▾ At a Glance

Effective Pixels

36.3 million

Sensor Size

35.9 mm x 24 mm

Image Sensor Format

FX

Storage Media

CompactFlash© (CF) (Type I, compliant with UDMA)

SD

SDHC

SDXC

Top Continuous Shooting Speed at full resolution

5 frames per second

ISO Sensitivity

ISO 64 -12,800

Lo-1 (ISO 32)

Hi-1 (ISO 25,600)

Hi-2 (ISO 51,200)

Movie

Full HD 1,920x1,080 / 60 fps

Full HD 1,920x1,080 / 50 fps

Full HD 1,920x1,080 / 30 fps

Full HD 1,920x1,080 / 25 fps

Full HD 1,920x1,080 / 24 fps

HD 1,280x720 / 60 fps

HD 1,280x720 / 50 fps

Monitor Size

3.2 in. diagonal

Monitor Type

Wide Viewing Angle TFT-LCD

Battery / Batteries

EN-EL15 Lithium-ion Battery

Approx. Dimensions (Width x Height x Depth)

5.8 in. (146 mm) x 4.9 in. (123 mm) x 3.3 in. (81.5 mm)

Approx. Weight

31.1 oz. (880 g)

camera body only

Expand/Collapse All

▾ Type

Type	Single-lens reflex digital camera
Lens Mount	Nikon F bayonet mount

▾ Image Sensor

Effective Pixels	36.3 million
Sensor Size	35.9 mm x 24 mm
Image Sensor Type	CMOS
Total Pixels	37.09 million
Dust-reduction system	Image sensor cleaning Image Dust Off reference data (optional Capture NX 2 software required)
Dust-Off Reference Photo	Yes
Image Area (pixels)	FX-format (L) 7,360 x 4,912 (M) 5,520 x 3,680 (S) 3,680 x 2,456 1:2 format (30 x 20) (L) 6,144 x 4,080 (M) 4,608 x 3,056 (S) 3,072 x 2,040 5:4 format (30 x 24)

FX-format (36 x 24)
(L) 6,144 x 4,912
(M) 4,608 x 3,680
(S) 3,072 x 2,456
DX-format
(L) 4,800 x 3,200
(M) 3,600 x 2,400
(S) 2,400 x 1,600

▾ File System

File Format Still Images	JPEG: JPEG-Baseline Compliant; can be selected from Size Priority and Optimal Quality JPEG: JPEG-Baseline Compliant with fine (approx 1:4), Normal (approx 1:8) or Basic (approx 1:16) Compression NEF (RAW): 12 or 14 bit, lossless compressed, compressed, or uncompressed; small size available (12-bit uncompressed only) NEF (RAW) + JPEG: Single Photograph Recorded in both NEF (RAW) and JPEG Formats TIFF (RGB)
Storage Media	CompactFlash© (CF) (Type I, compliant with UDMA) SD SDHC SDXC
Card Slot	1 CompactFlash© (CF) card and 1 Secure Digital (SD) card
File System	Compliant with DCF (Design Rule for Camera File System) 2.0 EXIF 2.3 (Exchangeable Image File Format for Digital Still Cameras) PictBridge

▾ Viewfinder

Viewfinder	Eye-level Pentaprism Single-Lens Reflex Viewfinder
Viewfinder Frame Coverage	FX (36x24): 100% Horizontal and 100% Vertical (Approx.) 1.2x (30x20): 97% Horizontal and 97% Vertical (Approx.) DX (24x16): 97% Horizontal and 97% Vertical (Approx.) 5:4 (30x24): 97% horizontal and 100% vertical (Approx.)
Viewfinder Magnification	0.70x (Approx.)
Viewfinder Eyepoint	17 mm (-1.0 m^{-1})
Viewfinder Diopter Adjustment	Built-in diopter adjustment (-3 to +1 m^{-1})
Focusing Screen	Type B BriteView Clear Matte Mark VIII with AF Area Brackets (grid lines can be displayed)
Reflex Mirror	Quick-return type
Mirror Lock Up	Yes

▾ Lens

Lens Aperture	Instant-return type
Depth-of-field Control	Yes
Lens Compatibility at a Glance***	AF-S or AF lenses fully compatible Metering with AI lenses

Compatible Lenses	AF NIKKOR lenses, including type G, E, and D lenses (some restrictions apply to PC lenses) and DX lenses (using DX 24 x 16 1.5x image area), AI-P NIKKOR lenses, and non-CPU AI lenses (exposure modes G and H only). Electronic rangefinder can be used with lenses that have a maximum aperture of f/5.6 or faster (the electronic rangefinder supports the 11 focus points with lenses that have a maximum aperture of f/8 or faster). IX NIKKOR lenses, lenses for the F3AF, and non-AI lenses cannot be used.

