



M I R R O R L E S S R E I N V E N T E D

A N E W B E N C H M A R K
I N O P T I C A L P E R F O R M A N C E



Z series™

CAPTURE TOMORROW



Nikon mirrorless cameras, designed to deliver new imaging possibilities

Z series

The Z mount system is more than a mirrorless camera system. It is Nikon's answer to the ever-increasing demand for superior image quality in stills and movies, drawing on over a century of experience in optical manufacturing. The secret lies in the system's large lens mount with 55-mm inner diameter and short 16-mm flange focal distance. The new Z mount brings enormous flexibility to the optical design of lenses — the most critical element in image making. As a result, the new NIKKOR Z lenses are able to deliver an unprecedented level of definition and depth to your images. Furthermore, the Z system maintains access to the long-cherished NIKKOR F lens range via an adapter. This slim and compact new system also offers a robust, tactile design that inherits Nikon's proven reliability and operability, allowing you to capture scenes with confidence, even in harsh environments. Placing equal emphasis on stills and videos, the Z system is an invitation into a new world of unprecedented sharpness, for everyone with a passion for making beautiful images.









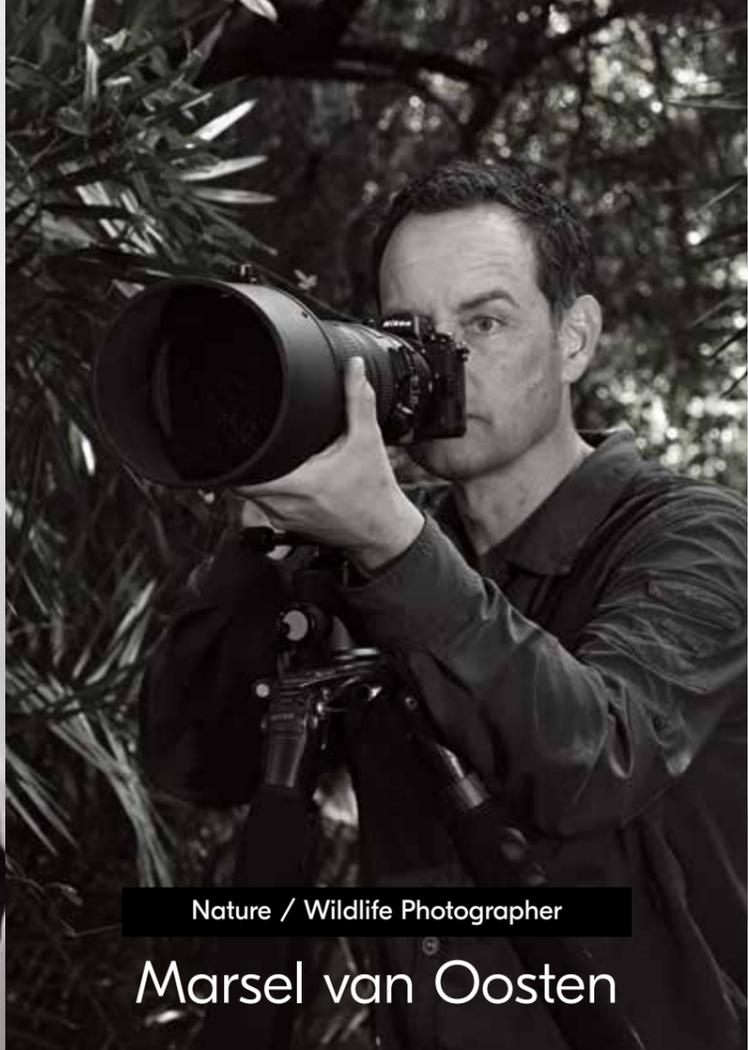






Urban Architect / Photographer

Vivien Liu



Nature / Wildlife Photographer

Marsel van Oosten



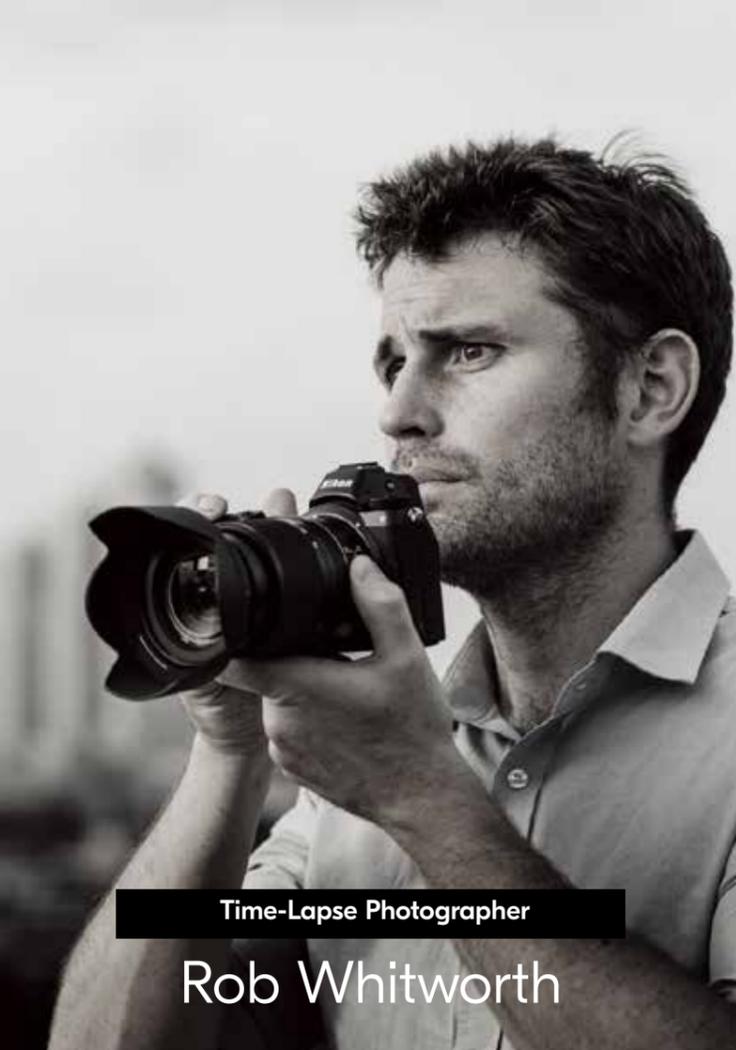
Wedding Photographer

Monika Zaldo



Adventure / Wildlife Photographer

Keith Ladzinski



Time-Lapse Photographer

Rob Whitworth



Video Production Company

Beyond Content



Social Media Content Creator / Photographer

Brandon Woelfel



Food / Lifestyle Photographer

Dominique Cherry



How far can optical performance evolve?

Lenses take on the essential role of receiving information about subjects in the form of light. If the information transmitted by light can be conveyed to a camera's image sensor in the purist possible form, could this be the next stage in the evolution of image expression? Based on this concept, Nikon's new Z mount mirrorless camera system is designed to enhance the optical performance of lenses thanks to a large-diameter mount and short flange focal distance. Overwhelmingly sharp resolution that reproduces every minute detail accurately, lens aberrations suppressed to the utmost, superior reproduction of point light sources, natural and beautiful bokeh: all of these factors flow forth from this one simple concept.

NIKKOR Z lenses open up a new dimension in optical performance.

NIKKOR Z | S-Line



• Camera body: Z 7 • Lens: NIKKOR Z 24-70mm f/4 S • Exposure: [M] mode, 1/2 s, f/4 • White balance: Auto 1 • Sensitivity: ISO 400 • Picture Control: Standard © Tamara Lackey

NIKKOR Z 24-70mm f/4 S

Portable, high-performance standard zoom lens, with superb rendering that can transform every scene into a work of art

Outstanding optical performance is realized by employing an aspherical ED glass element and three aspherical lens elements. Featuring optical design that minimizes various lens aberrations across all focus distances, a frequently used focal-length range covering 24 to 70 mm, and a constant maximum aperture of f/4 throughout the entire zoom range, this lens can be applied to a wide range of fields and subjects. Sagittal coma flare is effectively reduced to ensure exquisite point-image reproduction of point light sources despite being a zoom lens. The easy-to-carry, lightweight body employs a retractable lens mechanism, resulting in high portability and superior operability that can reliably capture precious moments.





• Camera body: Z 7 • Lens: NIKKOR Z 35mm f/1.8 S • Exposure: [M] mode, 1/1000 s, f/5 • White balance: Auto 1 • Sensitivity: ISO 100 • Picture Control: Standard
© Ross Harvey



• Camera body: Z 7 • Lens: NIKKOR Z 50mm f/1.8 S • Exposure: [M] mode, 1/200 s, f/1.8 • White balance: Auto 1 • Sensitivity: ISO 100 • Picture Control: Portrait
© Kenta Aminaka

NIKKOR Z 35mm f/1.8 S

A fast, wide-angle lens useful in a wide variety of situations, delivering superior rendering that overwhelms other 35mm f/1.8 lenses

While realizing quiet, high-speed and highly accurate AF control via the adoption of a multi-focusing system, this lens achieves superb rendering performance and suppresses aberrations to the maximum possible extent. The employment of two ED glass elements effectively compensates for axial chromatic aberration, while three aspherical lens elements effectively suppress sagittal coma flare for superb point-image reproduction of point light sources even in the peripheral areas of the frame. It also delivers the soft and natural bokeh characteristics that only a fast lens can offer.



NIKKOR Z 50mm f/1.8 S

A fast prime lens with superior rendering performance that redefines perceptions of what a 50mm f/1.8 lens can do

Outstanding resolving power enables the reproduction of even minute textures across the entire frame. Axial chromatic aberration is effectively reduced through the employment of two ED glass elements, while three aspherical lens elements effectively compensate sagittal coma flare for superb point-image reproduction of point light sources even at the maximum aperture. The natural and beautiful bokeh characteristics that only a fast lens can achieve are provided even at short focus distances. In addition, a powerful, newly developed stepping motor enables outstandingly quiet and accurate AF control for both still and movie shooting.





• Camera body: Z 7 • Lens: NIKKOR Z 24-70mm f/2.8 S • Image quality: JPEG FINE • Shutter speed: 1/1000s, f/5.6

© Ami Vitale



• Camera body: Z 7 • Lens: NIKKOR Z 14-30mm f/4 S • Image quality: JPEG FINE • Exposure: [A] mode, 10 s, f/8 • White balance: AUTO • Sensitivity: ISO 100 • Picture Control: Standard © Jimmy McIntyre

NIKKOR Z 24-70 mm f/2.8 S

Outstanding optical performance achieved with a fast zoom lens featuring f/2.8 maximum aperture

The NIKKOR Z 24-70mm f/2.8 S, one of the high-performance S-Line models, is a fast standard zoom lens with f/2.8 maximum aperture covering the frequently used focal-length range from wide-angle 24 mm to 70 mm. Superior optical performance is realized by fully utilizing the latest optical technologies while maximizing the high flexibility in lens design that the Z mount system provides. For the AF drive system, the new “multi-focusing system” is adopted. While contributing to highly accurate, high-speed AF, it achieves an extremely sharp focal plane across the entire shooting range, including close distances, for any scene.



NIKKOR Z 14-30 mm f/4 S

Filter-attachable ultra-wide-angle zoom lens offering portability, high image quality and expanded shooting possibilities

The NIKKOR Z 14-30mm f/4 S covers a focal length from 14 mm to 30 mm, allowing it to deliver images with dynamic perspectives, as well as capture a broad range of scenes. With its small diameter and slim front lens element, it is the world’s first* wide-angle zoom lens with a focal length from 14 mm that is also filter-attachable. Photographers can shoot more creatively with Polarizing or ND filters, which cannot be used with conventional lenses. Because the lens can be protected with a filter or lens hood, is sealed for dust- and drip-resistance and has a fluorine coat applied to its front surface, photographers can shoot more actively with ease. The maximum aperture is fixed at f/4 at any zoom setting. Photographers can shoot at faster shutter speeds without raising sensitivity even for relatively dark scenes.

* Among FX-format (full-size) compatible interchangeable lenses for digital cameras, available as of January 8, 2019. Based on Nikon research.





