Specifications

Type of camera

Type	Single-lens reflex digital camera
Lens mount	Nikon F mount (with AF coupling and AF contacts)
Effective angle of view	Nikon DX format; focal length in 35 mm [135] format equivalen 1.5x that of lenses with FX format angle of view

Effective pixels

Effective pixels	20.9 million

Image sensor

Image sensor	23.5 x 15.7 mm CMOS sensor
Total pixels	21.51 million
Dust-reduction system	Image sensor cleaning, Image Dust Off reference data (Captu software required)

Storage

Image size (pixels)	DX (24x16) image area: 5568 x 3712 (L: 20.6 million), 4176 11.6 million), 2784 x 1856 (S: 5.1 million)

	1.3x (18x12) image area: 4272 x 2848 (L: 12.1 million), 3200 6.8 million), 2128 x 1424 (S: 3 million)
	Photographs with image area of DX taken during movie reco 3128 (L: 17.4 million), 4176 x 2344 (M: 9.7 million), 2784 x 1 million)
	Photographs with image area of 1.3x taken during movie rec x 2400 (L: 10.2 million), 3200 x 1800 (M: 5.7 million), 2128 x million)
	Photographs taken during movie recording at a frame size o 2160: 3840 x 2160 (8.2 million)
File format	NEF (RAW): 12 or 14 bit, lossless compressed or compresse JPEG: JPEG-Baseline compliant with fine (approx. 1:4), nori 1:8), or basic (approx. 1:16) compression; optimal quality co available NEF (RAW)+JPEG: Single photograph recorded in both NEF JPEG formats
Picture Control system	Auto, Standard, Neutral, Vivid, Monochrome, Portrait, Landsca selected Picture Control can be modified; storage for custom F Controls
Media	SD (Secure Digital) and UHS-I compliant SDHC and SDXC me
File system	DCF 2.0, Exif 2.31, PictBridge

Viewfinder

Viewfinder	Eye-level pentaprism single-lens reflex viewfinder

Frame coverage	DX (24x16) image area: Approx. 100% horizontal and 100% 1.3x (18x12) image area: Approx. 97% horizontal and 97% v
Magnification	Approx. 0.94x (50 mm f/1.4 lens at infinity, -1.0 m^{-1})
Eyepoint	18.5 mm (-1.0 m^{-1}; from center surface of viewfinder eyepiece
Diopter adjustment	-2 to +1 m^{-1}
Focusing screen	Type B BriteView Clear Matte Mark II screen with AF area brac grid can be displayed)
Reflex mirror	Quick return
Lens aperture	Instant return, electronically controlled

Lens

Compatible lenses	Compatible with AF NIKKOR lenses, including type G, I lenses (some restrictions apply to PC lenses) and AI-P lenses and non-CPU AI lenses (M mode only); IX-NIKK lenses for the F3AF, and non-AI lenses can not be used The electronic rangefinder can be used with lenses that maximum aperture of f/5.6 or faster (the electronic rang supports the center focus point with lenses that have a aperture of f/8 or faster)

Shutter

Type	Electronically controlled vertical-travel focal-plane mechanical electronic front-curtain shutter available in mirror up release m

Speed	1/8000 to 30 s in steps of 1/3 or 1/2 EV, bulb, time, X250
Flash sync speed	X=1/250 s; synchronizes with shutter at 1/320 s or slower (flas at speeds between 1/250 and 1/320 s)

Release

Release modes	S (single frame), CL (continuous low speed), CH (continuous l Q (quiet shutter-release), QC (quiet continuous shutter-release MUP (mirror up)
Approximate frame advance rate	CL: 1 to 7 fps, CH: 8 fps Frame rates assume continuous-servo AF, manual or sl priority auto exposure, a shutter speed of 1/250 s or fas selected for custom setting a1 (AF-C priority selection), settings at default values
Self-timer	2 s, 5 s, 10 s, 20 s; 1 to 9 exposures at intervals of 0.5, 1, 2 or
Remote control modes (ML-L3)	Delayed remote, quick-response remote, remote mirror-up

Exposure

Metering system	TTL exposure metering using RGB sensor with approx. 180K (pixels
Metering modes	Matrix: 3D color matrix metering III (type G, E and D lenses) metering III (other CPU lenses) Center-weighted: Weight of approx. 75% given to 8-mm circl frame; diameter of circle can be changed to 6, 10 or 13 mm, can be based on average of entire frame

