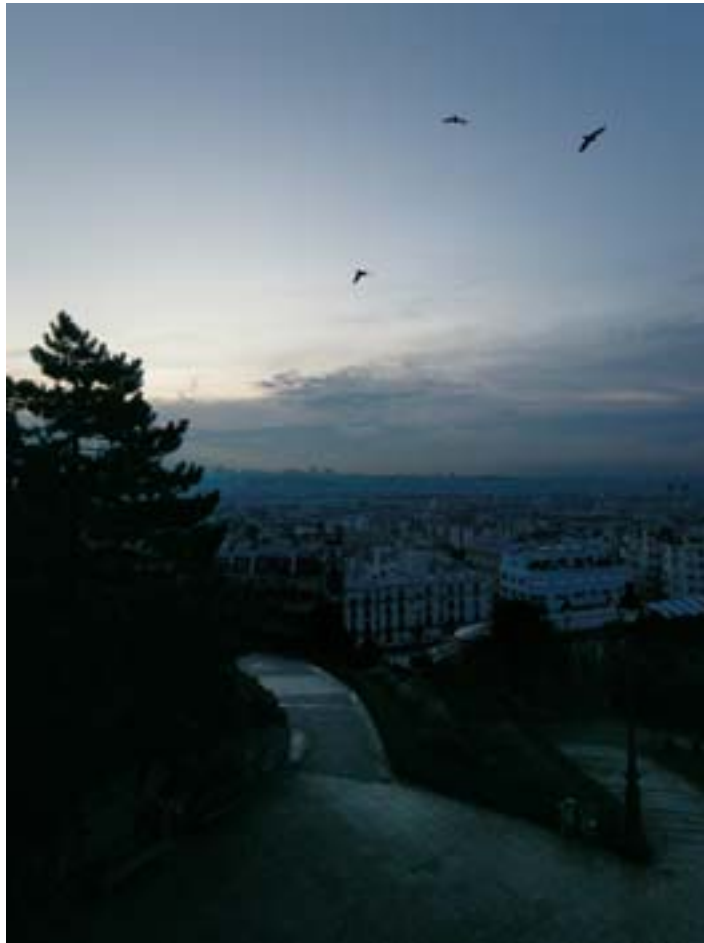
RICOH LENS S10 24-72mm F2.5-4.4 VC, 1/250sec, F2.5, ISO100, EV-1.0, WB：AUTO, no trimming

Camera unit
RICOH LENS S10 24-72mm F2.5-4.4 VC

The "VC" designation indicates that this unit has the Vibration Correction function developed independently by Ricoh.

| 10.00 million pixels | CCD 1/1.7-inch | 24-72mm optical zoom | 1cm minimum shooting distance | VGA movies 640×480P | Max 5 frames RAW continuous shooting |

Excellent correction of various types of aberrations. Sharp optical performance at all focal lengths

This 24-72 mm 3x optical zoom can handle a diverse range of subjects. The lens configuration has 7 groups and 11 elements, with 4 aspherical lens elements situated in optimum positions. Using special low-dispersion glass and other techniques, we have achieved high resolution and contrast at all focal lengths.

Approach subject detail from 1 cm range. Close-up photography

Close-up photography with a minimum shooting distance of 1 cm (wide-angle; distance from front of lens) is possible. When used in combination with the digital zoom, which provides greater magnification than standard shooting, it is possible to fill the frame with a subject of about 4.4×3.3 mm size.

High-sensitivity CCD achieves natural and high image quality

A 1/1.7-inch CCD is used as image sensor. Providing both high-sensitivity and low-noise, this CCD can handle the wide sensitivity setting range of ISO100 to 3200. Even when shooting at high ISO sensitivity, it is possible to obtain natural high-quality images with low levels of both color noise and luminance noise.

Distinct images without blurring. Camera shake correction and high-sensitivity setting

The Ricoh-developed Vibration Correction function is effective for preventing the camera shake that can occur in situations such as night scenes and telephoto shooting. In addition, blurring from both camera shake and subject movement can be suppressed using Auto-Hi (high sensitivity auto), which can be set as high as ISO3200.