• Camera body: Z 7 • Lens: AF-S Micro NIKKOR 60mm f/2.8G ED + Mount Adapter FTZ • Exposure: [M] mode, 1/160 s, f/3.2 • White balance: Day white fluorescent, B3.50, M3.50 • Sensitivity: ISO 100 • Picture Control: Portrait © Lafugue Logos

Mount Adapter FTZ

The vast NIKKOR F lens lineup continues to shine brightly with Nikon mirrorless cameras

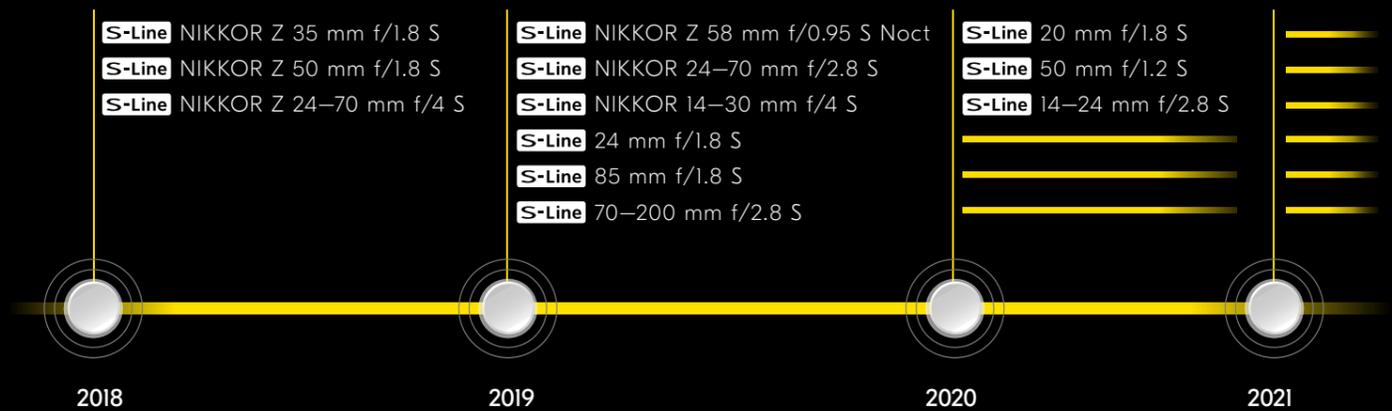
The Mount Adapter FTZ allows Nikon D-SLR photographers to continue utilizing the outstanding performance of their NIKKOR F lenses seamlessly with the new mirrorless camera system. Approx. 360 NIKKOR F lenses are compatible* with the FTZ, including 93 AF-P/AF-S/AF-I lenses that enable shooting with AF and AE.

* Supported features differ according to each lens.



More light. More possibilities

This is just the beginning. The family of NIKKOR Z lenses is set to expand.



Nikon's first FX-format mirrorless camera with 45.7 effective megapixels gets the most out of the NIKKOR Z lenses' unprecedented optical performance

Z 7



Evolution never ends for high-pixel-count cameras. Featuring 45.7 effective megapixels in a compact body, the Z 7 — Nikon's brand new, FX-format mirrorless camera — fully exploits the unprecedented optical performance offered by the new NIKKOR Z lenses and delivers overwhelming edge-to-edge detail in both stills and videos. In addition, its wide, 493-point hybrid AF system with superb focusing accuracy and the new EXPEED 6 image-processing engine contribute to achieving sharper images than ever. The 3690k-dot Quad-VGA electronic viewfinder provides a clear view and an amazingly comfortable shooting experience, thanks to Nikon's advanced optics and imaging expertise. And with 10-bit N-Log as well as 4K UHD and 8K time-lapse* movie, it meets the needs of demanding video creators too. Condensing all of this power into a compact yet robust body, the Z 7 promises to take you to a new world of truly amazing images.

* 8K time-lapse movie production requires third-party software.



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Taking full advantage of the NIKKOR Z lens' high optical performance and 45.7 effective megapixels, the Z 7 can deliver sharpness edge to edge.



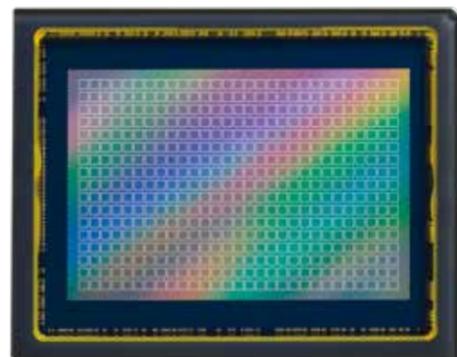
Delivering unparalleled resolution with NIKKOR Z lenses — Backside illumination CMOS sensor featuring 45.7 effective megapixels and ISO 64-25600

At the heart of the Z 7 is a new FX-format backside illumination CMOS sensor, featuring 45.7 effective megapixels and focal-plane phase-detection AF pixels. It takes full advantage of NIKKOR Z lenses' unparalleled optical performance, bringing a new level of sharpness to your images. What's more, by increasing the volume of signal accumulated in the photodiodes as much as possible, the Z 7 achieves a standard sensitivity range of ISO 64-25600 (expandable to ISO 32-102400 equivalent) with advanced image processing by EXPEED 6.

Focal-plane phase-detection AF pixels are efficiently distributed throughout the sensor, allowing it to provide accurate AF over a wide area of the frame. Meanwhile, the sensor's copper-wiring circuits enable rapid read-out of AF information and the huge volume of data from

its 45.7 effective megapixels, while realizing continuous shooting at up to 9 fps*.

* AE is fixed at the first frame.



EXPEED 6

Crisper definition in stills and movies with a new sharpness parameter — EXPEED 6

The new EXPEED 6 image-processing engine helps maximize the high resolving power of NIKKOR Z and NIKKOR F lenses, along with the camera's high-pixel-count image sensor performance. It's designed to bring more sharpness to your images while effectively reducing noise, allowing the camera to achieve a maximum standard sensitivity of ISO 25,600.

The engine now supports a mid-range sharpening parameter* for Picture Control, Nikon's unique image creation system, which works together with the existing

sharpening and clarity parameters to effectively enhance sharpness for both stills and videos.

EXPEED 6 also offers diffraction compensation, which helps capture landscapes and cityscapes crisply even at slow apertures. And with the introduction of Creative Picture Controls, it enables you to create your own look more easily than ever before.

* High image quality mode only for video.

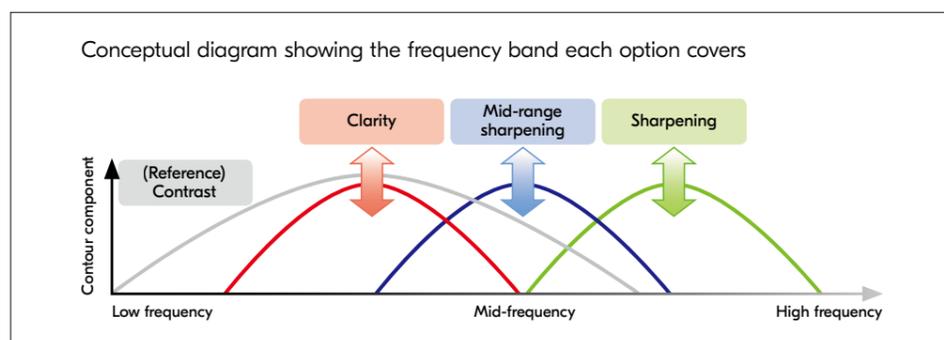
More effective sharpness adjustments — Mid-range sharpening and quick sharp for Picture Controls

The Z 7 introduces a mid-range sharpening parameter* for Picture Control, Nikon's image creation system. It sits between the existing clarity parameter, which adjusts overall sharpness, and sharpening, which adjusts the appearance of details and patterns. Used together, they give you finer control over the various textures within the frame to make them look sharper or softer. If you want to control sharpening, clarity and mid-range sharpening in a simpler way, "quick sharp" is available to adjust them with a single slider.

* High image quality mode only for video.



Mid-range sharpening menu



Mid-range sharpening: -5



Mid-range sharpening: 2 (Default Standard)



Mid-range sharpening: 5



Quick sharp: -2



Quick sharp: 0 (Default Standard)



Quick sharp: 2

Softer ◀ ▶ Sharper

Pursue your own look — Creative Picture Control

In addition to the conventional Picture Control, the Z 7 features 20 creative options that can be used to give an artistic look to your images instantly, encouraging you to explore your creativity further. The effect level is adjustable from 0 to 100 in increments of 10 steps. It is

also possible to create custom Picture Controls by altering each preset's parameters — such as sharpening and contrast — in-camera, or using Picture Control Utility 2 on your computer. Creative Picture Controls are available in all exposure modes, as well as movie recording.

The following images were processed at effect level 100.



Dream

Provides gentle expression, offering lightness and warmth. Its pale orange tone brightens darker areas and smoothens the edges of subjects, giving a very soft appearance.



Morning

Creates the atmosphere of an image taken in the fresh morning air. Dark areas are slightly brightened and the entire tone is a little bluish with a sense of transparency. This achieves a refreshing image.



Pop

The highest degree of saturation is applied to produce more colorful tones and textures. Even with a brighter image, the original tone of the subject can be emphasized.



Sunday

Produces an open atmosphere as if the image was captured on a sunny Sunday afternoon. By increasing contrast, highlights are largely blown out. This helps the subject project a stronger impression.



Somber
Projects a melancholic, calm atmosphere like that experienced after rain. By increasing saturation and suppressing brightness, colors can be clearly recognized despite the dark tone.



Dramatic
Delivers a profound impression emphasizing light and shade. Even with dark-toned images, highlights can be expressed more brightly. Suitable for dramatic expression of light.



Sepia
Provides sepia images with faded colors that create a classical impression. A very tasteful image tone is achieved, like a monochrome picture that has been colored. The toning level can be adjusted according to shooting intentions.



Blue
Conveys a calm and melancholic mood. The whole image projects a quiet, bluish tone. Images like cyanotypes can be obtained depending on the subject. The toning level can be adjusted as desired.



Silence
Produces a transient and lonely contemplative feeling. Tranquil, soft images with reduced saturation can be achieved.



Bleached
Gives a serious impression with a metallic feel. Greenish, low-saturation images can be created. Details of subjects can be minutely rendered for tasteful expression with a silvery tone.



Red
Produces striking retro images featuring a heavy tone that strongly emphasizes red. Images like those taken with red-scale film can be captured. The toning level can be adjusted according to your intentions.



Pink
Delivers romantic expression with a soft and gentle tone. Images become slightly pinkish. By further emphasizing pink, an even softer atmosphere can also be created. The toning level can be adjusted as required.



Melancholic
Produces retro expression with a slightly melancholic atmosphere. The entire tone is slightly magenta-tinged. Because saturation and edge sharpening are more restrained, images with a soft impression can be captured.



Pure
A soft and pure image can be attained, as if viewed from behind a veil. The whole image projects a soft, bluish tone, and especially when perceived from highlights and shadows, this delivers a tranquil ambience.



Charcoal
Produces monochrome images with a gentle atmosphere resembling black-and-white drawings. Soft, monochrome images with minimal loss of detail in highlights and shadows can be obtained. By weakening edge sharpness, a softer feel can be retained for monochrome pictures that otherwise usually tend to give a cold impression.



Graphite
Light can be effectively expressed with sharpened edges and lustrous black. Solid, monochrome images with accentuated contrast and edge sharpness can be produced. Suitable for capturing crisp images.



Denim
A deep tone with strong blue. While high saturation is retained, blue is intentionally shifted to cyan. The blue of a subject can thus be more strongly accentuated.



Toy
Generates a distinctive look, inspired by toy cameras. While high saturation is retained, blue is intentionally shifted to indigo blue. Compared to the expression obtained with an actual toy camera, a deeper and calmer impression can be realized.



Binary
Delivers powerful rendering that emphasizes the subject and suppresses details. With two tones only, crisp monochrome images are created. The world of black and white can be expressed in an individual way.



Carbon
Provides stable and deep images with black-based gradation. Black is strongly emphasized, resulting in dark images. Recommended for taking serious, dignified images.