	Spot: Meters circle with diameter of about 3.5 mm (about 2.5 centered on selected focus point
	Highlight-weighted: Available with type G, E and D lenses
Range (ISO 100, f/1.4 lens, 20°C/68°F)	Matrix, center-weighted or highlight-weighted metering: 0 to Spot metering: 2 to 20 EV
Exposure meter coupling	CPU
Modes	Auto modes (auto, auto [flash off]), scene modes (portrait, land sports, close up, night portrait, night landscape, party/indoor, b sunset, dusk/dawn, pet portrait, candlelight, blossom, autumn special effects modes (night vision, super vivid, pop, photo illu: camera effect, miniature effect, selective color, silhouette, high key), programmed auto with flexible program (P), shutter-priori aperture-priority auto (A), manual (M), U1 (user settings 1), U2 settings 2)
Exposure compensation	Can be adjusted by -5 to +5 EV in increments of 1/3 or 1/2 EV SCENE and EFFECTS modes
Exposure lock	Luminosity locked at detected value
ISO sensitivity (Recommended Exposure Index)	ISO 100 to 51200 in steps of 1/3 or 1/2 EV; can also be set to 0.5, 0.7 or 1 EV (ISO 50 equivalent) below ISO 100 or to appro 0.7, 1, 2, 3, 4 or 5 EV (ISO 1640000 equivalent) above ISO 51 ISO sensitivity control available
Active D-Lighting	Can be selected from auto, extra high, high, normal, low or off

Focus

Autofocus	Nikon Advanced Multi-CAM 3500 II autofocus sensor module phase detection, fine-tuning, 51 focus points (including 15 cros sensors; f/8 supported by one sensor), and AF-assist illuminat approx. 0.5 to 3 m/1 ft 8 in. to 9 ft 10 in.)
Detection range	-3 to +19 EV (ISO 100, 20°C/68°F)
Lens servo	Autofocus (AF): Single-servo AF (AF-S); continuous-servo A auto AF-S/AF-C selection (AF-A); predictive focus tracking a automatically according to subject status Manual focus (M): Electronic rangefinder can be used
Focus point	Can be selected from 51 or 11 focus points
AF-area modes	Single-point AF; 9-, 21- or 51-point dynamic-area AF, 3D-tracki area AF, auto-area AF
Focus lock	Focus can be locked by pressing shutter-release button halfwa servo AF) or by pressing AE-L/AF-L button

Flash

Built-in flash	Auto, portrait, child, close up, night portrait, party/indoo portrait, super vivid, pop, photo illustration, toy camera flash with auto pop-up P, S, A, M, food: Manual pop-up with button release
Guide number	Approx. 12/39, 12/39 with manual flash (m/ft, ISO 100, 20°C/6
Flash control	TTL: i-TTL flash control using RGB sensor with approx. 180K (pixels is available with built-in flash; i-TTL balanced fill-flash fo

	is used with matrix, center-weighted and highlight-weighted me standard i-TTL fill-flash for digital SLR with spot metering
Flash modes	Auto, auto with red-eye reduction, auto slow sync, auto slow sy eye reduction, fill-flash, red-eye reduction, slow sync, slow syr eye reduction, rear-curtain with slow sync, rear-curtain sync, o high-speed sync supported
Flash compensation	-3 to +1 EV in increments of 1/3 or 1/2 EV
Flash-ready indicator	Lights when built-in flash or optional flash unit is fully charged; flash is fired at full output
Accessory shoe	ISO 518 hot-shoe with sync and data contacts and safety lock
Nikon Creative Lighting System (CLS)	i-TTL flash control, radio-controlled Advanced Wireless Lightin Advanced Wireless Lighting, modeling illumination, FV lock, co information communication, auto FP high-speed sync, AF-assi area AF
Sync terminal	AS-15 Sync Terminal Adapter (available separately)

White balance

White balance	Auto (2 types), incandescent, fluorescent (7 types), direct sunl cloudy, shade, preset manual (up to 6 values can be stored, sp balance measurement available during live view), choose colo (2500 K to 10000 K), all with fine-tuning

Bracketing

Bracketing types	Exposure, flash, white balance and ADL

Live view

Modes	Photo live view, movie live view
Lens servo	Autofocus (AF): Single-servo AF (AF-S); full-time servo AF (A Manual focus (M)
AF-area mode	Face-priority AF, wide-area AF, normal-area AF, subject-trackir
Autofocus	Contrast-detect AF anywhere in frame (camera selects focus automatically when face-priority AF or subject-tracking AF is se

