RICOH G900SE II:

Business-use digital camera, ideal for use in demanding worksites subject to rain, dust and dirt, and in industries such as construction, disaster relief and healthcare. It supports Bluetooth® and wireless LAN connections, and is compatible with NFC (Near Field Communication) cards (FeliCa-, Mifare- and ISO1443-standard, Type A/B non-contact IC cards).

Here is the most important information in brief

• 1/2.3" Sensor with 20 MP for High-quality, high-resolution images

• Five-times optical zoom lens

• 4K-resolution movie recording for videos

• High system data management functions in connection with intranet systems

• High security features, such as Camera Lock function

• Heavy-duty, business-use construction for use in demanding worksites

• A host of user-friendly features to facilitate shooting at various worksites

• Extensive shooting and editing functions

Main features of the RICOH G900SE II

1. Bluetooth® and wireless LAN functions, and compatibility with NFC cards

• The G900SE II supports Bluetooth® (versions 3.0/4.2 BLE) and wireless LAN (IEEE802.11 a/b/g/n/ac 2.4/5GHz) connections, it assures wireless, high-speed data transmission of captured images to a broader choice of devices, ranging from PCs and smartphones to intranet systems.

• When coupled with an external GPS unit, barcode reader or laser distance meter support-ing Bluetooth® (versions 3.0 and 4.0) connection, the G900SE II lets the user attach ac-quired data to images.

• The G900SE II supports security-enhanced Enterprise Wi-Fi systems. It also supports WPS (Wi-Fi Protected Setup™) for easy setting of wireless LAN protocols.

• The G900SE II is compatible with NFC (Near Field Communication) cards (FeliCa-, Mifare- and ISO1443-standard, Type A/B non-contact IC cards). Simply by holding an NFC card in front of the camera, the user can activate or release the Camera Lock func-tion.

• • By creating a user list on the camera in advance, the G900SE II allows the user to link the Camera Memo function with data stored on an NFC card. For instance, users can attach their personal names contained in the user list to their images, simply by holding a corpo-rate identification card in front of the camera.

2. High system data management functions in connection with intranet systems

• When using multiple cameras connected to an intranet system, the user can update all of them automatically and simultaneously by loading each camera's firmware version update information, camera menu settings and Camera Memo list files onto an intranet server. This setup can also be performed using an SD card.

• The user can automatically synchronize the camera clock with the server's time.

3. High security features, such as Camera Lock function

• The G900SE II lets the user restrict use of the camera's operations by locking some of functions from a list of menu items, including camera access, menu access, internal memory viewing, USB connection, SDWO card usage, and WEB service access. The camera can be unlocked using the camera's onscreen keyboard or barcode reader, or an NFC card.

• Two separate passwords can be set – one for the user, and another for the administrator – to restrict camera operations. The administrator, for instance, can create a personal password to lock the menu access to restrict the use of certain functions at worksites and prevent the user from accidentally changing camera settings during shooting; the user can create another password to lock camera access to prevent a third party from using the camera.

• The G900SE II also allows the user to set a password for each SDHC- or SDXC-type memory card. Even when an SD card is lost or stolen, this password protection prevents the disclosure of images stored on the card to outsiders.

4. Camera Memo function to greatly reduce the workload needed for post-shooting data management

- The G900SE II's Camera Memo function lets the user attach a text (100 items max.; up to 128 letters per item) or an audio file (30 seconds max.), which has been previously creat-ed on the camera or computer, to a captured image. The user can also browse reference images compatible with the Camera Memo function, such as plans or blueprints, on the LCD monitor, after selecting the desired subject from a list of as many as 999 memo con-tents.

- In combination with the barcode scanning function, the Camera Memo function makes it effortless to attach barcode information to camera memo data.

- Using the included EX-2 application software, the user can integrate image categoriza-tions and file names into camera memo data, making it possible to greatly reduce the post-shooting workload. The camera also allows for the output of data stored as an XML file in the desired format, to improve the interface with databases.

5. Heavy-duty, business-use construction for use in demanding worksites

- Despite its compact, lightweight design, the G900SE II incorporates a protective rein-forced glass element to the front surface of its lens and a number of protectors at crucial parts of the body. Its rugged body is shockproof against a fall from heights of up to 2.1 me-ters,* dustproof (equivalent to IPX6 or JIS Class 6), cold-resistant to temperatures as low as -10°C, and crushproof against weights of up to 100kgf (kilogram force).** Thanks to this heavy-duty construction, the G900SE II performs superbly and dependably in harsh, de-manding conditions of various worksites.

