

D5



FX format * 153 AF points * AF down to -4 EV * Dedicated AF Engine * 12 fps with stable VF image 100-102400 * ISO up to Hi 5 20.8 mega-pixels * EXPEED 5 * 180K-pixel RGB sensor * 4K UHD video * Touch-screen * XG Monitor * XQD x 2 or * CF x 2 * Built-in fast * wired LAN * Radio-controlled AWL

[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 FX format
Effective pixels	20.8 million
Image sensor	35.9 x 23.9 mm CMOS sensor
Total pixels	21.33 million
Dust-reduction system	Image sensor cleaning, Image Dust Off reference data (Capture NX-D software required)
Storage	

Image size (pixels)

- FX (36x24) image area: 5568 x 3712 (L), 4176 x 2784 (M), 2784 x 1856 (S)
- 1.2x (30x20) image area: 4640 x 3088 (L), 3472 x 2312 (M), 2320 x 1544 (S)
- DX (24x16) image area: 3648 x 2432 (L), 2736 x 1824 (M), 1824 x 1216 (S)
- 5:4 (30x24) image area: 4640 x 3712 (L), 3472 x 2784 (M), 2320 x 1824 (S)

	1856 (S)
	<ul style="list-style-type: none"> • Photographs taken during movie recording at a frame size of 3840 x 2160: 3840 x 2160 • FX-format photographs taken during movie recording at a frame size of 1920 x 1080 or 1280 x 720: 5568 x 3128 (L), 4176 x 2344 (M), 2784 x 1560 (S) • DX-format photographs taken during movie recording at a frame size of 1920 x 1080 or 1280 x 720: 3648 x 2048 (L), 2736 x 1536 (M), 1824 x 1024 (S) • Photographs taken during movie recording at a frame size of 1920 x 1080 crop: 1920 x 1080
File format	<ul style="list-style-type: none"> • NEF (RAW): 12 or 14 bit (lossless compressed, compressed or uncompressed); large, medium, and small available (medium and small images are recorded at a bit depth of 12 bits using lossless compression) • TIFF (RGB) • JPEG: JPEG-Baseline compliant with fine (approx. 1:4), normal (approx. 1:8) or basic (approx. 1:16) compression; optimal quality compression available • NEF (RAW)+JPEG: Single photograph recorded in both NEF (RAW) and JPEG formats
Picture Control system	Standard, Neutral, Vivid, Monochrome, Portrait, Landscape and Flat; selected Picture Control can be modified; storage for custom Picture Controls
Storage media	<ul style="list-style-type: none"> • XQD-Type (Models for use with XQD cards): XQD cards • CF-Type (Models for use with CompactFlash cards): Type I CompactFlash memory cards (UDMA7 compliant)
Double card slots	Slot 2 can be used for overflow or backup storage or for separate storage of copies created using NEF+JPEG; pictures can be copied between cards
File system	DCF 2.0, Exif 2.3, PictBridge
Viewfinder	
Viewfinder	Eye-level pentaprism single-lens reflex viewfinder
Frame coverage	<ul style="list-style-type: none"> • FX (36x24): Approx. 100% horizontal and 100% vertical • 1.2x (30x20): Approx. 97% horizontal and 97% vertical • DX (24x16): Approx. 97% horizontal and 97% vertical • 5:4 (30x24): Approx. 97% horizontal and 100% vertical
Magnification	Approx. 0.72x (50 mm f/1.4 lens at infinity, -1.0 m^{-1})
Eyepoint	17 mm (-1.0 m^{-1} ; from center surface of viewfinder eyepiece lens)
Diopter adjustment	-3 to $+1 \text{ m}^{-1}$
Focusing screen	Type B BriteView Clear Matte Mark IX screen with AF area brackets

	(framing grid can be displayed)
Reflex mirror	Quick return
Depth-of-field preview	Pressing Pv button stops lens aperture down to value selected by user (A and M modes) or by camera (P and S modes)
Lens aperture	Instant return, electronically controlled
Lens	
Compatible lenses	Compatible with AF NIKKOR lenses, including type G, E, and D lenses (some restrictions apply to PC lenses), DX lenses (using DX [24x16] 1.5x image area), AI-P NIKKOR lenses, and non-CPU AI lenses (exposure modes A and M only); IX-NIKKOR lenses, lenses for the F3AF, and non-AI lenses cannot be used: The electronic rangefinder can be used with lenses that have a maximum aperture of f/5.6 or faster (the electronic rangefinder supports the 15 focus points with lenses that have a maximum aperture of f/8 or faster, of which 9 points are available for selection)
Shutter	
Type	Electronically-controlled vertical-travel focal-plane mechanical shutter; electronic front-curtain shutter available in mirror up release mode
Speed	1/8000 to 30 s in steps of 1/3, 1/2 or 1 EV, bulb, time, X250
Flash sync speed	X=1/250 s; synchronizes with shutter at 1/250 s or slower
Release	
Release mode	S (single frame), CL (continuous low speed), CH (continuous high speed), Q (quiet shutter-release), Self-timer, MUP (mirror up)
Approximate frame advance rate	Up to 10 fps (CL); 10 to 12 fps, or 14 fps with mirror up (CH); or 3 fps (quiet continuous mode)
Self-timer	2 s, 5 s, 10 s, 20 s; 1 to 9 exposures at intervals of 0.5, 1, 2 or 3 s
Exposure	
Metering	TTL exposure metering using RGB sensor with approx.180K (180,000) pixels
Metering method	<ul style="list-style-type: none"> • 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 • Center-weighted: Weight of 75% given to 12-mm circle in center of frame; diameter of circle can be changed to 8, 15 or 20 mm, or weighting can be based on average of entire frame (non-CPU lenses use 12-mm circle) • Spot: Meters 4-mm circle (about 1.5% of frame) centered on selected focus point (on center focus point when non-CPU lens is used) • Highlight-weighted: Available with type G, E and D lenses
Range	
(ISO 100, f/1.4 lens, 20°C/68°F)	<ul style="list-style-type: none"> • Matrix or center-weighted metering: -3 to 20 EV • Spot metering: 2 to 20 EV