Additional effect level examples

Dream



Toy



Red



Diffraction compensation: ON

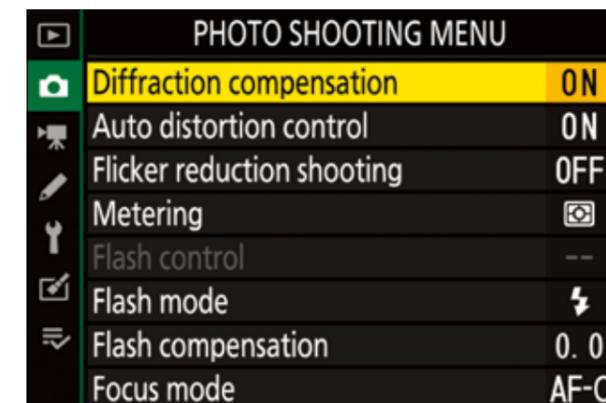


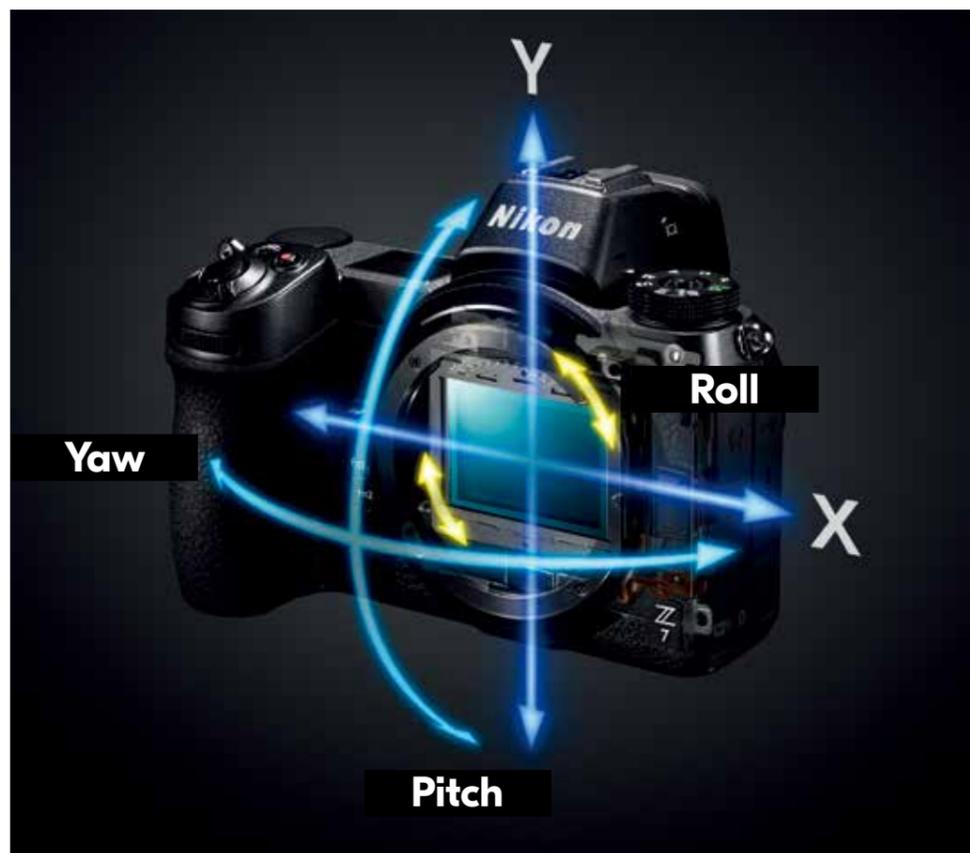
Diffraction compensation: OFF



Reduced image blur at smaller apertures — Diffraction compensation

With digital cameras, if you select a small aperture to increase depth of field when shooting cityscapes or landscapes, it may cause a loss of sharpness across the image due to diffraction. The Z 7's newly employed diffraction compensation function automatically reduces the effects of diffraction when a small aperture is used. As a result, you can get the most out of the high resolving power of NIKKOR Z and NIKKOR F lenses and the camera's high-pixel-count image sensor.





Approx. 5.0-stop vibration reduction for a wide variety of scenes — Nikon's first*¹ in-camera VR

The Z 7 incorporates an in-camera vibration reduction (VR) mechanism, providing an effect equivalent to a shutter speed up to approx. 5.0 stops*² faster. It detects camera shake using the image's motion vector information as well as the gyro sensor, and then drives the vibration reduction unit to offer compensation in five directions: yaw, pitch, X, Y, and roll, which is likely to be noticeable

in videos. It also works with NIKKOR F lenses, including non-VR lenses*³.

*¹ Among interchangeable lens digital cameras.

*² Based on CIPA Standards. This value is achieved when NIKKOR Z 24-70mm f/4 S attached, with zoom set at the maximum telephoto position.

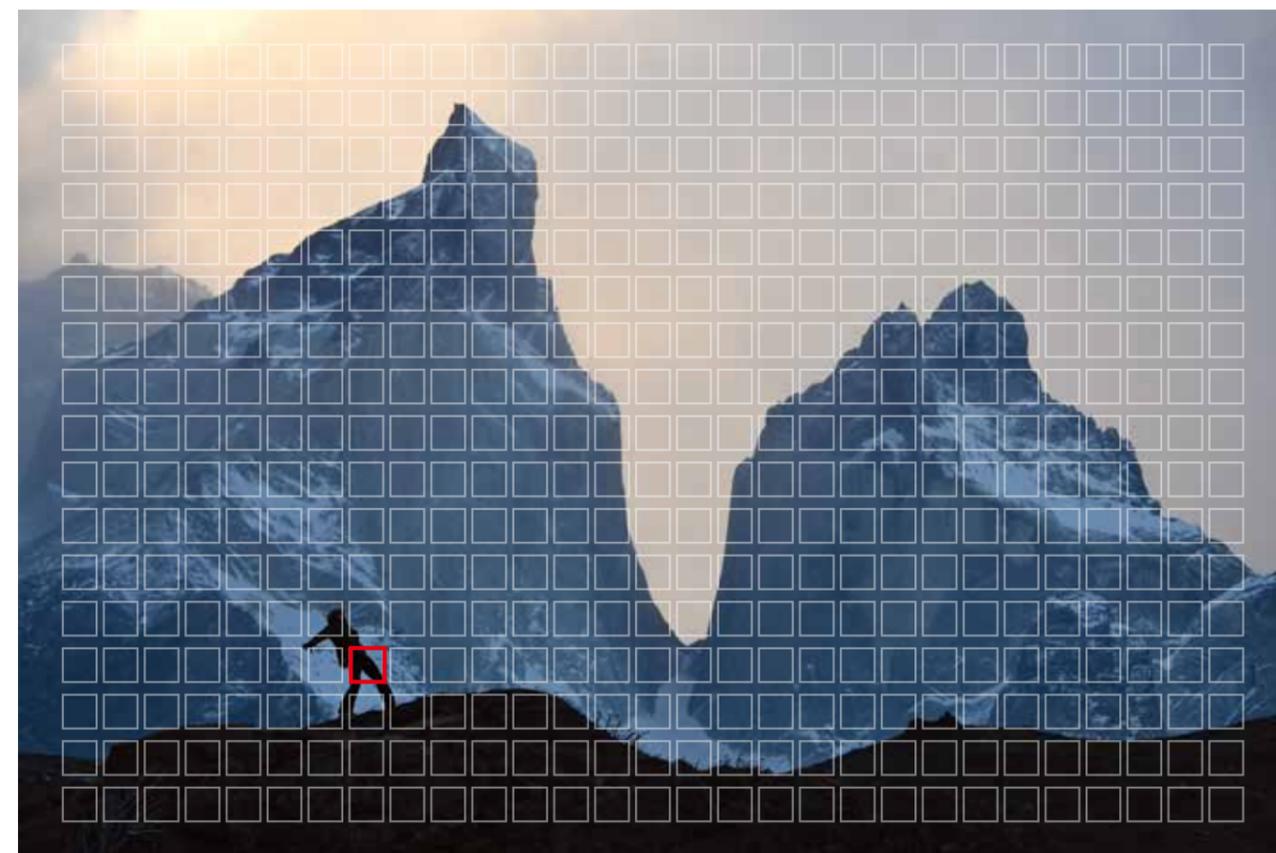
*³ Requires Mount Adapter FTZ. When using NIKKOR F lenses, the VR effect is slightly lower compared to using NIKKOR Z lenses.



VR On



VR Off



Accurate focus across 90% of the frame — 493-point hybrid AF system

To experience the true potential of the Z 7's 45.7 effective megapixels and the high resolution of the NIKKOR Z lenses, extremely sharp focus is essential. The Z 7 adopts a newly developed hybrid AF system that offers extremely wide coverage — approx. 90% of the frame both horizontally and vertically with 493 focus points*¹. Using an AF algorithm that's optimized for the FX-format sensor, it achieves focus on the subject, utilizing focal-plane phase-detection AF or contrast-detect AF as appropriate. Thanks to its wide coverage, it can also

focus on subjects in the periphery, bringing a new level of creative freedom. What's more, the NIKKOR Z lenses are designed to meet a stricter AF standard, ensuring high-resolution performance and superior AF accuracy. And when shooting stills of dark scenes, activating the camera's low-light AF function offers AF down to -4 EV*².

*¹ In FX format with single-point AF.

*² With f/2.0 lens attached, ISO 100, 20°C/68°F.

Flexible autofocus options for every scenario — Six AF-area modes

Pinpoint AF*

Uses a focus area half the size of single-point AF to attain precise focus on a very small area of the subject — particularly useful for capturing subjects such as the pistil of a flower, or an intricately designed accessory.

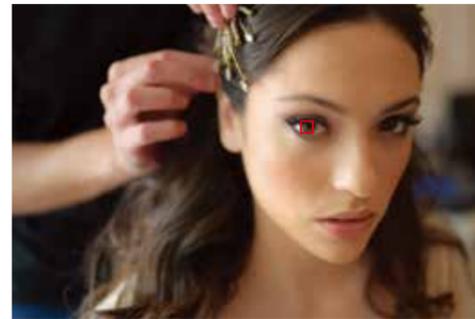
* Available when AF-S is selected for still images. Contrast-detect AF is activated when this mode is set.



Pinpoint AF

Single-point AF

Focuses on the subject using just the selected focus point. This is ideal when you want to achieve focus on a particular part of a stationary subject, such as a person's eye.



Single-point AF

Dynamic-area AF*

Focuses on the subject using the selected focus point. If the subject briefly leaves the selected point, the camera will focus based on information from the surrounding AF points.

* Available when AF-C is selected for still images.

Wide-area AF (S/L)

Captures a subject with a wider focus area. Two AF area size options are available, depending on the size of the subject.

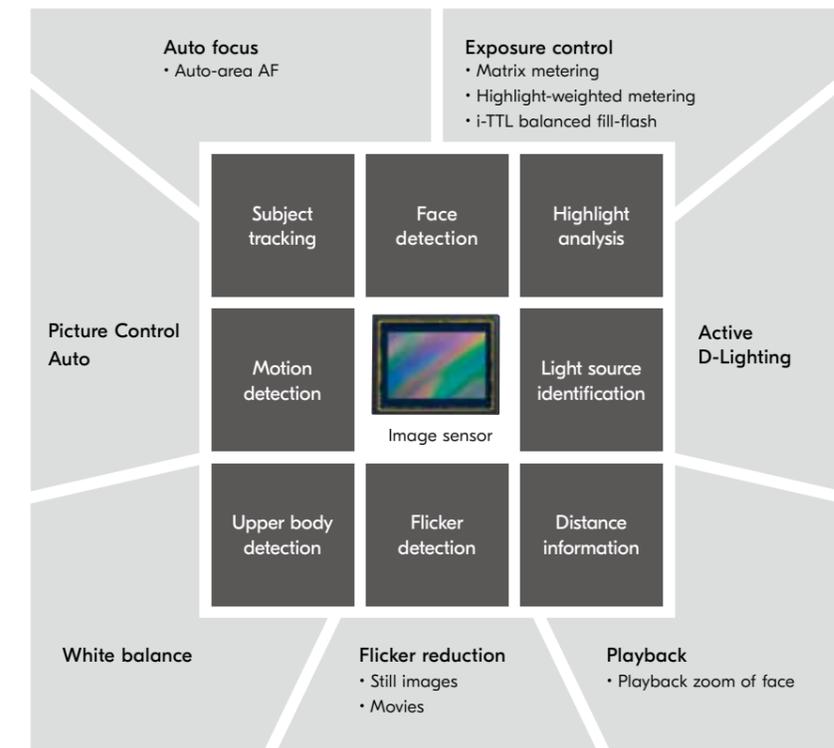
Auto-area AF

Using information from all focus points, the camera automatically detects the main subject and focuses on it. When “On” is selected for “Auto-area AF face detection,” the camera automatically detects faces, and users can choose which face to focus on if there is more than one. Thanks to a newly developed face-detection and subject-tracking algorithm, the AF can keep tracking a subject's face if they turn their head or briefly look away.