  * Measured using RICOH IMAGING-original testing standards (from a height of 2.1 meters, onto a surface of 5cm-thick plywood, and with the camera's power on), conforming to Method 516-5-Shock of the MIL-Standard 810F.

  ** Measured using RICOHIMAGING-original testing standards.

- This business-use model is also designed to be highly resistant to chemicals, such as ethanol or the sodium hypochlorite chlorine dioxide solutions used as fungicidal food additives.

6. A host of user-friendly features to facilitate shooting at various worksite

- The G900SE II incorporates a GPS module, which receives signals from GPS satellites and GLONASS (global navigation satellite system), and an electronic compass which co-vers 360 degrees in 16 directions.

- Positioned around the circumference of the lens barrel, a six-LED Ring Light unit is useful for capturing well-defined, close-up images of such miniscule subjects as microscopic components, scratches and cracks.

- The camera's transparency guide allows the user to recall a previously captured image on the LCD monitor, and use it as a template for the effortless capture of a new image with the identical composition.

- The Image Clipping function allows the user to check two related images – such as a worksite photo and an image of survey data – on a computer screen.

- The G900SE II features a large, high-resolution 3.0-inch LCD monitor and approximately 1,040,000 dots.

- By selecting specific outline fonts,

  * the user can print the text displayed on the monitor at optimal size and in a legible typeface.

- * RICOH RT fonts.

7. Easy to use webcam function

Simply by switching the G900SE II to the UVC (USB Video Class) mode and connecting it to a computer with an USB cable (included as a standard accessory), it can be used as a web camera* for real-time streaming of Full HD-resolution video images at 30 frames per second. When combined with the camera's macro shooting capability and built-in Ring Light unit, the user can deliver more detailed, creative images than those captured by the com-puter's built-in camera during online business meetings or private online communications.

* Compatible applications: Zoom, Skype®, Microsoft Teams®, Google, MeetTM, Cisco, WebEX®, Face-book, Messenger. Supported operating systems: Windows® 10, Windows® 11, MacOS 11, MacOS 12, MacOS13, MacOS 14. The web camera function does not provide audio feed. We advise using the computer's built-in mic for audio communications at online meetings. The optional TE-2 Exten-sion Adapter (available separately) is required to use the G900SE II on a tripod.

Further details

• The G900SE II has 6.5GB of built-in memory, which allows for the capture of as many as 856 images at the largest image size. This is convenient when the user forgets a memory card, or when the memory card has reached its full capacity.

• The G900SE II provides 4K-resolution movie recording capability (3840 x 2160 pixels, 30fps frame rate) in the H.264 format.

• The Electronic Level provides for a high-precision check on the LCD monitor of the cam-era's horizontal and vertical inclination.

• By mounting the optional DW-5 Wide Conversion Lens*, the user can expand the camera's focal length to 22mm (in the 35mm format) at wide-angle end.

  *Unable to shoot underwater

• The G900SE II accepts the O-RC1 Waterproof Remote Control

PACKAGING INFORMATION

INCLUDED ACCESSORIES	
	Art. No. 7838 - Rechargeable Li-Ion Battery DB-110 Art. No. 30275 - USB Cable I-USB173 Art. No. 30280 - Strap O-ST174 Art. No. 30276 - Macro Stand O-MS3
OPTIONAL ACCESSORIES	
	Art. No. 37838 - Rechargeable Li-Ion Battery DB-110 Art. No. 39892 - Remote Control O-RC1 Art. No. Wide Angle Adapter DW-5
ARTICLE CODES	
	Art. No. 1488 - RICOH G900SE II Black/Pearl White EAN 0027075311138
MARKET LAUNCH	August 2024

