# PowerShot G9

#### **Imaging Sensor**

**Resolution** Approx. 12.1 million pixels

**Recording pixels** 4000 x 3000

**Sensor type** Interline Transfer CCD

**Sensor size** ½1.7-inch type

**Lens** 

**Focal length** 7.4 – 44mm (equivalent to 35–210mm, in 35mm format)

**Zoom ratio** 6x (optical) / 4x (digital)

**Lens construction** 9 elements in 7 groups (including 1 aspherical lens element)

**Maximum aperture**  $f/2.8 \text{ (W)} \sim f/4.8 \text{ (T)}$ 

*Image Stabilizer system* Lens shift type; Approx. 3 stops correction.

• IS modes: Off, Continuous, Shoot Only, Panning

**Closest focusing distance** Normal — 1.6 feet

(Wide) Macro — .39 inches

**Autofocus** TTL autofocus; nine-point AIAF (camera automatically selects AF point) or single AF point

• Single AF point: center of frame or FlexiZone (freely move around most of frame)

• Selectable AF point size: normal, or small

• Face Detect AF (Up to 35 faces recognized)

• User can specify a single primary face in a scene via Face Selector Button

**Manual focus** Yes

**Image Recording** 

**Still image recording** 8-bit JPEG; Three compression settings ("Super-Fine", "Fine", and "Normal")

**RAW file recording** Canon .CR2 RAW format possible

• Images can be processed using (included) RAW Image Task software, part of Canon's ZoomBrowser or ImageBrowser programs

Movie recording

AVI (Image data: Motion JPEG; Audio data: WAVE mono)

**Data recording format** DCF (Design rule for Camera Filing system); DPOF ver. 1.1 (Digital Print Order Format)

EXIF 2.2 compatible

**Reduced resolution options** 4000 x 2248 (16:9 Widescreen); 3264 x 2448 (Medium 1); 2592 x 1944 (Medium 2);

1600 x 1200 (Medium 3); 640 x 480 (Small)

**Sound recording** 1). Up to 60 second sound memo can be recorded for each image

2). Sound Recorder: camera can be used as "tape recorder"; up to 12 hours of sound recording possible on 1GB SD card

**Storage media** Secure Digital (SD); or SD High Capacity (SDHC); or Multi-Media Card (MMC);

or High Capacity Multi-Media (HC MMCplus) memory cards

**Format function** Normal and low level format

**Color space** sRGB

**Red-eye correction** Uses Face Detection function to automatically remove red-eye from playback menu option.

If no face is detected, user can set frame to remove red-eye



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### **Shooting Controls**

Shooting modes

On mode dial: Full Auto, Program, Shutter-priority, Aperture-priority, Manual,

two user-defined Custom settings, Stitch Assist, Movie, and Special Scene

Special Scene Modes: Portrait, Landscape, Night Scene, Night Snapshot, Sports, Indoor,

Kids & Pets, Foliage, Snow, Beach, Fireworks, Aquarium, ISO 3200,

Underwater, Color Accent, Color Swap

Shutter speed range

15 seconds  $\sim \frac{1}{2500}$  sec.

**Aperture** 

f/2.8 - f/8.0 (W) / f/4.8 - f/8.0 (T)

"My Colors" mode

Full range of settings: Vivid, Neutral, Sepia, Black & White, Positive Film, Lighter Skin Tone, Darker Skin Tone, Vivid Blue, Vivid Green, Vivid Red, and Custom Color (adjustments for contrast, sharpness, and saturation)

Noise reduction

Available when shutter speed is set between 15 seconds and 1.3 sec.

White Balance

Three options available:

Auto; Pre-set White Balance (daylight, cloudy, tungsten, fluorescent, fluorescent H, flash and underwater); two Custom settings (WB off of white object or neutral gray object)

Self-timer

2-second delay, 10-second delay, and Custom Timer

• Custom Timer: user can set delay  $0 \sim 10$ , 15, 20 or 30 seconds, and number of shots  $1 \sim 10$ 

Remote shooting

Possible, using Canon's supplied Remote Capture Task software, via USB to computer

#### **Exposure**

Metering

Evaluative, Center-weighted average, Spot (spot metering at center

or linked to active AF point), Face Detect AE
• incorporates face brightness when using Face Detection

• concentrates metering on faces

Auto Exposure Lock

Available

Program Shift / Safety Shift

Available

Exposure compensation

+/- up to 2 stops, ½-stop increments

Auto exposure bracketing

Available

ISO sensitivity

Auto, High ISO Auto (uses high ISOs when needed, up to 800);

or user-set ISO 80, 100, 200, 400, 800, 1600 — ISO set on top-mounted dial

Shutter speed range

15 seconds  $\sim \frac{1}{2}500$  sec.