RICOH LENS S10 24-72mm F2.5-4.4 − Other Major Specifications

Item		Specifications
Effective pixels		Approximately 10.0 million
Image sensor		1/1.7" CCD (total pixels: approx. 10.40 million)
Lens	Focal length	5.1mm ~ 15.3mm (35 mm format equivalent: 24-72 mm)
	Aperture(f-number)	f/2.5 ~ f/4.4
	Focus range	Normal shooting: Approx. 30 cm to infinity, Macro shooting: Approx. 1 cm to infinity (wide angle) ; Approx. 4 cm to infinity (telephoto); approx. 1 cm to infinity (zoom macro)
	Construction	11 elements in 7 groups
Zoom		3.0 × optical zoom; 4.0 × digital zoom; approx. 5.7 × auto resize zoom (VGA)
ISO sensitivity (Standard Output Sensitivity)		Auto, Auto-Hi, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200
Flash range (built-in flash)		Approx. 20 cm ~ 4.5 m (wide-angle), approx. 15 cm ~ 2.7 m (telephoto; ISO AUTO)
Shutter speed		Photographs: 1/2000 ~ 180 sec. Movies: 1/30 ~ 1/2000 sec.
Number of pictures shot in Continuous		Noise Reduction off: 5 pictures, Noise Reduction on (Weak or Strong): 4 pictures (ISO sensitivity: ISO 800, ISO 1600, ISO 3200)
Continuous shooting capacity		Photographs: 3648 × 2048, 3648 × 2736, 3648 × 2432, 2736 × 2736, 3264 × 1840, 3264 × 2448, 3264 × 2176, 2448 × 2448, 2592 × 1944, 2048 × 1536, 1280 × 960, 640 × 480 Movies: 640 × 480, 320 × 240
Battery life		Based on CIPA standard DB-90: approx. 410 shots
Dimensions (W × H × D)		Camera unit only:68.7 mm × 57.9 mm × 39.2 mm (excluding projections; according to CIPA guidelines) When mounted on the camera body:113.9 mm × 70.2 mm × 44.4 mm (excluding projections; according to CIPA guidelines)
Weight		Camera unit only: Approx. 161g Mounted on camera body: Approx. 361g (including battery, SD memory card)

10.7x optical zoom lens, high-speed continuous shooting
at 4.3 frames/second in RAW mode, and high sensitivity with low noise.
This high-performance camera unit expands your GXR world of expression.

RICOH LENS P10 28-300mm F3.5-5.6 VC, 1/7sec, F5.6, ISO100, EV±0, WB：Multipattern AUTO, no trimming   300mm Telephoto
Special thanks：MUSEUM OF CONTEMPORARY ART TOKYO

Camera unit
RICOH LENS P10 28-300mm F3.5-5.6 VC

The "VC" designation indicates that this unit has the Vibration Correction function developed independently by Ricoh.

10.00 million pixels	CMOS 1/2.3-inch Back-illuminate	28-300mm High magnification zoom	1cm minimum shooting distance	HD movies 1280×720P	Max 5 frames RAW continuous shooting

Great versatility in a 10.7x optical zoom with wide-angle to telephoto coverage

This 28-300 mm 10.7x optical zoom handles everything from expansive landscape shots to concerts and sports where you are far from the action. The lens configuration has 7 groups and 10 elements. The adoption of 4 aspherical lenses (5 surfaces) has made it possible to achieve clear photographs with high image quality at all focal lengths.

Ultra-high-speed continuous shooting at 4.3 frames/second in RAW mode and up to 120 frames/second maximum

Wield continuous shooting power at about 4.3 frames/second* at maximum pixels (10M) and at up to 120 frames/second (640 × 480) at the ultra-high-speed Hi setting. The M-continuous plus function is also included.

*When noise reduction is off. *The maximum number of images for continuous shooting in RAW mode is five.

Darkness conquered with MAX noise reduction and a new CMOS sensor

This camera unit achieves high image quality even at high ISO sensitivity levels by combining a back-illuminated CMOS sensor with a MAX noise reduction setting that divides the image into segments and optimizes noise processing for each.

*The amount of time it takes to record an image will vary depending on the noise reduction setting.

Extensive shooting functions to realize all your creative inspirations

The broad range of functions include dynamic range double shot, macro shooting as close as 1 cm (at wide-angle; from front of lens), and the shooting of 1280 × 720p HD movies.

Note: When shooting movies of 1280 × 720 size, the use of an SD/SDHC memory card with an SD speed class of Class 6 or higher is recommended.

RICOH LENS P10 28-300mm F3.5-5.6 VC – Other Major Specifications

Item		Specifications
Effective pixels		Approximately 10.00 million
Image sensor		1/2.3-inch CMOS sensor (total pixels: approx. 10.60 million pixels)
Lens	Focal length	f=4.9-52.5 mm (35 mm equivalent: 28-300 mm)
	Aperture(f-number)	f/3.5 – f/5.6
	Focus range	Normal shooting: Approx. 30 cm - infinity (wide-angle); approx. 1.5 m – infinity (telephoto) Macro shooting (from the front of the lens): Approx. 1 cm - infinity (wide-angle); approx. 27 cm - infinity (telephoto) ; approx. 1 cm - infinity (zoom macro)
	Construction	10 elements in 7 groups (4 aspherical lens elements with 5 surfaces)
Zoom		10.7x optical zoom; 4.0x digital zoom (2.8x for movies, HD), approx. 5.7x auto resize zoom (VGA)
ISO sensitivity (Standard Output Sensitivity)		Auto, Auto-Hi, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200
Flash Range (built-in flash)		Approx. 20 cm – 4.0 m (wide-angle), approx. 28 cm – 2.5 m (telephoto) (ISO AUTO)
Shutter speed		Photographs: 1/2000 - 30 s (upper and lower limits vary according to shooting and flash mode) Movies: 1/30 – 1/2000 s
Number of pictures shot in Continuous (Picture Size: RAW)		Noise Reduction off: 5 pictures Noise Reduction on weak, strong, or MAX: 4 pictures
Continuous shooting capacity		Photographs: 3648 × 2048, 3264 × 1840, 3648 × 2736, 3264 × 2448, 2592 × 1944, 2048 × 1536, 1280 × 960, 640 × 480, 3648 × 2432, 3264 × 2176, 2736 × 2736, 2448 × 2448 Movies: 1280 × 720, 640 × 480, 320 × 240
Battery life		Based on CIPA standard DB-90: approx. 440 shots
Dimensions (W × H × D)		Camera unit only: 68.7 mm × 57.9 mm × 44.0 mm (excluding projections; according to CIPA guidelines) When mounted on camera body: 113.9 mm × 70.2 mm × 49.8 mm (excluding projections; according to CIPA guidelines)
Weight		Camera unit only: Approx. 160 g. Mounted on camera body: Approx. 360 g (Including battery, SD memory card)