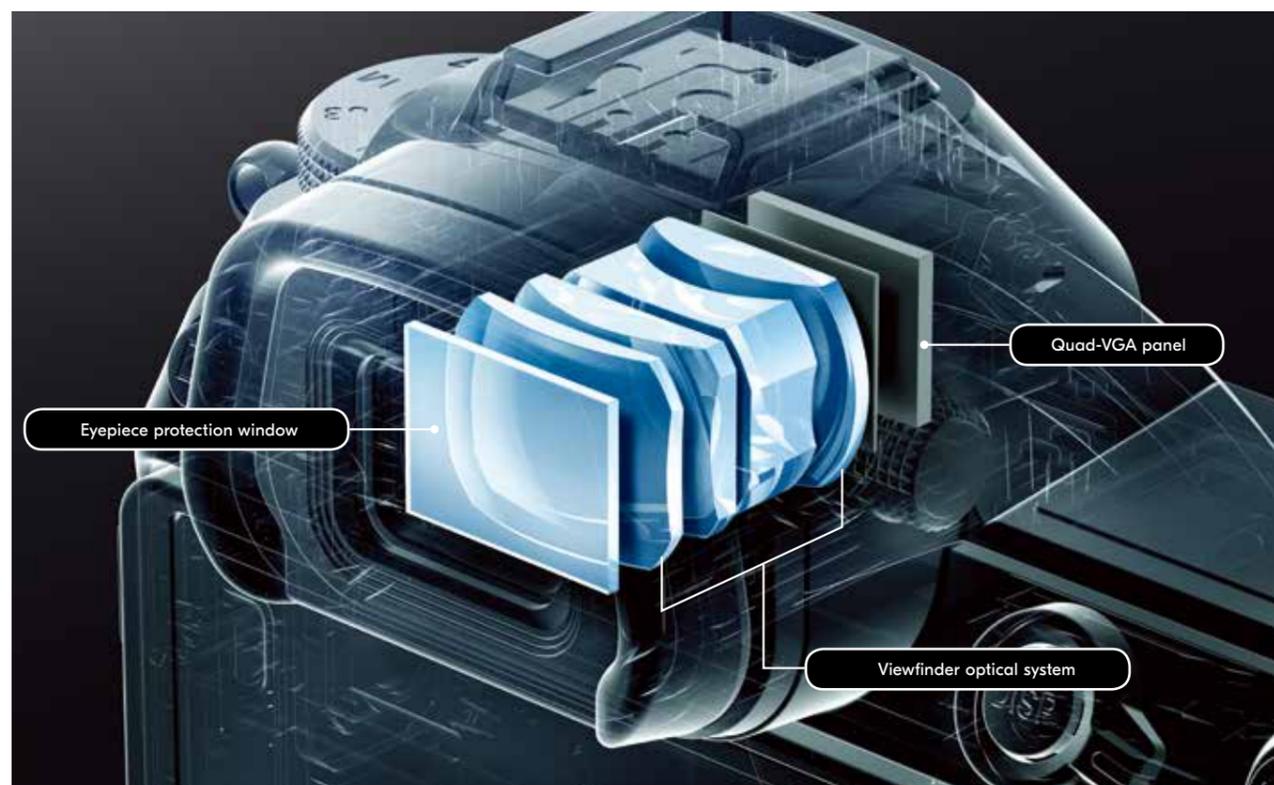
Auto-area AF

Advanced Scene Recognition System

Reliable auto control technology inherited from renowned Nikon DSLRs —
Advanced Scene Recognition System

The Z 7 incorporates a range of auto controls to help you obtain optimum results, using the Advanced Scene Recognition System. The camera uses the image sensor to recognize various conditions of the scene, then utilizes this information to ensure accuracy in auto exposure,

auto focus, auto white balance and other auto controls, including “natural light auto” white balance and Picture Control Auto. The system also makes it possible to achieve effective flicker reduction — both in still photography and movie recording.



Get a clear and comfortable view of your subjects — Approx. 3690k-dot Quad-VGA electronic viewfinder (EVF) incorporating Nikon's superior optical and image-processing technology

Viewfinder visibility is crucial for photographers. In developing a mirrorless camera system, Nikon didn't just aim for impressive specifications. The Z 7's electronic viewfinder boasts an organic EL panel, approx. 100% frame coverage and approx. 0.8× magnification*, with an approx. 37.0° diagonal viewing angle. But it also draws on Nikon's superior optical and image-processing

technology to ensure a clear and comfortable view with reduced aberration and minimum eyestrain, even during extended shoots. Furthermore, fluorine coat is applied to the eyepiece protection window, reducing flare while repelling dirt.

* 50mm lens at infinity, -1.0 m⁻¹.

Natural view, like using an optical viewfinder — Selectable “Apply settings to live view” function

The great advantage of using a mirrorless camera is the ability to confirm the effects of settings such as white balance and Picture Control before you shoot, using the EVF and monitor. However, some users may find it more important to focus on subject confirmation — the same as using a conventional optical viewfinder in a DSLR — rather than see how the final image will look. If you select

“Off” for “Apply settings to live view,” the EVF and monitor will display a similar color, brightness and contrast to what you would get with an optical viewfinder, allowing you to confirm the subject easily. This gives you the flexibility to choose the appropriate mode, according to your needs.

Instant setting changes — Quick setting using **i** menu

Pressing the **i** button while shooting provides instant access to various settings on the **i** menu. It lets you intuitively change settings while looking through the EVF, using the main command dial and sub-command dial. You can also flexibly customize the functions assigned on the **i** menu and their layout.



Take full control over focusing — Four functions for smoother MF operation

Some photographers prefer to use manual focusing instead of AF depending on the subject, and the Z 7 provides four confirming functions to realize maximum focus precision.

You can zoom in on the image to confirm focus in detail by pressing the zoom in button before shooting. The electronic rangefinder indicates if the subject is in focus, or if the focus point is far in front or behind. When focus is achieved, the selected focus point turns green, allowing even easier confirmation. Meanwhile, the focus distance indicator* at the bottom of the display shows where focus is obtained, between infinity and the minimum range. Finally, when focus peaking display is enabled, the camera automatically detects the highest-contrast edges in the scene and highlights them in a designated color.

* Available when using NIKKOR Z lenses.



Sophisticated operability and exterior design — Portable and ergonomic camera body

Photographers want a compact camera system, but sometimes this means sacrificing operability. Nikon tackled this problem head-on, to create a system that delivers superior operability, in spite of its compact size. The camera's grip is designed for firm grasp and takes into account the comfortable positioning of even the little finger. The operational controls, including a sub-selector, AF-ON button, ISO button and exposure compensation button, are carefully arranged to allow quick operation using the right hand in a shooting posture. A handy top display panel enables users to confirm various information at a glance. And the metallic rings around the Z mount and the root of NIKKOR Z lenses have the same look and feel, to provide a sense of unity as a system.



Greater convenience in the field — Touch-operable, tilting 8-cm/3.2-in., approx. 2100k-dot monitor

The Z 7's large, high-resolution tilting monitor offers touch-panel functionality. You can pinch and swipe to review images or confirm focus precisely, making full use of the

approx. 2100k-dot high-resolution display. The monitor allows you to shoot from both high and low angles, giving greater flexibility and creativity in your shooting.





Distillation of Nikon's accumulated design and production expertise — Robust body with superior dust and drip resistance

The compact design of the Z 7 is handy not only for everyday shooting but also when traveling to harsh, remote areas. Its body incorporates magnesium alloy in its front, back and top covers to offer reliable robustness, with a rigorously conceived design based on impact and drop simulations and quality tests conducted repeatedly

throughout the development process. Effective sealing, equivalent to the D850, is applied to the joints of each exterior cover, as well as components such as the shutter-release button and battery-chamber cover. Sealing is also employed in the NIKKOR Z lenses and Mount Adapter FTZ, to enhance total reliability as a system.



Tested for 200,000 cycles — Durable, high-precision shutter

The Z 7 employs a highly accurate shutter unit capable of speeds of 1/8000 s. To ensure durability, it uses the same brake mechanism and shutter blade material adopted by the D850, and has been tested for 200,000 cycles while actually loaded in the camera. It also incorporates a leaf spring switch for the shutter-release button, the same as the D850, allowing it to respond to a delicate touch for fewer missed opportunities.





Capture fleeting moments — High-speed continuous shooting at up to 9 fps

The Z 7 supports continuous shooting at a maximum of approx. 9 fps*. To facilitate the capture of moving subjects, it features wide AF coverage, and a focus prediction algorithm that Nikon has refined over years of DSLR camera development.

* When using 12-bit RAW, JPEG or TIFF in high-speed continuous shooting (extended). Continuous shooting at 9 fps lasts approx. 2.5 s in 12-bit RAW with AF. AE is fixed at the first frame. High-speed continuous shooting with full AF/AE is available at approx. 5.5 fps, and allows almost real-time display of the subject's movements while shooting. Continuous shooting speed varies depending on image quality, image size and silent photography settings, and type of memory card used.



The above image was created by combining the six images below using focus stacking.

More convenient focus stacking — Focus shift photography

When shooting a scene containing various subjects at different focus distances, or creating specimen pictures of insects and flowers, photographers may want to bring everything into sharp focus. The Z 7's focus shift photography function enables you to shoot sequences of up to 300 frames, while gradually and automatically shifting focus position from the start point to infinity. The shutter release interval and the focus step width can be selected. Moreover, the Z 7 employs a new peaking stack image function that creates a monochrome preview image automatically to confirm*1 the areas in focus before combining the pictures*2 — making focus stacking more convenient than ever.

*1 Can be confirmed only with camera.

*2 Requires third-party application.



No. of shots (1-300) Focus step width (1-10) Interval until next shot (00"-30")

Set the number of shots, focus step width (the amount of shifted focus distance with each shot) and interval between shots.



• Camera body: Z 7 • Lens: NIKKOR Z 50mm f/1.8 S • Exposure: [M] mode, 1/100 s, f/2.8 • White balance: Auto 1 • Sensitivity: ISO 1250 • Picture Control: Auto
© Monika Zaldo

Nail a shot without any mechanical vibration or shutter release sound — Silent photography

The Z 7's silent photography function* prevents shutter sound or mechanical vibration by utilizing an electronic shutter, allowing you to make full use of the camera's 45.7 effective megapixels in a broad variety of scenes.

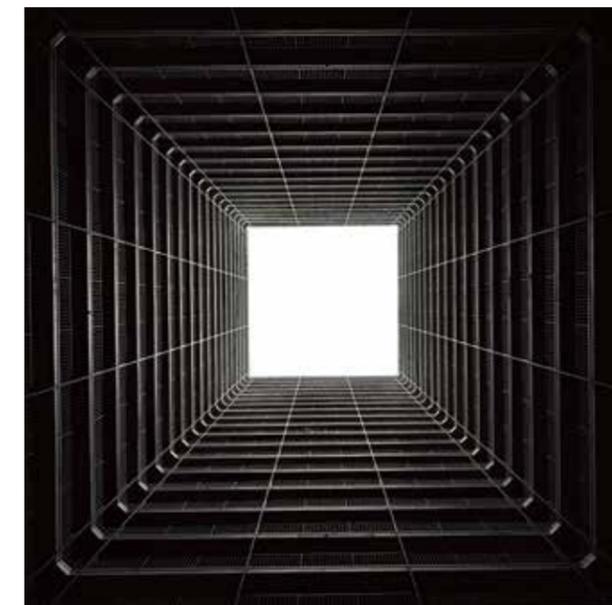
* Aperture and AF drive sound may occur. If a NIKKOR F lens is used with a mount adapter, aperture, VR driving and initial lens driving sounds may occur, for instance when turning on the camera.

Note: Rolling shutter distortion may occur during silent photography. AE is fixed at the first frame in continuous shooting.



Show your creativity in a social media-friendly format — 1:1 image area option

The Z 7 has an image area option with a 1:1 aspect ratio, reminiscent of 6 × 6 medium format, which is ideal for social media, where square images have become increasingly popular. You can create pictures to impress your followers, as well as experiment with the creative potential of this unique image area.



Push your imagination further with image overlays — Multiple exposure options

Multiple exposure photography lets you expand your creative options, and produce striking, one-of-a-kind images without using a computer. The Z 7 offers four overlay modes — add, average, lighten and darken — and displays a semi-transparent view of the overlay image being created, making it easier to confirm the composition when taking the next shot. Furthermore, it lets you select a RAW file stored in the memory card to use as the first image of the overlay. If your last shot doesn't meet your satisfaction, you can delete, reshoot and replace it easily. The Z 7 can also save the RAW files used for your multiple exposure, allowing you to use them individually.



Rapid reading and writing of data — XQD memory card

The Z 7 supports XQD memory cards, enabling fast reading and writing of the vast data generated from its high-pixel-count image sensor. It will also support CFexpress (Type B) cards via a forthcoming firmware update, for use in a broader variety of professional applications.



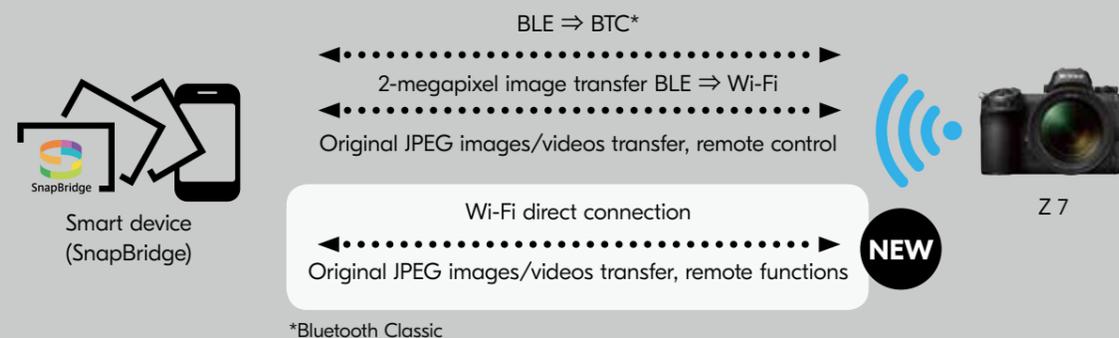
Direct connection with built-in Wi-Fi® for faster image transfers — SnapBridge ver. 2.5

SnapBridge enriches your image experience by connecting your camera and smart device* seamlessly. In addition to connection via Bluetooth®, the new SnapBridge ver. 2.5 offers direct connection via built-in Wi-Fi®. It makes it easier to transfer images (JPEG) and videos to a smart device and to shoot remotely.