#### LCD

LCD monitor

3.0-inch (diagonal) TFT LCD monitor (no tilt/swivel); Night Display available

• Resolution: approx. 230,000 pixels; 100% coverage of actual image

Horizontal and vertical grid lines display option

Brightness Adjustment

15 Levels available

Eye-level viewfinder

Optical eye-level, real-image zoom finder; diopter range -3.0~+1

Special playback features

• Enlarged playback  $(2x \sim 10x)$  with free scrolling to any part of image

• Advance or reverse through magnified images is available

• Organize images in My Category: People, Scenery, Events, Category 1—3 and To Do

• Image is automatically rotated when camera is in either vertical or horizontal

• Jump: 10/100 images, shot date, movie, folder and My Category

• Slide Show: Playback interval 3–10 sec., 15 sec., 30 sec. (3 types available)

• Transition Effects: 3 types available

• Movie playback: Normal, Slow Motion, Pause, Editing (portions of clip can be erased)

Histogram

Real-time shooting histogram available, and playback histogram available (overexposure warning available when viewing playback histogram)



## **PowerShot G9** specifications (continued)

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**Performance** 

Imaging processor

DIGIC III

Continuous shooting speed

Approx. 1.5 shots per second Large/Fine (with AF locked)

• 0.7 shots per second with continuous AF

Camera start-up time A

Approx. 1.3 seconds

**Movie Mode** 

Resolution

High-resolution: 1024 x 768 at 15 fps

Standard: 640 x 480 (VGA) at 30 fps/30 fps LP (Long Play); 320 x 240 (QVGA) at 30 fps

*Compact:* 160 x 120 (QQVGA) at 15 fps

Recording length

Up to 4GB or 1 hour per movie clip

Features during movie recording

• AF lock, AE lock, exposure shift, digital zoom (Standard mode only), MF, grid line display

• Continuous IS (Image Stabilization), continuous auto focus, auto exposure, WB

• Mono sound recording: 16-bit, 44.100 kHz (11.025 kHz for 160x120 movies)

• Long play mode increases compression rate for longer video recording

• Color Accent / Color Swap available during movie recording

• Time Lapse movies — record at 1 fps or 0.5 fps; play back at 15 fps

Movie playback

On camera's LCD (with sound); Standard TV monitor using video-out cord; or within Macintosh or Windows PC using Apple QuickTime  $^{\rm TM}$  software

• View first frame, previous frame, next frame, and last frame

• Fast forward, fast rewind, and slow motion (five different slow-motion speeds available in addition to standard playback speed

• No audio during slow-motion playback

#### **Flash**

**Built-in flash** Yes

*Flash modes* Automatic firing; Flash On; Flash Off

**Face Detection Flash** Yes, Face Detect FE (Flash Exposure)

**Manual flash output** Yes, 3 steps

**Slow sync** Available (second-curtain sync not available)

*Flash exposure lock* Available

**Flash output compensation** +/- 2 stops in 1/3 stop increments

**Maximum distance** 9.8 ft (W) / 6.6 ft (T); ISO set to Auto

**Macro flash** 1.6 feet

*Flash sync speed* 1/500 sec. (maximum)

**Compatible accessory Speedlites** Any EX-series speedlite (wireless E-TTL possible with compatible flashes,

and/or Canon ST-E2 wireless transmitter



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**Computer Interface** 

Direct-connection to computer

USB (mini-B); via dedicated Canon USB cable IFC-400PCU (supplied with camera)

• USB speed: 2.0 Hi-speed

Communication Settings

PTP (Picture Transfer Protocol) and MTP (Media Transfer Protocol)

• Certified Windows Vista compatible

Computer Controlled Shooting

When connected to a computer, shooting operation via the computer is possible with of supplied Remote Capture Task Software

Video Out to TV monitor

Yes, via supplied A/V cable AVC-300 (NTSC or PAL; selectable on camera's menu)

**Direct Printing** 

Compatible printers

Canon Compact Photo printers — prints directly to Canon CP and SELPHY printers Canon inkjet printers — prints directly to compatible Direct-print Canon printers Third-party inkjet printers — prints directly to PictBridge-compatible printers

Printing features

Print with shooting data, image optimizer (face brightener), select paper size,

ID Photo print (possible on CP printer), Single frame Movie print

(thumbnail frames from movie can be printed with select Canon CP printers)

Print/Share button Yes

**Battery and Power** 

Type

Rechargeable Canon NB-2LH battery pack (same battery as EOS Digital Rebel XT/XTi)

Recording capacity

Approx. 240 shots (LCD monitor on, CIPA standard)

LCD playback time

Approx. 7 hours

AC adapter

(optional) Canon AC Adapter Kit ACK-DC20

Car battery charger

(optional) Canon CBC-NB2

**Body & Dimensions** 

Dimensions (W x H x D)

4.2 x 2.8 x 1.7 inches; excluding protrusions

Weight (w/o battery or SD card)

11.3 oz.

Other

Languages

25 languages: English, German, French, Dutch, Danish, Finnish, Italian, Norwegian, Swedish, Spanish, Simplified Chinese, Russian, Portuguese, Greek, Polish, Czech, Hungarian, Turkish, Arabic, Traditional Chinese, Korean, Thai, Romanian, Ukrainian, and Japanese

Clock Function

Built-in; automatic calendar until year 2037

• No imprinting of date/time on images, except Postcard direct print mode to select Canon printers