*For aperture value adjustment, an ND filter is used.

Leica M lens mount capability plus a large image sensor.
With this expansion unit, you can experience the rich variety of ways in which lenses portray

Universal mount accommodating Leica M lenses and more

GXR MOUNT A12 is compatible with the M mount, which supports a rich range of lenses that include many "gems" of the lens field. In addition to the ability to mount Leica M lenses, lenses with many more types of mounts can also be accommodated if a conversion adapter is used. Focusing is done manually. A checking device is included for use in confirming whether or not your lenses can be physically mounted.

Imaging excitement: 12 M pixels
with a large 23.6 x 15.7 mm CMOS sensor

Get beautiful bokeh, rich tone gradations, and high resolution. Through on-chip micro-lens optimization, we have also controlled the peripheral light falloff that can be a concern with classic lenses. The design optimizes for resolution, drawing out all of the sharpness of each lens.

Bring classic lenses back to life with functions
for peripheral-light and aberration correction

Correction/compensation can be finely tuned to the characteristics of each lens. There is color shading correction and illumination correction for the image periphery and also distortion correction (barrel and pincushion type). Not only can you correct for the optical characteristics of the lens, you can also go the other way and emphasize those characteristics to enjoy creating a distinctive feel not found in the images of today's lenses.

Assist function makes precise manual focusing possible

A focus assist function is included. Outlines and contrast are strengthened to assist the photographer in high-precision manual focusing. It is also possible to magnify the screen image when shooting. In addition to magnifying the central part of the image, it is possible to display the magnified area across the entire screen, making it much easier to focus accurately. The area to be magnified can be moved with the directional pad.

No noise and low vibration, with electronic shutter mode
the camera disappears

The focal plane shutter has a maximum speed of 1/4000 seconds. In manual exposure mode, bulb and time shooting are possible (up to 180 sec.). In addition, if you select "electronic shutter" in scene mode, you can use a fast 1/8000-second shutter speed. It is effective for scenes where you want to suppress sound and vibration.

*The electronic shutter is not suitable for shooting moving subjects or shooting with low-speed settings.

LEITZ SUPER-ANGULON 21mm F4, 1/800sec, F5.6, ISO200, Exposure mode: Manual, WB：Multi-pattern AUTO,

GXR MOUNT A12 Major Specifications

Item	Specifications
Effective pixels	Approximately 12.30 million
Image sensor	23.6 mm x 15.7 mm CMOS (total pixels: 12.90 million)
Zoom	4.0x digital zoom (3.6x for movies), 5.9x auto resize zoom (VGA)
Focus mode	Manual focus
ISO sensitivity (Standard Output Sensitivity)	AUTO/AUTO-HI/ISO-LO/ISO 200/ISO 250/ISO 320/ISO 400/ISO 500/ISO 640/ISO 800/ ISO 1000/ISO 1250/ISO 1600/ISO 2000/ISO 2500/ISO 3200
Flash	Guide number: 9.6 (ISO 200 equivalent) Illumination angle: 24 mm - (35 mm equivalent)
Shutter speed	Photographs: 1/4000 - 180 sec., bulb, time (upper and lower limits vary according to shooting and flash mode) Movies: 1/2000 - 1/30 sec.
Number of pictures shot in Continuous (Picture Size: RAW)	Noise reduction off or on (Weak): 4 pictures Noise reduction on (Strong/MAX): 3 pictures
Number of pixels recorded:	Photographs: 16:9/4288 x 2416, 3456 x 1944; 4:3/3776 x 2832, 3072 x 2304, 2592 x 1944, 2048 x 1536, 1280 x 960, 640 x 480; 3:2/4288 x 2848, 3456 x 2304; 1:1/2848 x 2848, 2304 x 2304 Movies: 1280 x 720, 640 x 480, 320 x 240
Battery life	Based on CIPA standard. DB-90: Approx. 330 shots
Dimensions (W x H x D)	Separate: 79.1 mm x 60.9 mm x 40.5mm *According to CIPA guidelines When mounted on camera body: 120.0 mm x 70.2 mm x 45.7 mm *According to CIPA guidelines Flange back: 27.8 mm
Weight	Lens mount unit only: Approx. 170 g Mounted on camera body: Approx. 370 g (Including battery, SD memory card)

the world.