Shutter

Shutter Type	Electronically controlled vertical-travel focal-plane
Shutter Speed	1/8000 to 30 sec. Bulb
Fastest Shutter Speed	1/8000 sec.
Slowest Shutter Speed	30 sec.
Flash Sync Speed	Up to 1/250 sec. Synchronizes with shutter at 1/320s or slower (flash range drops at speeds between 1/250 and 1/320s)
Bulb Shutter Setting	Yes
Shutter Release Modes	Continuous low-speed [CL] mode Continuous high-speed [CH] mode Mirror-up [Mup] mode Quiet Shutter Release Quiet Continuous Release Self-timer Mode Single-frame [S] mode
Continuous Shooting Options	FX-format CH: Up to 5 frames per second CL: Up to 1-5 frames per second 5:4 format CH: Up to 5 frames per second CL: Up to 1-5 frames per second DX-format CH: Up to 6 frames per second 7 fps in DX-crop mode when using optional MB-D12 battery pack and EN-EL18a battery CL: Up to 1-6 frames per second 1:2 format CH: Up to 6 frames per second CL: Up to 1-6 frames per second
Top Continuous Shooting Speed at full resolution	5 frames per second
Self-timer	2, 5, 10, 20 sec.; 1 to 9 exposures at intervals of 0.5, 1, 2, or 3 sec. *Timer duration electronically controlled*

Exposure

Exposure Metering System	TTL exposure metering using 91,000-pixel RGB sensor
Metering Method	Center-weighted: Weight of 75% given to 12 mm circle in center of frame Matrix: 3D Color Matrix Metering III (type G, E, and D lenses); Color Matrix Metering III (other CPU lenses); Color Matrix Metering available with non-CPU lenses if user provides lens data Spot: Meters 4 mm circle (about 1.5% of frame) centered on selected focus point Highlight-weighted: Available with type G, E, and D lenses; equivalent to center-weighted when non-CPU lens is used
Metering Range	0 to 20 EV (3D Color Matrix, center-weighted metering or highlight-weighted

Metering Range	0 to 20 EV (3D Color Matrix, center-weighted metering or highlight weighted metering)
	0 to 20 EV (spot metering)
Exposure Meter Coupling	CPU
	AI
Exposure Modes	Aperture-Priority (A)
	Manual (M)
	Programmed auto with flexible program (P)
	Shutter-Priority (S)
Exposure Compensation	±5 EV in increments of 1/3, 1/2 or 1 EV
Exposure Bracketing	2 to 9 frames in steps of 1/3, 1/2, 2/3 or 1 EV
Exposure Lock	Yes
Picture Control	Flat
	Landscape
	Monochrome
	Neutral
	Portrait
	Standard
	User-customizable Settings
	Vivid

Sensitivity

ISO Sensitivity	ISO 64 -12,800
	Lo-1 (ISO 32)
	Hi-1 (ISO 25,600)
	Hi-2 (ISO 51,200)
Lowest Standard ISO Sensitivity	64
Highest Standard ISO Sensitivity	12,800
Lowest Expanded ISO Sensitivity	Lo-1 (ISO 32 equivalent)
Highest Expanded ISO Sensitivity	Hi-2 (ISO 51,200 equivalent)
Expanded ISO Sensitivity Options	Lo-1 (ISO 32 equivalent)
	Hi-1 (ISO 25,600 equivalent)
	Hi-2, (ISO 51,200 equivalent)
Long Exposure Noise Reduction	Yes
High ISO Noise Reduction	Yes
	Normal
	High
	Off
Active D-Lighting	Auto
	Extra High
	High
	Normal
	Low
	Off
D-Lighting Bracketing	2 frames using selected value for one frame
	3–5 frames using preset values for all frames

Focus/Autofocus

Single-point AF Mode	Yes
Dynamic AF Mode	Number of AF points: 9, 21, 51 and 51 (3D-tracking)
Auto-area AF Mode	Yes
Autofocus System	Nikon Advanced Multi-CAM 3500FX autofocus sensor module with TTL phase detection
Detection Range	-2 to 19 EV (ISO 100, 68°F/20°C)
Lens Servo	Autofocus (AF): Single-servo AF (AF-S); Continuous-servo AF (AF-C); predictive focus tracking activated automatically according to subject status Manual focus (MF): Electronic rangefinder can be used
AF-area Mode	9, 21 or 51 point Dynamic-area AF Auto-area AF Single-point AF 3D-tracking (51 points) Group-area AF
Focus Lock	Focus can be locked by pressing AE-L/AF-L button Focus can be locked by pressing shutter-release button halfway (single-servo AF)
Focus Modes	Auto AF-S/AF-C selection (AF-A) Continuous-servo (AF-C) Face-Priority AF available in Live View only and D-Movie only Full-time Servo (AF-A) available in Live View only and D-Movie only Manual (M) with electronic rangefinder Normal area Single-servo AF (AF-S) Wide area
Maximum Autofocus Areas/Points	51
Autofocus Sensitivity	-2 to +19 EV (ISO 100, 20°C/68°F)
Autofocus Fine Tune	Yes