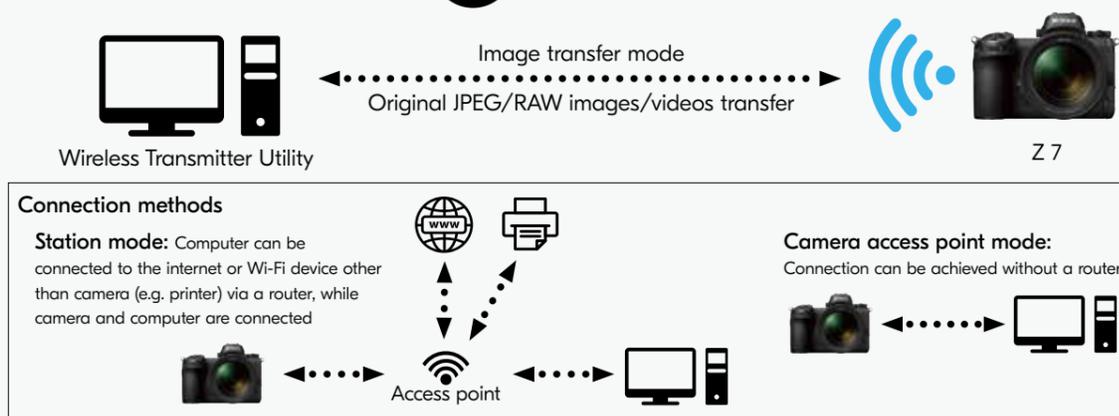
* Compatible with iPhone®, iPad®, iPod touch® or smart devices running on the Android™ operating system. Available free from Apple App Store® and Google Play™. Please check Nikon's website for further information.



Connection to a smart device via built-in wireless function



PC connection via built-in Wi-Fi **NEW**



Direct connection to a computer — Built-in Wi-Fi

With the Z 7, built-in Wi-Fi isn't just for connection with your smart device: you can also use it to directly connect the camera to your computer*¹. Original JPEG and RAW images as well as videos can be transferred*² at up to approx. 433 Mbps*³ for editing on computer. There are two modes available: camera access point mode, which supports direct connection between computer and camera; and station (STA) mode, which allows connection

via a router. Dual-band communication is now supported, making it possible to choose 5 GHz band*⁴ in STA mode for faster communication, in addition to 2.4 GHz band.

*¹ Wireless Transmitter Utility must be installed on the computer (available for download from Nikon website).

*² Available in image transfer mode.

*³ Maximum logical data rates according to IEEE standard. Actual rates may differ.

*⁴ May not be available in certain countries.



This picture was shot during sunset hours, using an SB-5000 Speedlight with orange gel as a remote flash. The model was illuminated from her front by the light via Advanced Wireless Lighting.

• Camera body: Z 7 • Lens: NIKKOR Z 50mm f/1.8 S • Exposure: [M] mode, 1/100 s, f/1.8 • White balance: Auto 2 • Sensitivity: ISO 400 • Picture Control: Auto • Speedlight: SB-5000 © Marsel van Oosten

Extend the possibilities of flash photography — Nikon Creative Lighting System

The Z 7 supports Nikon Creative Lighting System*, which makes it easy to produce striking images by adding lights to your shooting scenes. Used in combination with Nikon Speedlights, it enables a range of advanced and

versatile lighting options, letting you bring dynamism to your subjects, according to your intentions.

* Except AF-assist illumination for multi-point AF.

Flexible, easy flash control for elaborate lighting indoors or out — SB-5000 Speedlight with radio-controlled system

Whether you're shooting indoors or outdoors, the SB-5000 Speedlight gives you complete mastery over your lighting. It can communicate via radio from distances up to approx. 30 m/98 ft*¹ with minimum interference from obstacles or ambient lighting (radio-controlled Advanced Wireless Lighting*²). This makes wireless lighting possible even in bright situations, as well as letting you render your subjects more impressively and flexibly — for example, by illuminating from the side or adding backlight. Despite featuring powerful output at a guide number of 34.5/113 (m/ft, ISO 100)*³, the SB-5000 can fire consecutively for longer than conventional models thanks to its built-in cooling system. Advanced Wireless Lighting with optical-controlled units such as the SB-700 is also possible with the Z 7.

*¹ Approx. range at height of about 1.2 m/3.9 ft; varies according to weather conditions, presence of obstacles and radio communication conditions.

*² Radio-controlled AWL with the Z 7 and SB-5000 requires WR-R10 Wireless Remote Controller.

*³ At 35 mm zoom head position, in FX format, standard illumination pattern.

Flexible remote shooting control — WR-1, WR-R10/WR-T10 Wireless Remote Controllers (optional)

Wireless remote controllers bring an array of options to your photography. When you want to release the shutter wirelessly to prevent camera shake caused by button operation, or release multiple cameras to shoot your subject from various angles, you need the WR-1 and WR-R10/WR-T10 Wireless Remote Controllers. The WR-1 and WR-T10 can both be configured as a transmitter, and release the shutter of a camera with another WR-1 or WR-R10 attached. When using the WR-1 as a transmitter, it's also possible to perform interval timer photography, and use its screen to confirm and change settings*¹ of the remote camera. WR-1 units communicate via 2.4 GHz radio frequencies, offering a communication range of up to 120 m/394 ft*² with 15 channels. The WR-R10/WR-T10 can communicate within a range of up to 20 m/66 ft*².

*¹ Limited functions only.

*² At approx. height of 1.2 m/3.9 ft; may vary depending on weather, presence of obstacles and radio communication conditions.



WR-1



WR-R10



WR-T10

Fast wired/wireless LAN transfer for professional use — WT-7/A/B/C Wireless Transmitter (optional)

The optional WT-7/A/B/C Wireless Transmitter provides a faster way to securely transfer images to storage. It can transmit images and movies to a computer*¹ or FTP server via both wired and wireless LAN. It's faster and more stable than connecting to a computer via built-in Wi-Fi and also provides a wide range of features that meet the needs of professionals. Wired LAN supports 1000BASE-T and delivers transmission speeds of up to approx. 1000 Mbps*², while wireless LAN supports IEEE802.11ac and enables transmission at up to approx. 866.7 Mbps*², over distances of up to approx. 200 m/656.1 ft*³.

The WT-7/A/B/C also offers two methods for controlling the camera remotely. Camera control mode allows wireless remote operation from a computer using the optional Camera Control Pro 2 software, while HTTP server mode lets you control the camera remotely using the web browser on a computer or smart device.

*¹ Requires Wireless Transmitter Utility (available for download from Nikon website).

*² Maximum logical data rates according to IEEE standard. Actual rates may differ.

*³ With large antenna at wireless LAN access point. Range may vary according to signal strength and presence or absence of obstacles.

Note: WT-7/A/B/C cannot be attached to the bottom of a camera when Mount Adapter FTZ is being used. In this case, please connect it to the camera without attaching it, for example by putting it in a bag and hanging it from a tripod.



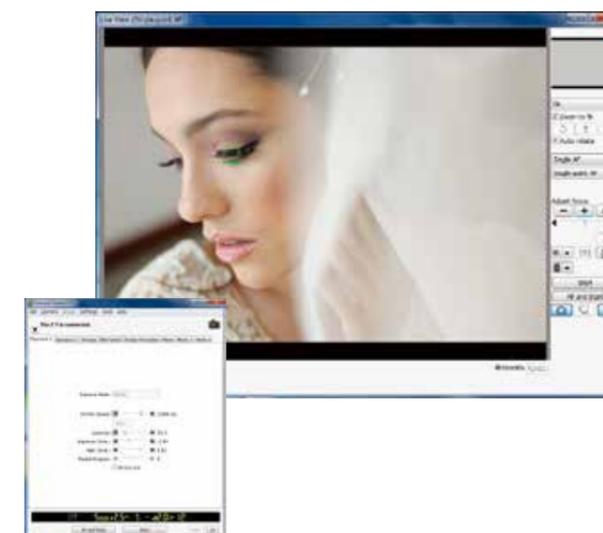
Z 7 + WT-7/A/B/C

Versatile remote control from a computer — Camera Control Pro 2 (optional)

Nikon's Camera Control Pro 2 lets you remotely control the Z 7 from a computer connected via wired or wireless LAN*¹. You can use it to control almost all the camera functions, such as playback, changing settings like AF and metering modes, as well as movie recording. It also lets you use unified flash control*², enabling you to change the settings of SB-5000 Speedlight units. In studios as well as outdoors, it makes remote camera control more versatile and more efficient.

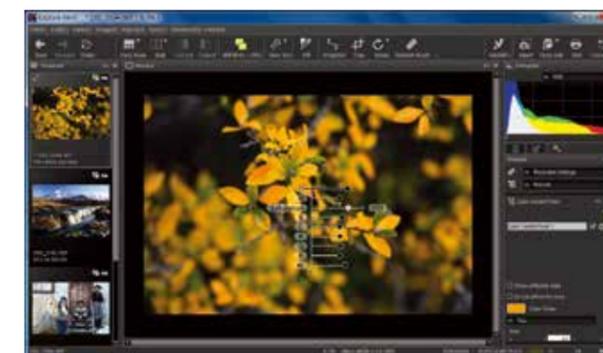
*¹ Remote operation with built-in Wi-Fi is not available.

*² Camera Control Pro 2 must be Ver. 2.27.0 or later.



RAW file processing software with color control points — Capture NX-D (free download)

Nikon's Capture NX-D software is the best way to process original RAW (NEF/NRW) files without losing any of their extremely rich data. You can adjust options such as exposure compensation, white balance, Picture Control, Active D-Lighting and noise reduction using a slider. It also incorporates color control points that let you edit the hue, brightness, saturation, contrast, etc. of a selected area. JPEG and TIFF files are also compatible.



Optimal management of still images and movies — ViewNX-i (free download)

ViewNX-i allows browsing and simple editing of JPEG, RAW and movie files, including 4K UHD footage. It also lets users save a frame from a movie as a still image.



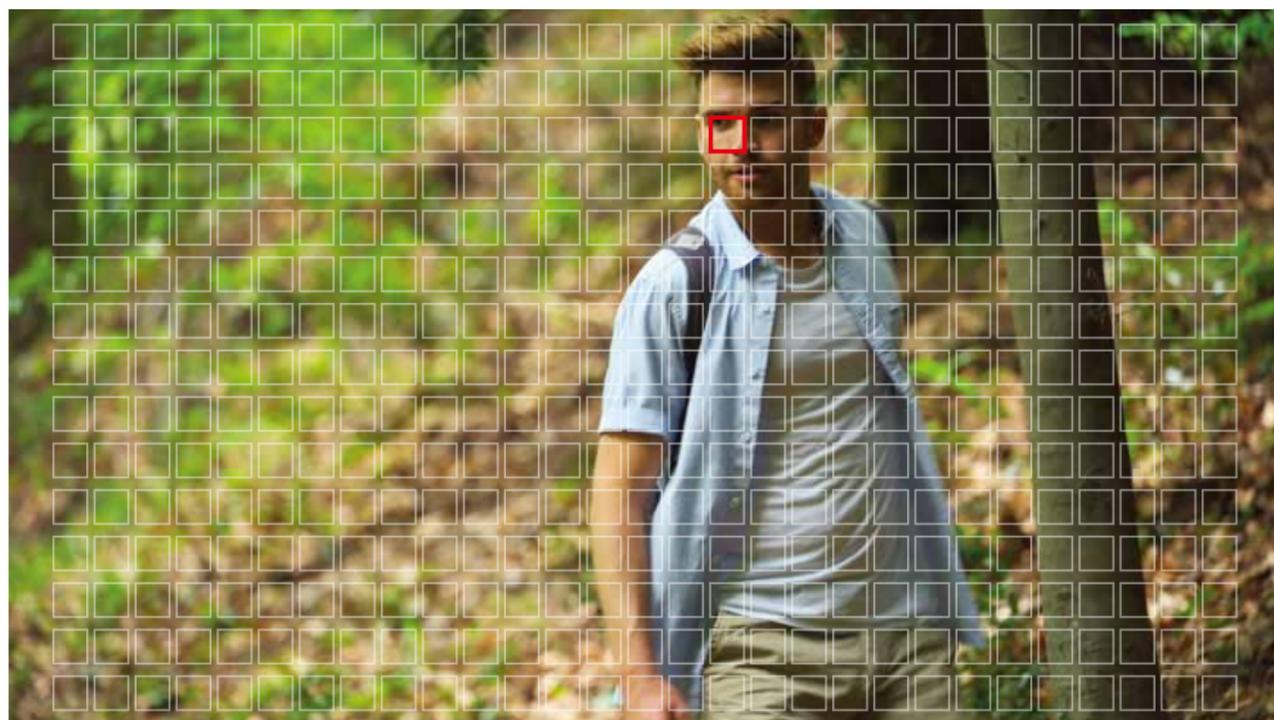
Videography: Table of Contents

p. 58| Chapter 6: Sharp image and accurate focus — Superb videos for full-scale productions

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p. 65| Chapter 8: Time-lapse movie production features for the next generation and beyond





AF system optimized for video shooting with wide coverage — 435-point focal-plane phase-detection AF

The Z 7's AF system allows you to capture videos with confidence. It has 435 AF points*¹ that cover a wide area of the frame, giving you greater creative freedom in your compositions. Hybrid AF — developed specifically for the Z system — utilizes a new AF algorithm and provides focus performance that's optimized for movies, while reducing wobbling*². A choice of four AF-area modes for videos — single-point AF, wide-area AF (S/L) and auto-area AF — brings added flexibility.