M mount compatible | 1/4000 high-speed shutter* | 12.30 million pixels

CMOS 23.6mm×15.7mm | HD movies 1280×720P | Max 4 frames RAW continuous shooting

Color shading correction (R +4, B -4), no trimming

Lens Mount Unit
GXR MOUNT A12

M mount compatible	1/4000 high-speed shutter*	12.30 million pixels
CMOS 23.6mm×15.7mm	HD movies 1280×720P	Max 4 frames RAW continuous shooting

*When the electronic shutter is used, maximum speed is 1/8000 sec

*The lens shown in the photo is not included.

What to say, and how to say it?
This system understands the photographer's intentions.

Shooting functions to handle diverse scenes

[Image settings adjustable to 9 levels] Freedom to create the best image quality.

Image settings include Vivid, Standard, Natural, Black & White, B&W (TE), and Setting. In addition, for Black & White, B&W (TE), and Setting, the range across which vividness, contrast, sharpness, and individual color settings can be adjusted has been broken down into nine levels. So it is now possible to fine tune image finishing in greater detail across a wider range.

[ISO3200 high sensitivity] a strong ally in shooting dark scenes and preventing subject blur.

Depending on the camera unit being used, high sensitivity settings of up to ISO1600 or ISO3200 are possible. An image sensor with a high signal-to-noise ratio together with an advanced image processing engine make it possible to obtain natural-looking images with a low-noise feel even at high ISO settings. For the sensitivity setting, you can select Auto or Auto-Hi (high sensitivity auto), or specify the sensitivity yourself.

[Multi-pattern auto white balance] Natural color reproduction.

The GXR segregates the image into multiple areas and applies the optimum white balance to each. For example, in cases such as where a person is photographed with flash in a room illuminated by incandescent light, even if the subject and background have different color temperatures, both are reproduced with natural colors.

[Full press snap] Seize that shutter chance.

With this quick-shooting function, a one-push full-press of the shutter-release button instantly takes the shot, skipping the usual AF operation. It is possible to select from the following focus distances: 1 m, 1.5 m, 2 m, 2.5 m, 3 m, 3.5 m, 5 m, or infinity.
*Can only be used when focus is set to Multi AF or Spot AF.

[M-continuous plus] Don't miss the moment.

Shoot continuously by holding down the shutter release button. The moment you release your finger, multiple images shot up to then are recorded. Use HI when shooting speed is the priority and LO when resolution is the priority.

[Firmware function] GXR evolution never stops.

Both new functions and enhanced functions are regularly provided via firmware updates. Examples of functions added in the past include the following scene mode options: miniaturize, high contrast B&W, soft focus, cross process, and toy camera.

Operability that sets free your desire to create

[Settings read when camera unit attached] Flexible response to creative intent.

The GXR remembers shooting settings in both the body and the camera unit. It is possible to specify in advance which settings are to be used. Select the body settings if you want to shoot and process images in the same way regardless of the camera unit. Select the camera unit settings if you want to change settings for image creation in a style specific to the camera unit. This increases shooting flexibility and speed by saving the time and effort involved in redoing settings.

[Precise focus checking with a 920,000-dot picture display]

The GXR has a 3.0-inch, 920,000-dot VGA picture display. A wide color reproduction range with 100% s RGB coverage gives a high-reality image for both shooting and playback. Precise focus checking and a micro-thumbnail display with up to 81 images are possible. Various coatings are used to insure superior visibility and durability.

[Three My Settings and the My Settings Box]

The GXR provides three My Settings. In addition, up to six special-purpose and infrequently used My Settings can be saved in a My Settings Box and on an SD card. From there they can be quickly assigned to the mode dial as necessary.

[ADJ. lever and two Fn buttons] Direct operability.

Frequently used functions can be assigned to the ADJ. lever. Press at the center to call up the registered functions and then press to the left or right to select a function. Use the + or – button to quickly complete the setting. In addition, there are two Fn buttons to which selected functions can be registered for switching with one push. Setting changes can be made directly without menu operations.

[DIRECT screen] Speedy function settings via.

Pressing the DIRECT button located on the back of the body displays the current shooting settings. Since the settings are transparently displayed over the image, the image and the settings can be simultaneously checked. Then selecting an individual setting with the directional pad, a change* can be quickly made. Background image density (four levels) can be changed by pressing the DISP. button while the DIRECT screen is displayed.
*For certain functions, setting changes cannot be made.

Other functions

- Pixel output interpolation algorithm effectively suppresses whiteout.
- Noise reduction increases image quality during high-sensitivity shooting.
- Distortion correction reduces the distortion that is characteristic of wide-angle lenses.
  *Done on certain camera units only.
- Level compensation adjusts contrast and tone gradations after shooting.
- Pre-AF speeds up focusing.
- AE/AF target selection provides greater freedom in framing and creative use of light.