Movie

Metering system	TTL exposure metering using main image sensor
Metering modes	Matrix, center-weighted or highlight-weighted
Frame size (pixels) and frame rate	3840 x 2160 (4K UHD); 30p (progressive), 25p, 24p 1920 x 1080; 60p, 50p, 30p, 25p, 24p 1280 x 720; 60p, 50p Actual frame rates for 60p, 50p, 30p, 25p and 24p are 59.94, 5 and 23.976 fps respectively; ★high quality available at all fram normal quality available at all sizes except 3840 x 2160
File format	MOV, MP4
Video compression	H.264/MPEG-4 Advanced Video Coding

Audio recording format	Linear PCM, AAC
Audio recording device	Built-in stereo or external microphone; sensitivity adjustable
ISO sensitivity (Recommended Exposure Index)	Mode M: Auto ISO sensitivity control (ISO 100 to Hi 5) availa selectable upper limit; manual selection (ISO 100 to 51200 ir or 1/2 EV) with additional options available equivalent to app 0.7, 1, 2, 3, 4 or 5 EV (ISO 1640000 equivalent) above ISO ! Modes P, S and A: Auto ISO sensitivity control (ISO 100 to H selectable upper limit EFFECT mode: Auto ISO sensitivity control (ISO 100 to Hi 5 Other modes: Auto ISO sensitivity control (ISO 100 to 12800
Active D-Lighting	Can be selected from same as photo settings, extra high, high or off
Maximum recording length	29 min. 59 s
Other options	Index marking, time-lapse movies, electronic vibration reductic

Monitor

Monitor	8-cm/3.2-in., approx. 922k-dot (VGA) tilting TFT touch-sensitiv 170° viewing angle, approx. 100% frame coverage, manual mc brightness control and an eye-sensor controlling display on/off

Playback

Playback	Full-frame and thumbnail (4, 9 or 72 images or calendar) playb playback zoom, playback zoom cropping, movie playback, phc

	movie slide shows, histogram display, highlights, photo informa data display, picture rating and auto image rotation

Interface

USB	Hi-Speed USB with Micro-B connector; connection to built-in U recommended
HDMI output	Type C HDMI connector
Accessory terminal	Wireless remote controllers: WR-1 and WR-R10, Remote cord GPS unit: GP-1/GP-1A (all available separately)
Audio input	Stereo mini-pin jack (3.5-mm diameter; plug-in power supporte
Audio output	Stereo mini-pin jack (3.5-mm diameter)

Wireless/Bluetooth

Wireless	Standards: IEEE 802.11b, IEEE 802.11g Operating frequency: 2412 to 2462 MHz (channels 1 to 11) Maximum output power: 8.4 dBm (EIRP) Authentication: Open system, WPA2-PSK
Bluetooth	Communication protocols: Bluetooth Specification Version 4.1
Range (line of sight)	Approx. 10 m/32 ft without interference; range may vary with s and presence or absence of obstacles

Supported languages

Supported languages	Arabic, Bengali, Bulgarian, Chinese (Simplified and Traditional Danish, Dutch, English, Finnish, French, German, Greek, Hinc Indonesian, Italian, Japanese, Korean, Marathi, Norwegian, Pe Portuguese (Portugal and Brazil), Romanian, Russian, Serbiar Swedish, Tamil, Telugu, Thai, Turkish, Ukrainian, Vietnamese

Power source

Battery	One EN-EL15a Rechargeable Li-ion Battery
AC adapter	EH-5b/EH-5c AC Adapter; requires EP-5B Power Connector (a separately)

Tripod socket

Tripod socket	1/4 in. (ISO 1222)

Dimensions/weight

Dimensions (W x H x D)	Approx. 135.5 x 104 x 72.5 mm/5.4 x 4.1 x 2.9 in.
Weight	Approx. 720 g/1 lb 9.4 oz with battery and memory card but wi cap; approx. 640 g/1 lb 6.6 oz (camera body only)

Operating environment

Operating environment	Temperature: 0 to 40°C/32 to 104°F humidity: 85% or less (no condensation)

Accessories

Supplied accessories (may differ by country or area)	EN-EL15a Rechargeable Li-ion Battery, MH-25a Battery Charg USB Cable, AN-DC3 BK Camera Strap, BF-1B Body Cap, DK- Cap, DK-28 Rubber Eyecup