When used together with NIKKOR Z lenses, which employ a rigorous standard for AF accuracy, it's possible to achieve even more precise focus. Your movies will show exceptional sharpness in the focused area, even when played back on a huge monitor or screen. What's more, the quieter AF of NIKKOR Z lenses prevents noise being recorded. You can also utilize AF-S, AF-I, AF-P NIKKOR F lenses with AF via the Mount Adapter FTZ.

*¹ In FX-based movie format with single-point AF.

*² Reciprocating movement of lens in contrast-detect AF.

AF control that more closely matches your intentions — AF-C mode in video recording

The Z 7 newly offers AF-C as a movie focus mode. By pressing the AF-ON button during movie recording, you can flexibly control when AF starts and stops. Used in combination with AF speed and AF tracking sensitivity options, this mode also makes it possible to use “focus

pull” techniques, to make scenes more impressive. AF-C allows you to take full advantage of the shallow depth-of-field and beautiful bokeh effects that an FX-format sensor and NIKKOR Z lenses offer.

More customizable AF control — Adjustable AF speed and tracking sensitivity

Focusing speed and the smoothness of focus transitions when switching between subjects can make a huge difference in movies. The Z 7 lets you customize the speed* and tracking sensitivity of AF when filming videos. AF speed is adjustable in 11 steps, between “Slow” (-5) and “Fast” (+5). At lower levels, focus is achieved slowly, making scenes look more cinematic. AF tracking sensitivity can be adjusted in 7 steps, from “High” (1) to “Low” (7). Select a higher sensitivity if you want to switch focus quickly to the next subject, and a lower sensitivity for maintaining focus on the current subject for longer.

* When using NIKKOR Z lenses and some NIKKOR F lenses.



Moviemaking for the future — NIKKOR Z lenses offer new levels of sharpness, minimized aberrations, beautiful bokeh and superior operability

As a tool for next-generation image-makers, the Z system gives equal importance to movie and still photography. And the unparalleled optical performance of NIKKOR Z lenses, with their high resolving power and reduced aberration, produces footage that's even sharper and clearer. NIKKOR Z lenses are also designed to reduce shifts in the angle of view when focusing (breathing), which is crucial in video recording. Their newly developed stepping motor enables quiet drive operation, while the new control ring also allows users to reduce the operational sound of designated functions such as focus, aperture or exposure compensation, achieving smoother control. NIKKOR Z lenses open up new possibilities for image-makers, letting them create movies that will amaze viewers both today and in a future dominated by increasingly high-megapixel displays.



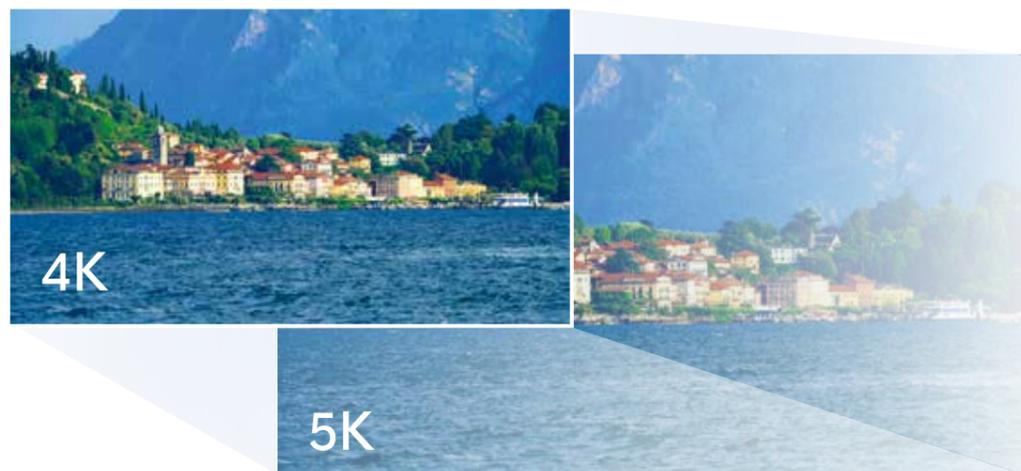
Clear and sharp video footage — Full-frame 4K UHD and Full HD 120p/100p

The Z 7 lets you film breathtaking 4K UHD/30p videos that make full use of the image area of FX format. When shooting in DX-based movie format, it can output sharper 4K UHD video employing rich information equivalent to 5K, thanks to its full-pixel readout. Used together with NIKKOR Z lenses, it delivers even higher-resolution movies. What's more, Active D-Lighting is now available in 4K UHD, preserving details in highlights and shadows even when shooting under harsh sunlight.

The camera also introduces Full HD 120p/100p*1 recording, including audio capture, providing more options in post-production. Meanwhile, the ability to capture Full HD ×4 and ×5 slow motion — processed in-camera — allows for instant dramatic expression. In addition, it is now possible to shoot still images*2 at approx. 8.3 megapixels during 4K UHD video recording, and approx. 2 megapixels during Full HD.

*1 Fixed at DX-based movie format.

*2 Simultaneous still image shooting is not available when using 10-bit HDMI output.

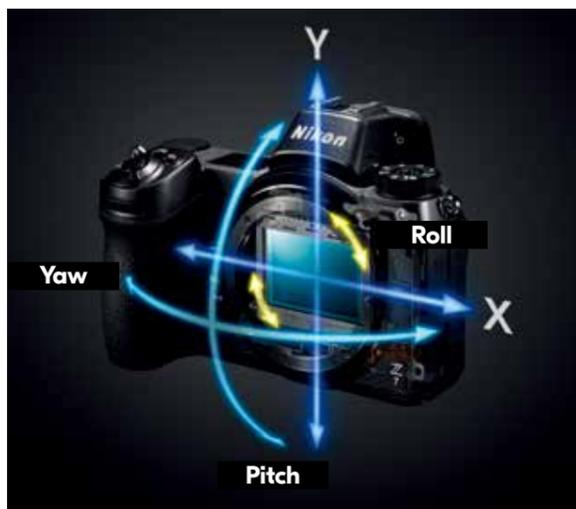


Hybrid vibration reduction effective for videos — Five-axis in-camera VR and electronic vibration reduction

The Z 7 utilizes a highly accurate gyro sensor and original algorithm that Nikon has refined for conventional lens VR. This compensates for vibration on five axes: yaw, pitch, X, Y, and roll, which is likely to be noticeable in videos. By choosing the “Sport” VR mode, vibration that might occur during movie recording can be effectively suppressed. It can also work together as a hybrid VR system with electronic vibration reduction*1, available in 4K UHD and Full HD, whether you use NIKKOR Z lenses or NIKKOR F lenses*2. This delivers an even more apparent effect. The VR unit employs a lock mechanism that automatically fixes the image sensor when the camera is switched off, preventing the VR unit from damage by accidental impacts when carrying the camera around. This mechanism also makes it possible to avoid even the tiniest alteration in composition during time-lapse and interval timer photography.

*1 Image area will be slightly smaller. Not available in 120p, 100p or slow-motion movie.

*2 Requires Mount Adapter FTZ. When using NIKKOR F lenses, the optical VR effect is lower compared to using NIKKOR Z lenses.



N-Log

After color grading

Richer tonality for professional post-production — 10-bit N-Log

If you're looking to produce professional-quality video pieces, N-Log is your ideal partner, letting you take advantage of extensive color depth range in 4:2:2 10-bit HDMI output. It captures up to approx. 1.07 billion colors and a wide dynamic range at 12 stops and 1300%, recording richer gradation information in highlights and shadows to

allow for more effective color grading. The camera also has a “View assist” function that displays simple gradation compensation while recording with N-Log, which is useful for confirming the final look of the footage.

Note: Simultaneous recording to memory card is not available.





Record 8-bit 4K UHD data syncing with the camera — HDMI output and Atomos Open Protocol support

Some filmmakers prefer to record footage both to an external HDMI recorder and to an in-camera memory card for backup. The Z 7 allows simultaneous recording of uncompressed 8-bit 4K UHD movie files onto such devices. It also supports Atomos Open Protocol and syncs the

start/stop of 4K UHD and Full HD recording on the in-camera memory card and an HDMI recorder* connected to the camera, when the camera's movie-recording button is pressed.

* When using third-party recorder which supports Atomos Open Protocol.



Expanding your moviemaking territory — Slim, compact body with enhanced operability and unparalleled robustness

The Z 7 was designed based on stringent principles of reliability inherited from Nikon DSLRs, which have earned the trust of a wide range of users including professionals. The Z 7 features effective sealing, equivalent to the D850, applied to the joints of each exterior cover, as well as components such as the shutter-release button and battery-chamber cover. Sealing is also employed for the

NIKKOR Z lenses and Mount Adapter FTZ, to enhance the overall reliability of the system. Magnesium alloy is used for the front, back and top covers of the camera body to achieve superior robustness and durability, while remaining lightweight. The camera's compact yet sturdy body makes filming possible even in harsh environments.



Greater convenience in the field — Touch-operable, tilting 8-cm/3.2-in., approx. 2100k-dot monitor

The Z 7's large, high-resolution tilting monitor offers touch-panel functionality. You can focus during movie recording by touch, or review videos with the approx. 2100k-dot high-resolution display. The monitor's tilting structure lets you confirm the video comfortably while shooting, even when the camera is mounted on a video tripod or stabilizer.



Accurate manual focus confirmation — Focus peaking display in 4K UHD

Many professional videographers use manual focus for accurate focusing. The Z 7's focus peaking display — now available in 4K UHD, as well as Full HD — allows precise confirmation of focus in manual mode. The camera detects the scene's highest-contrast edges and highlights them in a designated color. You can choose to display highlights in red, yellow, blue or white, according to your subject's own coloration, and adjust between three levels of detection sensitivity. For added convenience, this peaking information will not be recorded on external devices connected via HDMI.



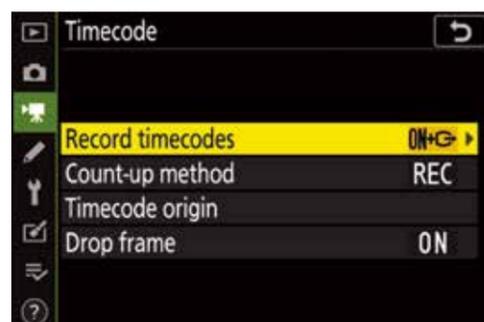
Customizable highlight confirmation that's easier to use — Highlight display

Highlight display using zebra patterns helps you confirm overblown highlights. You can adjust the level of brightness, to be indicated between 180-255 depending on your needs. What's more, the zebra patterns come in two varieties, selectable according to the patterns and textures of your subjects.



Efficient footage synchronization — Timecode support

Many videographers shoot movies using more than one camera and combine the footage after shooting. The Z 7 can record a timecode*1 in video data, as well as including it with footage saved to an external recorder*2 via HDMI, making it easier to synchronize footage and sounds from multiple devices in post-production. The camera also supports drop frame, which compensates time code discrepancies that occur due to differences between the original 30p or 60p video frame rate and the actual frame rate for broadcasting.



*1 Not available when shooting slow-motion movies.

*2 Atomos Monitor Recorders (SHOGUN, NINJA, SUMO series), etc. are supported.



Spectacular 8K time-lapse movies with sharpness throughout the frame — Interval timer photography

As 8K display monitors become more popular, creators increasingly demand the capacity to produce spectacular movies at higher resolutions. The Z 7's interval timer mode exploits the camera's vast 45 megapixels (8256 × 5504 pixels) and the high resolving power of NIKKOR Z lenses, allowing you to produce*1 amazing 8K time-lapse movies with edge-to-edge sharpness.