- Exposure bracketing and white balance bracketing enhance shooting certainty.
- Color bracketing simultaneously records black and white and tinted monochrome images, each with a different feel.
- Manual flash amount enables the control of subject and background light balance.
- Tilt indicator supports quick and accurate camera leveling.
- Flag function enables registration of up to 20 images for easy viewing later.
- Grid guide function provides three patterns for selection to suit the subject.
- Intuitive operation. 8-Directional pad handles diagonal movement

A full line of accessories for a system to realize the photographer's aspirations.

[External TTL Flash GF-1] Performing with light and shadow.

This is an external flash with G.No 20(24mm) -30(105mm) (ISO100•m). It utilizes an original TTL flash technique to provide precise flash exposure with auxiliary flash. Also capable of bounce flash to softly and naturally illuminate the subject with indirect light, the GF-1 enables the photographer to enjoy a wide range of creative shooting options only possible with an external flash. There are built-in wide-angle diffuser and catch-light panels. When the wide-angle diffuser panel is used,a coverage angle equivalent to 18 mm is possible.

[LCD Viewfinder VF-2] Small size and 920,000-dot high definition.

Attached to the hot shoe, the LCD viewfinder has a 100% field of view equivalent to approx. 920,000 dots. It provides a wealth of benefits to the photographer, such as eliminating the influence of sunlight to provide a consistently excellent field of view and helping control hand-motion blur by enabling a three-point hold. With a high-performance viewfinder optical system utilizing an aspherical lens, the VF-2 achieves a low-distortion field of view, a high image magnification ratio, and a wide diopter correction range (–1±3.5Dpt). The tilt capability is convenient for low-angle shooting. (Case included)

[Teleconversion Lens TC-1] Frame and capture your target.

This magnification 1.88x teleconversion lens extends the focal length of the camera unit lens, reaching 135 mm at maximum telephoto. Of course, a telephoto lens will bring far away subjects closer, but the photographer can also enjoy a variety of other effects, such as isolating one small area from the overall field of view, creating dramatic scenes, and imposing order on the image composition.

*Optional accessories for RICOH LENS S10 24-72 mm *For use, the hood & adapter (HA-3) are necessary.
*When attached, the internal flash cannot be used because vignetting would occur. *When attached, vignetting may occur at all zoom positions other than maximum telephoto.

[Self-retaining Lens Cap LC-2 LC-3] For greater shooting flexibility.

This hinged-type lens cap opens and closes automatically when the lens barrel extends and retracts. It increases shooting flexibility by eliminating the inconvenience of having to remove/attach the lens cap. There is also no more worry about lens cap loss. Bayonet-type mount.

*LC-2 is an option for RICOH LENS S10 24-72mm/P10 28-300mm. *When LC-2 is used, the hood & adapter (HA-3) cannot be used. *LC-3 is an option for RICOH LENS A16 24-85mm F3.5-5.5.
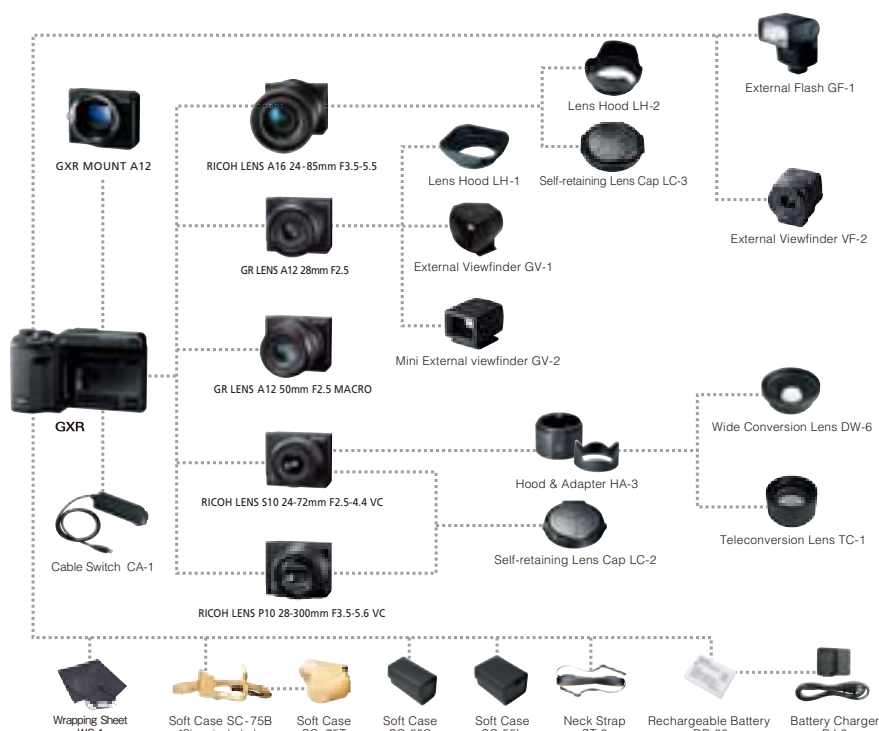
[Wide Conversion lens DW-6] For wide-angle shooting wider than the naked eye.

