



## ADVANTAGES

### The complete Outdoor camera

- ✓ Resistant to water, dust, sand, crash, cold and pressure
- ✓ Tough construction for shooting in demanding outdoor conditions
- ✓ Reliable waterproof construction to assure worry-free shooting at a depth of 14m
- ✓ Exceptional shockproof capability; it can withstand a fall from a height of 2m
- ✓ Crushproof to a pressure up to 100kg
- ✓ Coldproof down to -10°C.

### High Quality Photo & Video

- ✓ 16 MP Back-illuminated CMOS sensor and Full HD Video
- ✓ Highest sensor resolution of its category 16 MP to offer extremely detailed pictures
- ✓ Back-illuminated CMOS sensor technology to capture light efficiently. This helps increase the sensitivity as well as optimize noise management
- ✓ Sensor-shift Shake Reduction
- ✓ Full HD video-recording (H.264) for high-quality movie clips and HDMI terminal

### Versatile zoom lens

- ✓ 25mm Wide-angle and 4X Optical Zoom lens
- ✓ Equivalent 35mm : 25 - 100mm, large aperture F.2 (W)
- ✓ Wide-angle 4X zoom to accommodate a wide range of subjects and scenes from landscapes to fast-action sports events.
- ✓ Macro shooting down to just 1 cm from the subject to get spectacular images of flower or insect
- ✓ 6 LED placed around the lens to avoid shadows on macro photos

### Your best travel partner

- ✓ Innovative new features for trekking and nature observation
- ✓ Sophisticated GPS function records your position data during travelling, in order to show your friends and family where pictures were taken, on such websites as Google Earth™ or FlickrR.
- ✓ Electronic compass
- ✓ Barometer (information on the front display)

**Dimensions :** Approx. 125(W) × 64.5(H) × 32(D)mm

**Weight :** 216g body only

# WG-4GPS

## THE ADVENTURE-PROOF CAMERA

Colour	Art. Code	EAN
Blue	08556	0027075275430
Black	08541	0027075275324

## SUPPLIED ACCESSORIES

Rechargeable lithium-ion battery D-LI92  
 Power adapter D-PA135  
 USB cable I-USB7  
 Carabiner strap O-ST144 (for black and silver WG-4/GPS)  
 Carabiner strap O-ST145 (for blue and lime yellow WG-4/GPS)  
 Macro stand O-MS2  
 Software (CD-ROM) S-SW145

## OPTIONAL ACCESSORIES



WG Flat adhesive mount O-CM1471  
37030



WG Handle bar mount O-CM1472  
37031



WG Suction Cup mount O-CM1473  
37032



WG Holder O-CH1470  
37033



Carabiner strap O-ST118 (Y&B)/103(OR)  
39003 & 39861



Chest harness  
50284



Remote control O-RC1  
39892



Floating Strap  
50195



Black neoprene case  
50282

Rechargeable battery Li-Ion D-LI92 - 39800  
 Charger kit K-BC92E - 39804  
 AC adapter K-AC117E - 38971  
 Video cable I-AVC7 - 39552  
 USB cable I-USB7 - 39551

Macro stand O-MS2 - 38642  
 Lens adapter O-LA135 - 38654  
 Wide conversion lens DW-5 - 171930

WG Repair parts 1 O-CM1474 (for O-CM1471) - 37034  
 WG repair parts 2 O-CM1475 (replacement nut for O-CM1471/72/73) - 37035  
 WG Repair parts 3 O-CM1476 (for O-CH1470) - 37036

## SENSOR

Number of pixels	Approx. 16 megapixels - effective
Total pixels	Approx. 16.79 megapixels
Sensor size	1/2.3" CMOS
Image size*	16M(4608x3456), 12M(11.1\3456x3456),12M(16.9\4608x 2592), 7M(3072x2304), 5M(16.9\3072x1728), 5M(2592x1944), 4M(16.9\2592x1464), 3M(2048x1536), 2M(16.9\1920x1080), 1024(1024x768), 640(640 x 480) (Unit:pixels)  * In Digital Microscope mode, recorded pixels is fixed to 2M(1920x1080) or fixed at 3M (2048x1536) in single frame (before merge.) * In Burst Shooting mode, recorded pixels is fixed to 5M(2592x1944) or 4M(2592x1464) per frame. * In Report mode, recorded pixels is fixed to 1280x960. * In Original Frame mode, recorded pixels is fixed to 5M(2592x1944) or 4M(2592x1464).
Motion blur reduction	Pixel Track SR, Hi-sensitivity anti-shake mode (Digital SR)
Sensitivity	AUTO, Manual (ISO 125 - 6400)
Auto ISO range	ISO 125-200, ISO 125-400, ISO 125-800, ISO 125-1600, ISO 125-3200, ISO 125-6400 *Fixed at ISO 125-1600 in Green mode. *Fixed at ISO 125-200, 125-400, 125-400, 125-1600 in Handheld Night Snap mode. *Fixed at ISO 125-6400 in Report mode.
Quality level	★★★ Excellent, ★★ very good, ★ good
Shake Reduction**	Sensor-Shift-Type (SR : Shake Reduction), Dual (SR & Pixel Track SR), High-sensitivity anti-shake mode (Digital SR)
Auto ISO range for SR	ISO 125-6400