SPECIFICATION

CAMERA TYPE	Zoom-compact digital-still camera
LENS	
Construction	PENTAX lens, 11 elements in 9 groups (5 aspherical elements)
Focal Length	5 - 25 mm Approx. 28 - 140mm (in 35mm format equivalent)
Maximum Aperture	F3.5(W) - F5.5(T)
Zoom Ratio	Optical Zoom: 5x Digital Zoom: approx. 8.1X Intelligent Zoom: approx. 7X at 10M, approx. 40.5X at 640 (including optical zoom)
Focal length (Macro)	9.26mm
Maximum Magnification	Approx. 0.4 x
Filter Diameter	37 mm
IMAGE CAPTURE UNIT	
Image Sensor	1/2.3" CMOS / Total: approx. 20 megapixels
Still image: File Format /	JPEG (conforms to Exif 2.3), conforms to DCF2.0, PRINT Image Matching III
Recorded Pixels	<4:3> 20M (5184 x 3888), 10M (3648 x 2736), 5M (2592 x 1944), 3M (2048 x 1536), VGA (640 x 480) <3:2> 18M (5184 x 3456), 9M (3648 x 2432), 4M (2592 x 1728), 3M (2048 x 1368), VGA (640 x 424) <1:1> 15M (3888 x 3888), 7M (2736 x 2736), 4M (1920 x 1920), 2M (1440 x 1440), VGA (480 x 480) • 2M and 1M are available only in the CALS mode. • In the CALS mode, the aspect ratio is fixed to 4:3. Quality Level ★★★, ★★, ★
Movie: File Format /	MPEG-4 AVC/H.264
Recorded Pixels	4K（3840 x 2160）: approx. 30fps, 1920（1920 x 1080): approx. 30fps, 1280（1280 x 720）: approx. 60/30fps
Audio: File Format	[Movie/Underwater Movie] 32KHz, 16bit, stereops
Sensitivity (Stand. output)	AUTO, Manual (ISO 125 - 64000)
White Balance	Auto, Daylight, Shade, Cloudy, Tungsten light, Fluorescent light(D:Daylight Color, N:Daylight White, W:White Light, L:Warm White), Ring light, Manual
Motion Blur Reduction	Still: Pixel Track SR Hi-sensitivity anti-shake mode (Digital SR: ISO 125 - 6400) Movie: Movie SR, Movie SR+
Noise reduction	Automatically applied when the shutter speed is slower than 0.25 sec.
FOCUS	
Focus type	TTL contrast detection auto focus system with AF Assist Beam 9-point AF, Spot AF, Auto tracking AF
Focus Range (From lens face)	Standard: 0.5m - infinity / 1.64ft. - infinity (entire zoom range) Macro: 0.1 - 0.6m / 0.33 - 1.97ft. (entire zoom range) 1cm Macro: 0.01 - 0.3m / 0.03 - 0.98ft. (middle zoom position) Infinity-landscape, Pan Focus, Manual Focus: available 2.5m/8.20ft (Firefighting Mode)
Face Detection	AF&AE is available for all modes up to 30 faces (1 pet) Smile Capture, Self-portrait Assist, Self-portrait Assist + Smile Capture, Blink Detection
EXPOSURE CONTROL	
Metering System	Multi-segment metering, Center-weighted metering, Spot metering
EV Compensation	± 2EV (1/3EV steps)
Shutter Speed	1/4000 - 1/4sec. (Mechanical and electronic shutter),
Capture modes	Auto Picture, Program, HDR, Movie, High Speed Movie, Digital Microscope, Interval Shooting, Interval Movie, Surf & Snow, Digital SR, CALS, watermark Options, Firefighting, Skew Correction, Text, Zoom Macro, Remove Haze, Depth of field composition,Image Sync
Scene Modes	Landscape, Portrait, Night Scene, Night Scene Portrait, Standard, Flower, Sport, Candlelight, Blue Sky, Sunset, Text, Group Photo, Pet, Portrait x Blue Sky, Portrait x Sunset, Portrait x Backlight
Dynamic range	available (Shadow/ Highlight adjustment)
Image Tone	Bright, Natural, Vibrant, Slide Film, Monochrome
BUILT-IN FLASH	
Modes	Force Off, Flash Auto, Fill Flash, Slow Sync., Slow Sync.＋Red-Eye, Red-Eye Reduction
Flash Range	Wide: approx. 0.2 - 5.5m / 0.66 - 18 ft. (ISO Auto) Tele: approx. 0.2 - 3.5m / 0.66 - 11 ft. (ISO Auto)

LCD MONITOR

Display Type	TFT color 3.0" LCD, approx. 1040K dots, AR Coating (Cover only)
Adjustments	Brightness, Outdoor View Setting: ±2 Steps

MEMORY

Storage Media	Built-in Memory (approx. 6.5GB) SD/SDHC/SDXC Memory Card FlashAir™ Card
Verified memory card	Sandisk, Panasonic, Toshiba