This is a convenient accessory for shooting at a wider wide-angle and for achieving a more extreme sense of distance. Magnification is 0.79x, and used at the maximum wide-angle setting it enables 19 mm ultra-wide-angle photography. Optimized for the optical system of the camera unit, the DW-6 consists of three glass lenses.

*Optional accessories for RICOH LENS S10 24-72 mm *For use, the hood & adapter (HA-3) are necessary.
*When attached, the internal flash cannot be used because vignetting would occur.

*GXR GR LENS A12 28mm F2.5
Options: LH-1 and VF-2 attached.

System diagram

Lens Hood LH-2
External Flash GF-1
GXR MOUNT A12
RICOH LENS A16 24-85mm F3.5-5.5
Lens Hood LH-1
Self-retaining Lens Cap LC-3
External Viewfinder VF-2
GR LENS A12 28mm F2.5
External Viewfinder GV-1
Mini External viewfinder GV-2
GR LENS A12 50mm F2.5 MACRO
GXR
Wide Conversion Lens DW-6
Hood & Adapter HA-3
RICOH LENS S10 24-72mm F2.5-4.4 VC
Self-retaining Lens Cap LC-2
Teleconversion Lens TC-1
Cable Switch CA-1
RICOH LENS P10 28-300mm F3.5-5.6 VC
Wrapping Sheet WS-1
Soft Case SC-75B *Strap included
Soft Case SC-75T
Soft Case SC-55S
Soft Case SC-55L
Neck Strap ST-3
Rechargeable Battery DB-90
Battery Charger BJ-9

•GXR Optional Accessories

Product Name	Model Name
Lens Hood *1	LH-1
Lens Hood *2	LH-2
External Viewfinder *1 *3	GV-1
Mini External viewfinder *1 *3	GV-2
Hood & Adapter *4	HA-3
Wide Conversion Lens *4 *5	DW-6
Teleconversion Lens *4 *5 *6	TC-1
External Flash	GF-1
External Viewfinder	VF-2
Cable Switch	CA-1
Wrapping Sheet	WS-1
Soft Case B*7	SC-75B
Soft Case T*7*8	SC-75T
Soft Case *4 *9	SC-55S
Soft Case *1 *10 *11	SC-55L
Neck Strap	ST-3
Self-retaining Lens Cap *2	LC-3
Self-retaining Lens Cap *4 *11	LC-2
Rechargeable Battery	DB-90
Battery Charger	BJ-9

*1 Optional accessories for GR LENS A12 28mm F2.5

*2 Optional accessories for RICOH LENS A16 24-85mm F3.5-5.5

*3 When using the external viewfinder, if the hood is also used, the viewfinder vignetting will increase.

*4 Optional accessories for RICOH LENS S10 24-72mm

*5 For use, the hood & adapter (HA-3) are necessary. When attached, the internal flash cannot be used because vignetting would occur.

*6 When attached, vignetting may occur at all zoom positions other than maximum telephoto.

*7 Cannot be used with RICOH LENS A16 24mm-85mm F3.5-5.5

*8 SC-75T cannot be used as a case by itself. It must be used together with SC-75B.

*9 Optional accessories for GXR MOUNT A12

*10 Optional accessories for RICOH LENS A12 50mm F2.5 MACRO

*11 Optional accessories for RICOH LENS P10 28-300mm F3.5-5.6 VC

Product Lineup

GXR	RICOH LENS A16 24-85mm F3.5-5.5 VC	GR LENS A12 28mm F2.5	GR LENS A12 50mm F2.5 MACRO	RICOH LENS S10 24-72mm F2.5-4.4 VC	RICOH LENS P10 28-300mm F3.5-5.6 VC	GXR MOUNT A12
< Accessories included > •Rechargeable Battery •Battery charger •AV Cable •USB Cable •Neck strap •CD-ROM •Instruction Manual (Camera Body User Guide) *Warranty Card Software manual supplied on CD-ROM	< Accessories included > •Lens cap •Connector cap •Soft case •Instruction manual •Warranty GXR+A16 KIT *Set with GXR body	< Accessories included > •Lens cap •Connector cap •Soft case •Instruction manual •Warranty	< Accessories included > •Lens cap •Connector cap •Soft case •Instruction manual •Warranty	< Accessories included > •Lens cap •Connector cap •Soft case •Instruction manual •Warranty GXR+S10 KIT *Set with GXR body	< Accessories included > •Lens cap •Connector cap •Soft case •Instruction manual •Warranty GXR+P10 KIT *Set with GXR body	< Accessories included > •Mount cap •Connector cap •Checker •Soft case •Instruction manual •Warranty GXR+MOUNT KIT *Set with GXR body