▾ Flash

Built-in Flash	Yes
Flash Bracketing	2 to 9 frames in steps of 1/3, 1/2, 2/3, or 1 EV
Built-in Flash Distance	39 ft. (ISO 100)
X-Sync Speed	1/250
Top FP High Speed Sync	Up to 1/8000
Flash Control	TTL: i-TTL flash control using 91,000-pixel RGB sensor are available with built-in flash and SB-910, SB-900, SB-800, SB-700, SB-600, SB-400, or SB-300; i-TTL balanced fill-flash for digital SLR is used with matrix and center-weighting metering, standard i-TTL flash for digital SLR with spot metering
Flash Sync Modes	Auto FP High-Speed Sync supported Front-curtain sync (normal) Rear-curtain sync Red-Eye reduction Red-Eye reduction with slow sync Slow rear-curtain sync Slow sync Off
Flash Compensation	-3 to +1 EV in increments of 1/3, 1/2 or 1 EV

Flash-ready Indicator	Lights when built-in flash or optional flash unit is fully charged; flashes after flash is fired at full output
Accessory Shoe	Yes
Nikon Creative Lighting System (CLS)	CLS Supported
Flash Sync Terminal	Yes

▼ White Balance

White Balance	Auto (2 types) Choose color temperature (2500K–10000K) Cloudy Direct Sunlight Flash Fluorescent (7 types) Incandescent Preset manual (up to 6 values can be stored, spot white balance measurement available during live view) Shade
White Balance Bracketing	2 to 9 exposures in increments of 1, 2 or 3 EV

▼ Live View

Live View Shooting	Photography Live View Mode Movie Live View Mode
Live View Lens servo	Autofocus (AF): Single-servo AF (AF-S); full-time-servo AF (AF-F) Manual focus (MF)
Live View AF-area mode	Face-priority AF Wide-area AF Normal-area AF Subject-tracking AF
Live View Autofocus	Contrast-detect AF anywhere in frame (camera selects focus point automatically when face-priority AF or subject-tracking AF is selected)

▼ Movie

Movie Metering	TTL exposure metering using main image sensor
Movie Maximum recording time	20 minutes at highest quality 29 minutes 59 seconds at normal quality
Movie File Format	MOV
Movie Video Compression	H.264/MPEG-4 Advanced Video Coding
Movie Audio recording format	Linear PCM
Movie	Full HD 1,920x1,080 / 60 fps Full HD 1,920x1,080 / 50 fps Full HD 1,920x1,080 / 30 fps Full HD 1,920x1,080 / 25 fps Full HD 1,920x1,080 / 24 fps HD 1,280x720 / 60 fps HD 1,280x720 / 50 fps
Movie Audio	Built-in microphone, stereo External stereo microphone (optional)

▾ Monitor

Monitor Size	3.2 in. diagonal
Monitor Resolution	1,229,000 Dots
Monitor Type	Wide Viewing Angle TFT-LCD
Monitor Angle of View	170-degree wide-viewing angle
Monitor Adjustments	Brightness, 5 levels Brightness control using ambient brightness sensor
Virtual Horizon Camera Indicator	Yes Also visible in LiveView Modes Also visible in Viewfinder

▾ Playback

Playback Functions	Auto Image Rotation Full-frame and thumbnail (4, 9, or 72 images) Highlights Histogram Display Image Comment Movie Slideshow Playback with Zoom Slideshow
In-Camera Image Editing	Color Balance Color Outline Color Sketch D-Lighting Distortion Control Edit Movie Filter Effects Fisheye Image Overlay Miniature Effect Monochrome NEF (RAW) Processing Perspective Control Quick Retouch Red-Eye Correction Resize Selective Color Side-by-Side Comparison Straighten Trim
Image Comment	Yes

▾ Interface

Interface	HDMI output: Type C mini-pin HDMI connector Headphone Connector NTSC Stereo Microphone Input Super Speed USB 3.0
Wi-Fi Functionality	Eye-Fi Compatible WT-5A

GPS	GP-1 GPS unit GP-1A GPS unit
Save/Load Camera settings	Yes

▾ Menus

Total Custom Settings	54
My Menu	Yes with customization
Recent Settings	Yes
Supported Languages	Arabic Bengali Brazilian Portuguese Bulgarian Chinese (Simplified and Traditional) Czech Danish Dutch English Finnish French German Greek Hindi Hungarian Indonesian Italian Japanese Korean Marathi Norwegian Persian Polish Portuguese Romanian Russian Serbian Spanish Swedish Tamil Telugu Thai Turkish Ukrainian Vietnamese
Date, Time and Daylight Savings Time Settings	Yes The camera clock is powered by a separate, non-rechargeable CR1616 lithium battery with a life of about two years.
World Time Setting	Yes

▾ Power

Battery / Batteries	EN-EL15 Lithium-ion Battery
Battery Life (shots per charge)	1,200 shots (CIPA)
AC Adapter	EH-5b AC Adapter; requires EP-5B Power Connector (available separately)
Battery Charger	MH-25a Quick Charger

▾ Miscellaneous

Tripod Socket	1/4 in.
Approx. Dimensions (Width x Height x Depth)	5.8 in. (146 mm) x 4.9 in. (123 mm) x 3.3 in. (81.5 mm)
Approx. Weight	31.1 oz. (880 g) *camera body only*
Operating Environment	0–40 °C (+32–104 °F)