- Highlight-weighted metering: 0 to 20 EV

Exposure meter coupling	Combined CPU and AI
Mode	Programmed auto with flexible program (P); shutter-priority auto (S); aperture-priority auto (A); manual (M)
Exposure compensation	-5 to +5 EV in increments of 1/3, 1/2 or 1 EV
Exposure lock	Luminosity locked at detected value
ISO sensitivity (Recommended Exposure Index)	ISO 100 to 102400 in steps of 1/3, 1/2 or 1 EV; can also be set to approx. 0.3, 0.5, 0.7 or 1 EV (ISO 50 equivalent) below ISO 100 or to approx. 0.3, 0.5, 0.7, 1, 2, 3, 4 or 5 EV (ISO 3280000 equivalent) above ISO 102400; auto ISO sensitivity control available
Active D-Lighting Focus	Can be selected from auto, extra high +2/+1, high, normal, low or off
Autofocus	Multi-CAM 20K autofocus sensor module with TTL phase detection, fine-tuning and 153 focus points (including 99 cross-type sensors and 15 sensors that support f/8), of which 55 (35 cross-type sensors and 9 f/8 sensors) are available for selection
Detection range	-4 to 20 EV (ISO 100, 20°C/68°F) <ul style="list-style-type: none"> • Autofocus (AF): Single-servo AF (AF-S); continuous-servo AF (AF-C); predictive focus tracking automatically activated according to subject status • Manual focus (M): Electronic rangefinder can be used
Lens servo	
Focus point	153 focus points, of which 55 or 15 are available for selection
AF-area mode	Single-point AF, 25-, 72-, or 153-point dynamic-area AF, 3D-tracking, group-area AF, auto-area AF
Focus lock	Focus can be locked by pressing shutter-release button halfway (single-servo AF) or by pressing the center of the sub-selector
Flash	
Flash control	TTL: i-TTL flash control using RGB sensor with approx. 180K (180,000) pixels; i-TTL balanced fill-flash for digital SLR is used with matrix, center-weighted, and highlight-weighted metering, standard i-TTL fill-flash for digital SLR with spot metering
Flash mode	Front-curtain sync, slow sync, rear-curtain sync, red-eye reduction, red-eye reduction with slow sync, slow rear-curtain sync, off; auto FP high-speed sync supported
Flash compensation	-3 to +1 EV in increments of 1/3, 1/2 or 1 EV
Flash-ready indicator	Lights when optional flash unit is fully charged; flashes after 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)	Supported
Radio-controlled Advanced Wireless Lighting	Supported
Unified flash control	Supported
Sync terminal	ISO 519 sync terminal with locking thread
White balance	Auto (3 types), incandescent, fluorescent (7 types), direct sunlight, flash, cloudy, shade, preset manual (up to 6 values can be stored, spot white balance measurement available during live view), choose color temperature (2500 K to 10000 K); all with fine-tuning
White balance	Auto (3 types), incandescent, fluorescent (7 types), direct sunlight, flash, cloudy, shade, preset manual (up to 6 values can be stored, spot white balance measurement available during live view), choose color temperature (2500 K to 10000 K); all with fine-tuning
Bracketing	
Bracketing types	Exposure, flash, white balance, and ADL
Live View	
Live view mode	Photo live view with available silent mode, Movie live view <ul style="list-style-type: none"> Autofocus (AF): Single-servo AF (AF-S); full-time-servo AF (AF-F) Manual focus (M)
Lens servo	<ul style="list-style-type: none"> Autofocus (AF): Single-servo AF (AF-S); full-time-servo AF (AF-F) Manual focus (M)
AF-area mode	Face-priority AF, wide-area AF, normal-area AF, subject-tracking AF
Autofocus	Contrast-detect AF anywhere in frame (camera selects focus point automatically when face-priority AF or subject-tracking AF is selected)
Movie	
Metering	TTL exposure metering using main image sensor
Metering method	Matrix, center-weighted or highlight-weighted <ul style="list-style-type: none"> 3840 x 2160 (4K UHD); 30p (progressive), 25p, 24p 1920 x 1080; 60p, 50p, 30p, 25p, 24p 1920 x 1080 crop; 60p, 50p, 30p, 25p, 24p 1280 x 720; 60p, 50p
Frame size (pixels) and frame rate	Actual frame rates for 60p, 50p, 30p, 25p, and 24p are 59.94, 50, 29.97, 25, and 23.976 fps respectively; ★high quality available at all frame sizes, normal quality available at all sizes except 3840 x 2160
File format	MOV
Video compression	H.264/MPEG-4 Advanced Video Coding
Audio recording format	Linear PCM
Audio recording device	Built-in stereo or external microphone; sensitivity adjustable