•GXR Major Specifications

Item		Specifications
Flash	Mode	Auto (flash fires when lighting is poor or subject is backlit), red-eye, on, slow sync, manual, off
	Range (built-in flash)	Refer to camera unit specifications.
	Flash compensation	±2.0 EV in increments of 1/2EV or 1/3EV
	Manual flash amount	FULL, 1/1.4, 1/2, 1/2.8, 1/4, 1/5.6, 1/8, 1/11, 1/16, 1/22, 1/32, 1/64
Picture display		3.0″ transparent LCD; approx. 920,000 pixels
Shooting mode		Auto, program shift, aperture priority, shutter priority, manual, scene (movie, portrait, sports, landscape, nightscape, skew correction) My Settings"
Picture quality		Fine, Normal, RAW (DNG) *1
Storage		SD/SDHC memory card, internal memory (approx. 86 MB)
File format	Still Image	JPEG (Exif Ver. 2.3) *2, RAW (DNG)
	Movie	AVI *3 (Open DML Motion JPEG compliant)
	Compression	JPEG baseline compliant (photographs and movies)
Other shooting options		Continuous shooting (continuous, M-Cont Plus); self-timer (shutter release delay of approx. 10 s or 2 s, or custom setting); interval timer (intervals of 5 s to 1 hour in increments of 5 s) *4; color bracketing; B&W (TE); color space selection; noise reduction; histogram display; framing grid; depth-of-field indicator; tilt indicator; hot shoe
Other playback options		Auto image rotation (when camera unit attached); multi-frame playback; playback zoom (up to 16 ×); resize
Interface		USB 2.0 (High-Speed) Mini-B connector; Mass Storage *5; AV output (NTSC), HDMI connector (Mini HDMI Type C)
Video signal format		NTSC, PAL
Power source		DB-90 rechargeable battery (3.6V)
Battery life		Refer to camera unit specifications.
Dimensions (W × H × D)		113.9 mm × 70.2 mm × 28.9 mm (excluding projections)
Weight		Camera body (excluding battery, memory card, neck strap, and connector cap): 160 g Battery, neck strap, and connector cap: 66 g
Tripod screw hole		1/4-20UNC
Operating temperature		0 °C to 40 °C
Date storage time		Approx. 1 week
Operating humidity		85% or less
Storage temperature		−20 °C to 60 °C

*1 A JPEG file is also recorded (the JPEG file may be a fine or normal quality file with the same dimensions as the RAW file or a VGA file). RAW files use the standard DNG format promoted by Adobe Systems Incorporated. *2 Compatible with the Design rule for Camera File system (DCF, a JEITA standard) and DPOF. Full compatibility with other devices is not guaranteed. *3 Audio: PCM 32 kHz, 16 bit monaural *4 Flash off.   *5 Mass Storage is supported under Windows® 2000, Windows® XP, Windows Vista®, Windows® 7, and Mac OS X 10.1.2–10.6.4.

•GXR Software

	Windows® 7	Windows Vista®	Windows® XP	Windows® 2000
1. DL-10	○	○	○	○
2. Irodio Photo & Video Studio	△*1	○	○	○
3. Adobe Reader	×	○	○	○

*To playback MP files and output still images from MP files on a Macintosh PC, please use the enclosed VM-1 Macintosh software for viewing MP files (compatible OS: Mac OS X 10.4-10.5.7). *1 There are limitations on some functions. For the latest version, please see the PIXELA webpage (www.pixela.co.jp/oem/irodio/j/irodio_digitalphoto_videostudio/download.html).

•GXR System Requirements

	Windows®
Operating system	Windows® 2000 Professional Service Pack4 Windows® XP Home Edition Service Pack 3/ Professional Service Pack 3 Windows Vista® Service Pack 2, Windows® 7
CPU	Windows® 2000 / Windows® XP : Pentium®III 500MHz or more, Windows Vista®/ Windows® 7 : Pentium®III 1GHz or more
Memory	Windows® 2000 / Windows® XP : 256MB or more, Windows Vista® : 512MB or more, Windows® 7 : 1GB or more
Available disk space on hard drive at installation time	160MB or more
Display Resolution	1024×768 dots or greater
Display Colors	65,000 colors or greater
CD-ROM Drive	A CD-ROM drive compatible with the above-mentioned computer
USB Port	A USB port compatible with the above-mentioned computer

*When the GXR is connected to a PC, only a USB connection can be used. Serial connection is not supported.
*It is necessary for the above OS to be preinstalled and for the USB port to be standard equipment.
*The 64-bit OS version is not supported.
*The GXR is compatible with MAC OS 9.0 to 9.2.2 and Mac OS X 10.1.2 to 10.6.4 by mass storage connection.