## LENS

Focal length	4.5 - 18mm (approx. 25 - 100mm equivalent in 35mm format)
Aperture	F2.0(W) - F4.9(T)
Smallest aperture	F11.3(W) - F18.5(T)
Construction	RICOH lens, 9 elements in 7 groups (4 aspherical elements)
Optical zoom	4X
Digital zoom*	Approx. 7.2X
Intelligent Zoom*	Approx. 30X at 7M, approx. 144X at 640 (including optical zoom)

## SCREEN

Type	3.0" wide TFT color LCD, Wide viewing 170 angle degree, approx. 460K dots, AR Coating (LCD Cover only) and protection acrylic cover
LCD frame rate	Approx. 60

## FILE FORMATS

Photo	JPEG(conforms to Exif 2.3), conforms to DCF2.0, DPOF, PRINT Image Matching III
Video	MPEG - 4 AVC/H.264
Audio	Movie/ Underwater Movie/ Time-Lapse Movie/ 1cm-Macro Movie : 32KHz, 16bit, stereo High Speed Movie : 8KHz, 16bit, stereo

## MEMORY

External memory	Compatible with SD/ SDHC/ SDXC and Eye-Fi memory cards
Internal memory	Approx. 70 MB

## FOCUSING

Type	TTL contrast detection auto focus system, 9-point AF, Spot AF, Auto tracking AF
Modes	Infinity-landscape, Pan Focus, Manual Focus
Focus range	Standard : 0.4m - infinity (entire zoom range) Macro : 0.1 - 0.5m (entire zoom range) 1cm macro : 0.01 - 0.3m (Mid-zoom to telephoto) Manual : 0.01m - infinity (Depends on the zooming steps)
Face detection	Face Detection AF&AE is available for all modes up to 32 faces. Smile Capture, Self-portrait Assist, Self-portrait Assist + Smile Capture, Blink Detection
Pet detection	Detect up to 1 pet's face(auto)
Largest magnification	Approx. 1.24x, at focus mode : 1cm macro, focal length 18mm, focusing distance 0.01m
AF Assist lamp	Available
Macro light	Available, 6 LED to assist close-up shooting

## EXPOSURE CONTROL

Metering system	Multi-segment metering, Center-weighted metering, Spot AE metering
Shutter speed	1/4000 - 1/4sec.(Mechanical and electronic shutter) / 1/2000 - 4 sec.(Shutter Priority, Night Scene)
Exposure compensation	±2EV(1/3EV steps)

## FLASH

Flash modes	Flash-on and Flash-off modes. "Red-eye" compensation function employs a pre-discharge.
Flash range	Wide:approx. 0.2 - 10.4m (ISO Auto) Tele:approx. 0.2 - 4.2m (ISO Auto)

## VIDEO

Resolution	1920, 1280
Quality level	Fixed
Shake reduction	Movie SR mode

## POWER SUPPLY

Battery	Rechargeable lithium-ion battery D-LI92
Capacity**	Still*: approx. 240 shots (Rechargeable Lithium-ion battery) Playback**: approx. 200 min. (Rechargeable Lithium-ion battery) Movie : Approx. 65 min. **  * Recording capacity shows approximate number of shots recorded during CIPA-compliant testing. Actual performance may vary depending on operating conditions. ** According to the result of RICOH IMAGING in-house testing.
Other	Optional AC adapter kit

## INTERFACES

Video output	NTSC/PAL
USB	USB2.0(Hi-Speed): USB/AV terminal, HDMI terminal (Type D, Micro port)