ISO sensitivity

- Exposure modes P, S and A: Auto ISO sensitivity control (ISO100to Hi 5) with selectable upper limit
- Exposure mode M: Auto ISO sensitivity control (ISO 100 to Hi 5) available with selectable upper limit; manual selection (ISO 100 to 102400 in steps of 1/3, 1/2, or 1 EV) with additional options available equivalent to approx. 0.3, 0.5, 0.7, 1, 2, 3, 4 or 5 EV (ISO 3280000 equivalent) above ISO 102400

Other movie options Index marking, time-lapse movies

Monitor

8-cm/3.2-in., approx. 2359k-dot (XGA) TFT touch-sensitive LCD with 170° viewing angle, approx. 100% frame coverage, and manual monitor brightness control

Monitor

Playback

Full-frame and thumbnail (4, 9 or 72 images) playback with playback zoom, movie playback, photo and/or movie slide shows, histogram display, highlights, photo information, location data display, auto image rotation, picture rating, voice memo input and playback, and IPTC information embedding and display

Playback

Interface

USB

SuperSpeed USB (USB 3.0 Micro-B connector); connection to built-in USB port is recommended

HDMI output

Type C HDMI connector

Audio input

Stereo mini-pin jack (3.5-mm diameter; plug-in power supported)

Audio output

Stereo mini-pin jack (3.5-mm diameter)

10-pin remote terminal

Can be used to connect optional remote control, optional WR-R10 (requires WR-A10 WR Adapter) or WR-1 Wireless Remote Controller, GP-1/GP-1A GPS Unit, or GPS device compliant with NMEA0183 version 2.01 or 3.01 (requires optional MC-35 GPS Adapter Cord and cable with D-sub nine-pin connector)

RJ-45 connector

Ethernet

- Standards: IEEE 802.3ab (1000BASE-T)/IEEE 802.3u (100BASE-TX)/IEEE 802.3 (10BASE-T)
- Data rates: 10/100/1000 Mbps with auto detect (maximum logical data rates according to IEEE standard; actual rates may differ)
- Port: 1000BASE-T/100BASE-TX/10BASE-T (AUTO-MDIX)

Peripheral connector

For WT-6/A/B/C, WT-5A/B/C/D Wireless Transmitter

Supported languages

Supported languages

Arabic, Bengali, Bulgarian, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hindi,

Hungarian, Indonesian, Italian, Japanese, Korean, Marathi, Norwegian, Persian, Polish, Portuguese (Portugal and Brazil), Romanian, Russian, Serbian, Spanish, Swedish, Tamil, Telugu, Thai, Turkish, Ukrainian, Vietnamese

Power source

Battery One EN-EL18a Rechargeable Li-ion Battery

AC adapter EH-6b AC Adapter; requires EP-6 Power Connector (available separately)

Tripod socket

Tripod socket 1/4 in. (ISO 1222)

Dimensions / weight

Dimensions (W x H x D) Approx. 160 x 158.5 x 92 mm/6.3 x 6.3 x 3.7 in.

Weight

- XQD-Type (Models for use with XQD cards): Approx. 1405 g/3 lb 1.6 oz with battery and two XQD memory cards but without body cap and accessory shoe cover; approx. 1235 g/2 lb 11.6 oz (camera body only)
- CF-Type (Models for use with CompactFlash cards): Approx. 1415 g/3 lb 1.9 oz with battery and two CompactFlash memory cards but without body cap and accessory shoe cover; approx. 1240 g/2 lb 11.8 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-EL18a Rechargeable Li-ion Battery, MH-26a Battery Charger, UC-E22 USB Cable, AN-DC15 Strap, BF-1B Body Cap, BS-3 Accessory Shoe Cover, USB Cable Clip, HDMI Cable Clip, DK-27 Eyepiece Adapter, DK-17F Fluorine-Coated Finder Eyepiece, BL-6 Battery Chamber Cover

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- WT-6/A/B/C Wireless Transmitter, SB-5000 Speedlight and WR-1/WR-R10 Wireless Remote Controller are controlled by the United States Export Administration Regulations. The permission of the U.S. government is not required for export to

countries other than the following, which as of this writing are subject to embargo or special controls: Cuba, Iran, North Korea, Sudan, and Syria (list subject to change).

Specifications are subjects to change without notice.