•Storage Capacity for each Lens (Number of Images and Time)*

Mode	Quality	No. of Pixels Recorded	GR LENS A12 28mm F2.5 Internal Memory	4GB	8GB	GR LENS A12 50mm F2.5 MACRO Internal Memory	4GB	8GB	GXR MOUNT A12 Internal Memory	4GB
Still	RAW* FINE	4288×2416	4 images	197 images	404 images	4 images	197 images	404 images	4 images	197 images
		3776×2832	4 images	191 images	391 images	4 images	191 images	391 images	4 images	191 images
		4288×2848	3 images	168 images	343 images	3 images	168 images	343 images	3 images	168 images
		2848×2848	5 images	251 images	513 images	5 images	251 images	513 images	5 images	251 images
	L FINE	4288×2416	21 images	935 images	1912 images	21 images	935 images	1912 images	21 images	935 images
		3776×2832	20 images	907 images	1854 images	20 images	907 images	1854 images	20 images	907 images
		4288×2848	18 images	799 images	1633 images	18 images	799 images	1633 images	18 images	799 images
		2848×2848	27 images	1195 images	2442 images	27 images	1195 images	2442 images	27 images	1195 images
	M FINE	3456×1944	32 images	1419 images	2902 images	32 images	1419 images	2902 images	32 images	1419 images
		3072×2304	30 images	1341 images	2741 images	30 images	1341 images	2741 images	30 images	1341 images
		3456×2304	27 images	1206 images	2466 images	27 images	1206 images	2466 images	27 images	1206 images
		2304×2304	41 images	1774 images	3627 images	41 images	1774 images	3627 images	41 images	1774 images
Movie		1280×720 (24 frames / sec.)	21″	15′58″	31′10″	21″	15′58″	31′10″	21″	15′58″
		640×480 (24 frames / sec.)	1′	46′10″	90′7″	1′	46′10″	90′7″	1′	46′10″
		320×240 (24 frames / sec.)	2′25″	110′27″	215′35″	2′25″	110′27″	215′35″	2′25″	110′27″

Mode	Quality	No. of Pixels Recorded	RICOH LENS S10 24-72mm F2.5-4.4 VC Internal Memory	4GB	8GB	RICOH LENS P10 28-300mm F3.5-5.6 VC Internal Memory	4GB	8GB
	RAW* FINE	3648×2048	6 images	272 images	556 images	6 images	270 images	551 images
		3648×2736	4 images	204 images	418 images	4 images	203 images	415 images
		3648×2432	5 images	229 images	469 images	5 images	228 images	466 images
		2736×2736	6 images	271 images	555 images	6 images	270 images	551 images
	L FINE	3648×2048	29 images	1284 images	2624 images	29 images	1284 images	2624 images
		3648×2736	22 images	965 images	1973 images	22 images	965 images	1973 images
		3648×2432	24 images	1087 images	2222 images	24 images	1087 images	2222 images
		2736×2736	29 images	1284 images	2642 images	29 images	1284 images	2624 images
	M FINE	3264×1840	36 images	1588 images	3245 images	36 images	1588 images	3245 images
		3264×2448	27 images	1195 images	2442 images	27 images	1195 images	2442 images
		3264×2304	30 images	1341 images	2741 images	30 images	1341 images	2741 images
		2448×2448	36 images	1588 images	3245 images	36 images	1588 images	3245 images
Movie		1280×720 (30 frames / sec.)	–	–	–	16″	12′14″	25′1″
		640×480 (30 frames / sec.)	49″	37′18″	72′50″	49″	35′38″	72′50″
		320×240 (30 frames / sec.)	1′59″	90′33″	176′44″	1′59″	86′28″	176′44″

Mode	Quality	No. of Pixels Recorded	RICOH LENS A16 24-85mm F3.5-5.5 Internal Memory	4GB	8GB
	RAW* FINE	4928×2768	3 images	150 images	306 images
		4532×3264	3 images	144 images	294 images
		4928×3264	2 images	127 images	260 images
		3264×3264	4 images	191 images	391 images
	L FINE	4928×2768	16 images	718 images	1468 images
		4532×3264	15 images	685 images	1401 images
		4928×3264	14 images	609 images	1245 images
		3264×3264	21 images	914 images	1868 images
	M FINE	3456×1944	32 images	1419 images	2902 images
		3072×2304	30 images	1341 images	2741 images
		3456×2304	27 images	1206 images	2466 images
		2304×2304	41 images	1774 images	3627 images
Movie		1280×720 (24 frames / sec.)	16″	12′14″	25′1″
		640×480 (24 frames / sec.)	49″	35′38″	72′50″
		320×240 (24 frames / sec.)	1′59″	86′28″	176′44″

*When RAW is selected, this is the compression rate for the simultaneously recorded copy.*For shooting capacity, the number of still images and movie time are estimates. *Movies may be up to 90 minutes in length or 4GB in size. *The number of exposures remaining as shown on the picture display may differ from the actual number because image file size varies depending on the subject. *The shooting capacity for number of still images and movie recording time may vary depending on the capacity of the recording media (internal memory or SD memory card), the shooting conditions, and the type and manufacturer of the SD memory card. *A high-speed memory card is recommended when shooting for long periods. *For other compression rates please check the website.   Note: When shooting movies of 1280 × 720 size, the use of an SD/SDHC memory card with an SD speed class of Class 6 or higher is recommended. *The storage capacity (number of images and time) for 1, 2, and 32GB is available on the webpage.

For more information, visit :
http://www.ricoh.com/r_dc

RICOH