FUNCTION

Drive Modes	One shot, Self-timer, Continuous Shooting, Burst Shooting, M Continuous, S Continuous, Remote Control, Auto Bracketing
Self- timer count	10 sec, 2 sec, Remote Control (immediately, 3 sec)
Start-up Time	Approx. 1.0 sec.
Release Time Lug	Approx. 0.003 sec.
Continuous shooting	Approx. 3 frames/sec.
Max. frames at conti. Shooting	30 (Subject dependent)
High speed continuous shooting	Approx. 10 fps, 5M(4:3): up to 36 frames
Playback functions	One Shot, Index (20 thumb nails, 81 thumb nails), Enlargement (up to 10X, scroll available), Movie Playback, Histogram, Folder display, Delete, Select&Delete, Delete All, Calendar
Playback modes	Slideshow, Image Rotation, Small Face Filter, Ink Rubbing Filter, Digital Filter, HDR Filter, Movie Edit, Red-eye Edit, Resize, Cropping, Image Copy, Protect, Start-up Screen, Recover File, Auto Image Rotation, Skew Correct, File Send
Digital filter	Playback only - B&W / Sepia, Toy Camera, Retro, Color, Extract Color, Color Emphasis, High Contrast, Starburst, Soft, Fish-eye, Brightness, Miniature Filter
Movie edit functions	Save as still image, Divide Movies, Adding title picture
Languages	Traditional Chinese, Simplified Chinese, Japanese, Korean, English, French, Spanish, Portuguese, Italy, Germany, Russian, Swedish, Danish, Indonesian, Norwegian, Hungarian, Greek, Polish, Vietnamese, Thai, Dutch, Turkey, Czech, Croatian, Hindi, Arabic
Date Imprint	Date Imprint Available (Date, Time, Date & time) (except Green)
GPS	GPS, GLONASS GPS display mode: LAT/LON, UTM, MGRS GPS log, GPS lock, GPS time adjustment, GPS data imprint, UTC data imprint
Electronic Compass	Compass heading : Cardinal, Degrees, Cardinal/Degrees Declination, Compass data imprint
Web Camera	USB Video Class 1.1
Others	- USER Setting (U1/U2) - ADJ Setting - Fn Button Setting - Green Button Setting - Todays Shots Counter - Electronic Leveler - Copyright Information - Eco Mode - Image Modification Check - Barcode Mode - Electronic Board Support - Image Clip - Image Transmitter2 Optional screwing in DW-5 wide-angle attachment. It is simply screwed in front of the lens and shortens the focal length by a factor of 0.8x to a focal length of 22 mm (35 mm film equivalent). It complies with JIS protection class 7

OPERATING ENVIRONMENT

Water proof / Dustproof	Equivalent to JIS Class 8 waterproof and JIS Class 6 dustproof capabilitie - Waterproof - Up to 20m(65.6ft.) for 2hours - Shock proof - Up to 2.1m (6.8ft.) - Operating Temperature -10℃(14°F) to 40℃(104°F)

POWER SUPPLY

Power Source	Rechargeable Battery DB-110 AC Adapter Kit K-AC166(Optional)
Battery life	Still*1:　　approx. 340 shots Playback*2: approx. 260 min. *1 Recording capacity shows approximate number of shots recorded during CIPA-compliant testing. Actual performance may vary depending on operating conditions. *2 According to the result of RICOH in-house testing.
Charging	internal, (USB Type-C), approx. 180 min.

INTERFACES

Connection Port	USB3.0 (Type C), HDMI output terminal (Type D)

Wireless LAN

Standards	IEEE 802.11a/b/g/n/ac (Wireless LAN standard protocol)
Frequency (Center Frequency)	2.4GHz (1ch〜11ch) / 5GHz (36ch〜48ch)
Security	WEP(64/128bit)、WPA/WPA 2 mixed PSK、WPA/WPA 2 mixed EAP format enterprise EAP-TLS, PEAP (MS-CHAPv2)

Bluetooth®

Standards	Bluetooth® v3.0/v4.2 BLE(Bluetooth Low Energy）
Frequency (Center Frequency)	2.4GHz(CH0〜CH39)

NFC

Standards	Felica,Mifare,ISO/IEC 14443 Type A/B
Frequency (Center Frequency)	13.56MHz

SYSTEM REQUIREMENTS

Windows®	Windows® 8.1, Windows® 10, Windows® 11
Macintosh	macOS 10.15, macOS 11, macOS 12, macOS 13, macOS 14

*Supported OS must be pre-installed in PC and updated to the latest version. USB port must be standard equipped.

DIMENSIONS AND WEIGHT

Dimensions	Approx. 118.2 (W) x 65.5 (H) x 33.1 (D)mm /4.7 (W) x 2.6 (H) x 1.3 (D) inches (including lens depth)
Weight	Approx. 252g / 8.9 oz. (Included dedicated battery and SD memory card), Approx. 225g / 7.9 oz.(Body only)