## SHOOTING FEATURES

Drive modes	One shot, Self-timer, Continuous Shooting, Burst Shooting, Remote Control*, Auto Bracketing
Continuous shooting	Approx. 1.5 fps, 16M(4:3): up to approx. 60 frames, approx. 1.7 fps, 12M(16:9): up to approx. 78 frames
High speed cont. shooting	Approx. 12 fps, 5M(4:3): up to 30 frames, approx. 14 fps, 4M(16:9): up to 30 frames
Scene Modes	Auto Picture, Program, Shutter Priority, USER, HDR, Handheld Night Snap, Movie, Digital Microscope, Landscape, Flower, Portrait, Interval Shot, Underwater, Underwater Movie, Interval Movie, High Speed movie**, Time-Lapse movie**, 1cm-Macro Movie, Digital SR, Surf & Snow, Kids, Pet, Sport, Night Scene, Night Scene Portrait, Fireworks, Food, Report*, Green
Auto picture scene modes	Landscape, Portrait, Night Scene, Night Scene Portrait, Standard, Flower, Sport, Candlelight, Blue Sky, Sunset, Text, Group Photo, Pet, Portrait&Blue Sky, Portrait&Sunset, Portrait&Backlight
White Balance	Auto, Daylight, Shade,Tungsten light, Fluorescent light(D:Daylight Color, N:Daylight White, W:White Light), Manual
Dynamic range	Available (Shadow/Highlight adjustment)
Noise reduction	Automatically applied when the shutter speed is slower than 0.25 sec

## OTHER FEATURES

World time	Supported
Electronic level	Available
Date Imprint	*Date Imprint Available(Date, Date & time, Time) (except Green)
Image Tone	Bright, Natural, Monochrome
Text size	Standard, Large
Languages	English, French, German, Spanish, Portuguese, Italian, Dutch, Danish, Swedish, Finnish, Polish, Czech, Hungarian,Turkey, Greek, Russian
Playback modes	Slideshow, Image Rotation, Small Face Filter, Ink Rubbing Filter, Collage, Digital Filter(B&W/Sepica, Toy Camera, Retro, Color, Extract Color, Color Emphasis, High Contrast, Starburst, Soft, Fish-eye, Brightness, Miniature), HDR Filter, Original Frame, Movie Edit, Red-eye Edit, Resize, Cropping, Image Copy, Protect, DPOF, Start-up Screen
Playback functions	One Shot, Index (6 thumbnails, 12 thumbnails), Enlargement (up to 10x, scroll available), Movie Playback, Histogram, Folder display, Select&Delete, Calendar, Changing Folder name
Digital filters (playback)	B&W/Sepia, Toy Camera, Retro, Color, Extract Color, Color Emphasis, High Contrast, Starburst, Soft, Fish-eye, Brightness, Miniature
Movie edit functions***	Save as still image , Divide Movies , Adding title picture
Self- timer count	10 sec, 2 sec, Remote Control(immediately, 3 sec)
Start-up Time	Approx. 1.8 sec
Release Time Lug	Approx. 0.016 sec
Water proof / Dustproof****	Equivalent to JIS Class 8 waterproof and JIS Class 6 dustproof capabilities.

## DIMENSIONS AND WEIGHT

Dimensions	Approx. 125(W) × 64.5(H) × 32(D)mm
Weight	RICOH WG-4 GPS: With battery & SD card : Approx. 236g (loaded and ready) Body only : Approx. 216g

## SYSTEM REQUIREMENTS

Operating systems	PC : Windows Vista®, Windows® 7, Windows® 8, Windows® 8.1 Mac : Mac OS X 10.6, 10.7, 10.8
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## SOFTWARE

Windows: MediaImpression 3.6.2 LE / Mac : MediaImpression 2.2 LE

The following functions and features are only for the RICOH WG-4 GPS : GPS function, Electronic Compass function, Sub-display

\* Remote control compatible, receivers located in the front and back of the camera.

\*\* Recorded pixels fixed to 1280(1280x720), frame rate fixed to 120fps for shooting, 30fps for playback in High Speed Movie mode.

\*\*\* Recorded pixels fixed to 840(640x360), frame rate fixed to 15fps for shooting, 240fps for playback in Time-Lapse Movie mode.

\*\*\*\* Still Picture Saving during Movie Recording (Up to 3p/ cont. movie recording, with focus fixed at the start of recording and nb of recorded pixels fixed to 12M(16:9). The angle of view may change, depending on the number of recorded pixels for movies. The image may be distorted, depending on recording conditions.)

\*\*\*\*\* Waterproof (Up to 14m for 2hours), Shock proof (Up to 2.0m)

\*\*\*\*\* Operating Temperature -10°C to 40°C

\* Digital zoom and Intelligent Zoom are not available in Report mode

\*\* The maximum effect of Shake Reduction is equivalent to approx. 3 exposure steps (when the Sensor-Shift-Type SR is selected).