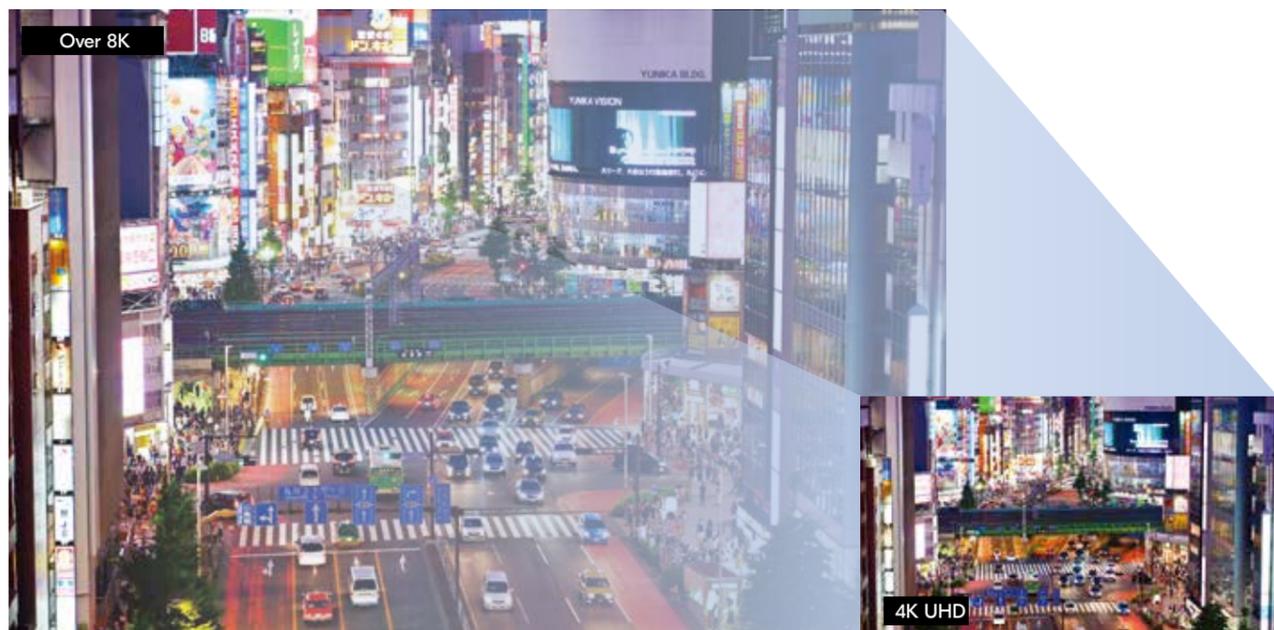
Having 45 megapixels also gives you greater leeway in creating sharper 4K video via down-conversion, or adding pan and zoom effects within the frame in post-production

using a computer, to inject more dynamism into the finished piece. Moreover, the Z 7 offers a minimum interval setting of 0.5 s*2 for smoother rendering of changes in the scene. From cityscapes to the movements of stars, it gives you the tools to create truly impressive time-lapse movies.

*1 Requires third-party software.

*2 May differ depending on camera settings. Use of an XQD card with 400 MB/s writing speed is recommended.





Easily produce high-quality 4K UHD time-lapse movies — In-camera time-lapse movie function

If you want to create high-resolution time-lapse movies without the need for post-production editing, the Z 7's in-camera, full-frame 4K UHD time-lapse movie function comes in handy. The camera automatically converts full-

pixel (over 8K-size) still images into high-quality 4K UHD time-lapse video. This is also available in Full HD, as well as silent in-camera time-lapse photography.

Shoot without any shutter release sound, mechanical vibration or mechanical wear — Silent option for time-lapse and interval timer photography

With the Z 7's silent photography function*, you can shoot outdoors for hours at night without worrying about the shutter release sound. It also prevents mechanical vibration, making it ideal for capturing scenes such as starry night skies where you want to avoid the tiniest image blur. And since there is no mechanical wear, it is suitable

for shooting interval timer sequences that require a huge number of images.

* Aperture and AF drive sound may occur. If a NIKKOR F lens is used with a mount adapter, aperture, VR driving and initial lens driving sounds may occur, for instance when turning on the camera.

Note: Rolling shutter distortion may occur during silent photography.

An easy way to shoot time-lapse sequences of starry night skies — Exposure smoothing with extended low-light metering range

Capturing overnight star movements is a popular application for time-lapse videos. Nikon's unique exposure smoothing function reduces subtle exposure variations between frames in time-lapse and interval timer shooting*¹, which can create unattractive flickering effects when converted into video. What's more, it extends exposure metering capability beyond -3 EV*² and lets you shoot starry night

skies using aperture-priority auto mode when employed with silent mode. Photographers can enjoy shooting star movements from midnight until dawn, when brightness changes significantly, in one continuous sequence.

*¹ Also available in focus shift photography.

*² With f/2.0 lens attached, ISO 100, 20°C/68°F.

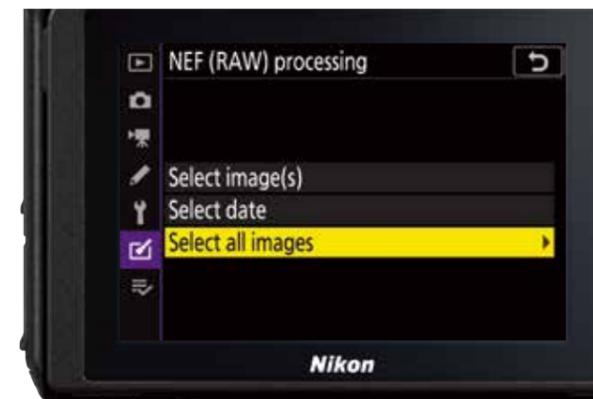
Huge time savings in post-production — In-camera RAW batch processing

Shooting in RAW gives greater leeway in post-production, letting photographers draw the most from the images they capture. However, processing RAW has always been extremely time-consuming. The Z 7 resolves this issue by offering a convenient, in-camera RAW batch-processing feature, which enables you to quickly apply the same

adjustments to selected images. It can process 1000 RAW files*¹ in approx. 38 minutes*².

*¹ When converting 14-bit lossless compressed RAW into JPEG fine★, Large. Time varies according to file size.

*² When using SONY XQD card (G series R440 MB/s W400 MB/s 128 GB).



Rapid reading and writing of data — XQD memory card

The Z 7 supports XQD memory cards, enabling fast reading and writing of the vast data generated from its high-pixel-count image sensor. It will also support CFexpress (Type B) cards via a forthcoming firmware update, for use in a broader variety of professional applications.





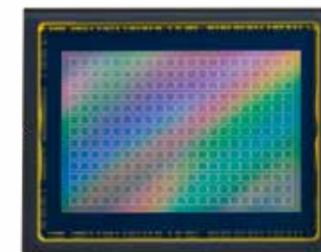
Z 6

For all your creative desires — Multifunctional FX-format mirrorless camera with excellent high-sensitivity performance and video features

Designed with a compact body, while providing superior high-sensitivity performance and outstanding video features, the Z 6 — featuring 24.5 effective megapixels — is ready to excel in a broad range of shooting scenarios. Taking advantage of the new EXPEED 6 image-processing engine, it achieves a standard sensitivity range of ISO 100-51,200, reducing noise effectively even at the higher end while maintaining resolution. Continuous shooting at up to approx. 12 fps is also available. Professional and amateur filmmakers alike will appreciate the camera's wide array of movie functions, including full-pixel readout full-frame 4K UHD, Full HD 100/120p and 10-bit N-Log. The Z 6 offers all this in a streamlined system with the same level of reliability as Nikon DSLRs, and the superior optical performance of NIKKOR Z lenses.

Capture superb images in diverse situations — Backside illumination CMOS sensor and EXPEED 6

With its 24.5 effective megapixels, the new Nikon FX-format backside illumination CMOS sensor works together with the new EXPEED 6 image-processing engine to attain a wide standard sensitivity range of ISO 100-51,200 (expandable to ISO 50-204,800 equivalent). Focal-plane phase-detection AF pixels are efficiently distributed throughout the sensor, enabling it to cover approx. 90% of the frame with 273 focus points*, and smooth AF is realized in both stills and movies. Furthermore, EXPEED 6 handles data from the image sensor rapidly, allowing up to approx. 12 fps** high-speed continuous shooting.



*1 When shooting stills in FX format with single-point AF.

*2 When using 12-bit RAW, JPEG or TIFF in high-speed continuous shooting (extended). Continuous shooting at 12 fps lasts approx. 3 s in 12-bit RAW with AF. AE is fixed at the first frame. High-speed continuous shooting with full AF/AE is available at approx. 5.5 fps, and allows almost real-time display of the subject's movements while shooting. Continuous shooting speed varies depending on image quality, image size and silent photography settings, and type of memory card used.

Get more from your movies — Outstanding movie-recording functions

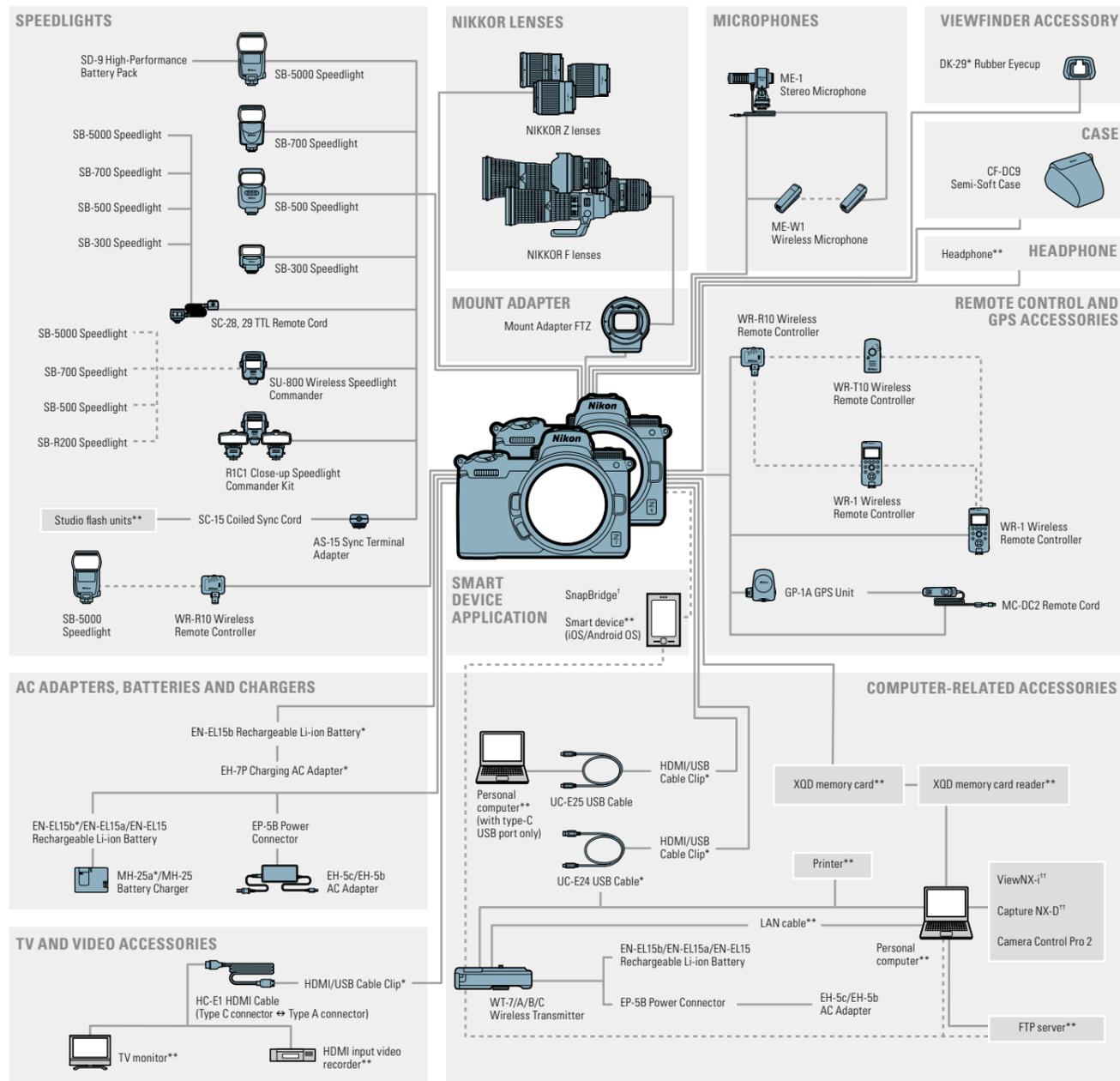
The Z 6 is capable of full-pixel readout, utilizing a wealth of information — equivalent to 6K — to deliver sharp, beautiful full-frame 4K UHD/30p movies in FX-based movie format. Active D-Lighting, electronic vibration reduction and focus peaking are now available in 4K UHD. The camera also introduces Full HD 120p/100p* filming, which allows you to create regular or slow-motion footage in post-production, according to your needs. 4:2:2 10-bit N-Log and timecode functions are also employed for professional use.

* Fixed at FX-based movie format.



- Mid-range sharpening parameter introduced for Picture Controls, in addition to conventional sharpening and clarity options, allowing more effective sharpness adjustments
- In-camera VR provides an effect equivalent to a shutter speed up to approx. 5.0 stops* faster
- Approx. 3690k-dot electronic viewfinder (EVF) incorporating Nikon's superior optical and image-processing technology delivers a clear and comfortable view
- Compact yet robust body design, featuring superb dust and drip resistance and sophisticated operability

* Based on CIPA Standards. This value is achieved when NIKKOR Z 24-70mm f/4 S attached, with zoom set at the maximum telephoto position.



*Supplied accessories (EH-7P Charging AC Adapter is for Z 7 only). **Non-Nikon products. † Can be downloaded from the application store of each smart device (free). †† Can be downloaded from Nikon website (free). EH-7P Charging AC Adapter can be used to charge EN-EL15b Rechargeable Li-ion Battery while inserted in the camera.



- 1 Shutter-release button
- 2 Power switch
- 3 Lens mount
- 4 Image sensor
- 5 Lens mounting mark
- 6 AF-assist illuminator/Red-eye reduction lamp/Self-timer lamp
- 7 Lens release button
- 8 Fn2 button
- 9 Fn1 button
- 10 Sub-command dial
- 11 Playback button
- 12 Delete button
- 13 Viewfinder
- 14 Eye sensor
- 15 Viewfinder eyepiece
- 16 Diopter adjustment control
- 17 Display button
- 18 Photo/movie selector
- 19 AF-ON button
- 20 Memory card slot cover
- 21 Sub-selector
- 22 *i* button
- 23 Memory card access lamp
- 24 Multi selector
- 25 OK button
- 26 Menu button
- 27 Release mode button/Self-timer button
- 28 Playback zoom out button/Thumbnail button/Help button
- 29 Playback zoom in button
- 30 Monitor
- 31 Eyelet for camera strap
- 32 Mode dial
- 33 Mode dial lock release
- 34 Stereo microphone
- 35 Control panel
- 36 Movie-record button
- 37 ISO button
- 38 Exposure compensation button
- 39 Main command dial
- 40 Focal plane mark
- 41 Speaker
- 42 Accessory shoe (for optional flash unit)
- 43 Battery-chamber cover latch
- 44 Battery-chamber cover
- 45 Power connector cover
- 46 Tripod socket
- 47 Monitor mode button
- 48 Charge lamp
- 49 Headphone connector
- 50 USB connector
- 51 HDMI connector
- 52 Connector for external microphone
- 53 Accessory terminal

	Z 7	Z 6
Type		
Type	Digital camera with support for interchangeable lenses	
Lens mount	Nikon Z mount	
Lens		
Compatible lenses	<ul style="list-style-type: none"> • Z mount NIKKOR lenses • F mount NIKKOR lenses with mount adapter; restrictions may apply 	
Effective pixels		
Effective pixels	45.7 million	24.5 million
Image sensor		
Image sensor	35.9 × 23.9 mm CMOS sensor (Nikon FX format)	
Total pixels	46.89 million	25.28 million
Dust-reduction system	Image Dust Off reference data (requires Capture NX-D), image sensor cleaning	
Storage		
Image size (pixels)	<ul style="list-style-type: none"> • FX (36×24) image area: 8256 × 5504 (L: 45.4 million), 6192 × 4128 (M: 25.6 million), 4128 × 2752 (S: 11.4 million) • DX (24×16) image area: 5408 × 3600 (L: 19.5 million), 4048 × 2696 (M: 10.9 million), 2704 × 1800 (S: 4.9 million) • 5 : 4 (30×24) image area: 6880 × 5504 (L: 37.9 million), 5152 × 4120 (M: 21.2 million), 3440 × 2752 (S: 9.5 million) • 1 : 1 (24×24) image area: 5504 × 5504 (L: 30.3 million), 4128 × 4128 (M: 17.0 million), 2752 × 2752 (S: 7.6 million) • 16 : 9 (36×20) image area: 8256 × 4640 (L: 38.3 million), 6192 × 3480 (M: 21.5 million), 4128 × 2320 (S: 9.6 million) • Photographs taken during movie recording at a frame size of 3840 × 2160: 3840 × 2160 • Photographs taken during movie recording at other frame sizes: 1920 × 1080 	<ul style="list-style-type: none"> • FX (36×24) image area: 6048 × 4024 (L: 24.3 million), 4528 × 3016 (M: 13.7 million), 3024 × 2016 (S: 6.1 million) • DX (24×16) image area: 3936 × 2624 (L: 10.3 million), 2944 × 1968 (M: 5.8 million), 1968 × 1312 (S: 2.6 million) • 1 : 1 (24×24) image area: 4016 × 4016 (L: 16.1 million), 3008 × 3008 (M: 9.0 million), 2000 × 2000 (S: 4.0 million) • 16 : 9 (36×20) image area: 6048 × 3400 (L: 20.6 million), 4528 × 2544 (M: 11.5 million), 3024 × 1696 (S: 5.1 million) • Photographs taken during movie recording at a frame size of 3840 × 2160: 3840 × 2160 • Photographs taken during movie recording at other frame sizes: 1920 × 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	Auto, Standard, Neutral, Vivid, Monochrome, Portrait, Landscape, Flat, Creative Picture Controls (Dream, Morning, Pop, Sunday, Somber, Dramatic, Silence, Bleached, Melancholic, Pure, Denim, Toy, Sepia, Blue, Red, Pink, Charcoal, Graphite, Binary, Carbon); selected Picture Control can be modified; storage for custom Picture Controls	
Media	XQD memory cards	
File system	DCF 2.0, Exif 2.31, PictBridge	
Viewfinder		
Electronic viewfinder	1.27-cm/0.5-in., approx. 3690k-dot (Quad VGA) OLED with color balance and auto and 11-level manual brightness controls	
Frame coverage	Approx. 100% horizontal and 100% vertical	
Magnification	Approx. 0.8× (50 mm lens at infinity, -1.0 m ⁻¹)	
Eye point	21 mm (-1.0 m ⁻¹ ; from center surface of viewfinder eyepiece lens)	
Dioptric adjustment	-4 to +2 m ⁻¹	
Eye sensor	Automatically switches between monitor and viewfinder displays	

	Z 7	Z 6
Shutter		
Type	Electronically controlled vertical-travel focal-plane mechanical shutter; electronic front-curtain shutter; electronic shutter	
Speed	1/8000 to 30 s in steps of 1/3 or 1/2 EV, bulb, time, X200	
Flash sync speed	X=1/200 s; synchronizes with shutter at 1/200 s or slower; auto FP high-speed sync supported	
Release		
Release modes	Single frame, low-speed continuous, high-speed continuous, high-speed continuous (extended), self-timer	
Approximate maximum frame advance rate (measured under Nikon-specified test conditions)	<ul style="list-style-type: none"> • Low-speed continuous: 1 to 5 fps • High-speed continuous: 5.5 fps (14-bit NEF/RAW: 5 fps) • High-speed continuous (extended): 9 fps (14-bit NEF/RAW: 8 fps) 	<ul style="list-style-type: none"> • Low-speed continuous: 1 to 5 fps • High-speed continuous: 5.5 fps • High-speed continuous (extended): 12 fps (14-bit NEF/RAW: 9 fps)
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 system	TTL metering using camera image sensor	
Metering modes	<ul style="list-style-type: none"> • Matrix metering • Center-weighted metering: Weight of 75% given to 12 mm circle in center of frame; weighting can instead be based on average of entire frame • Spot metering: Meters 4 mm circle (about 1.5% of frame) centered on selected focus point • Highlight-weighted metering 	
Range (ISO 100, f/2.0 lens, 20°C/68°F)	-3 to 17 EV	-4 to 17 EV
Modes	Auto (AUTO); programmed auto with flexible program (P); shutter-priority auto (S); aperture-priority auto (A); manual (M); user settings (U1, U2, U3)	
Exposure compensation	-5 to +5 EV in increments of 1/3 or 1/2 EV available in modes P, S, A and M	
Exposure lock	Luminosity locked at detected value	
ISO sensitivity (Recommended Exposure Index)	ISO 64 to 25,600 in steps of 1/3 or 1/2 EV; can also be set to approx. 0.3, 0.5, 0.7 or 1 EV (ISO 32 equivalent) below ISO 64 or to approx. 0.3, 0.5, 0.7, 1 or 2 EV (ISO 102,400 equivalent) above ISO 25,600; auto ISO sensitivity control available	ISO 100 to 51,200 in steps of 1/3 or 1/2 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 or 2 EV (ISO 204,800 equivalent) above ISO 51,200; auto ISO sensitivity control available
Active D-Lighting	Can be selected from auto, extra high, high, normal, low or off	
Multiple exposure	Add, average, lighten, darken	
Other options	HDR (high dynamic range), photo mode flicker reduction	
Focus		
Autofocus	Hybrid phase-detection/contrast AF with AF assist	
Detection range (in photo mode, AF-S, ISO 100, f/2.0 lens, 20°C/68°F)	-1 to +19 EV (-4 to +19 EV with low-light AF)	-2 to +19 EV (-4 to +19 EV with low-light AF)
Lens servo	<ul style="list-style-type: none"> • Autofocus (AF): Single-servo AF (AF-S); continuous-servo AF (AF-C); full-time AF (AF-F; available only in movie mode); predictive focus tracking • Manual focus (M): Electronic rangefinder can be used 	
Focus points (in photo mode, FX format, single-point AF)	493 (single-point AF)	273 (single-point AF)
AF-area modes	Pinpoint, single-point and dynamic-area AF (pinpoint and dynamic-area AF available in photo mode only); wide-area AF (S); wide-area AF (L); auto-area AF	
Focus lock	Focus can be locked by pressing shutter-release button halfway (single-servo AF) or by pressing center of sub-selector	
Vibration reduction (VR)		
Camera VR	5-axis image sensor shift	
Lens VR	Lens shift (available with VR lenses)	

	Z 7	Z 6
Flash		
Flash control	TTL: i-TTL flash control; i-TTL balanced fill-flash is used with matrix, center-weighted and highlight-weighted metering, standard i-TTL fill-flash with spot metering	
Flash modes	Front-curtain sync, slow sync, rear-curtain sync, red-eye reduction, red-eye reduction with slow sync, slow rear-curtain sync, off	
Flash compensation	-3 to +1 EV in increments of 1/3 or 1/2 EV available in modes P, S, A and M	
Flash-ready indicator	Lights when optional flash unit is fully charged; flashes as underexposure warning 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)	i-TTL flash control, radio-controlled Advanced Wireless Lighting, optical Advanced Wireless Lighting, modeling illumination, FV lock, color information communication, auto FP high-speed sync, unified flash control	
White balance		
White balance	Auto (3 types), natural light auto, direct sunlight, cloudy, shade, incandescent, fluorescent (7 types), flash, choose color temperature (2500 K to 10000 K), preset manual (up to 6 values can be stored), all except choose color temperature with fine-tuning	
Bracketing		
Bracketing types	Exposure, flash, white balance and ADL	
Movie		
Metering system	TTL exposure metering using camera image sensor	
Metering modes	Matrix, center-weighted or highlight-weighted	
Frame size (pixels) and frame rate	<ul style="list-style-type: none"> • 3840 × 2160 (4K UHD); 30p (progressive), 25p, 24p • 1920 × 1080; 120p, 100p, 60p, 50p, 30p, 25p, 24p • 1920 × 1080 (slow-mo); 30p ×4, 25p ×4, 24p ×5 Actual frame rates for 120p, 100p, 60p, 50p, 30p, 25p and 24p are 119.88, 100, 59.94, 50, 29.97, 25 and 23.976 fps respectively; quality selection available at all sizes except 3840 × 2160, 1920 × 1080 120p/100p and 1920 × 1080 slow-mo, when quality is fixed at ★ (high)	
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 with attenuator option; sensitivity adjustable	
ISO sensitivity (Recommended Exposure Index)	<ul style="list-style-type: none"> • : Auto ISO sensitivity control (ISO 64 to 25,600) • P, S, A: Auto ISO sensitivity control (ISO 64 to Hi 2) with selectable upper limit • M: Auto ISO sensitivity control (ISO 64 to Hi 2) available with selectable upper limit; manual selection (ISO 64 to 25,600 in steps of 1/3 or 1/2 EV) with additional options available equivalent to approx. 0.3, 0.5, 0.7, 1 or 2 EV (ISO 102,400 equivalent) above ISO 25,600 	<ul style="list-style-type: none"> • : Auto ISO sensitivity control (ISO 100 to 51,200) • P, S, A: Auto ISO sensitivity control (ISO 100 to Hi 2) with selectable upper limit • M: Auto ISO sensitivity control (ISO 100 to Hi 2) available with selectable upper limit; manual selection (ISO 100 to 51,200 in steps of 1/3 or 1/2 EV) with additional options available equivalent to approx. 0.3, 0.5, 0.7, 1 or 2 EV (ISO 204,800 equivalent) above ISO 51,200
Active D-Lighting	Can be selected from same as photo settings, extra high, high, normal, low or off	
Maximum movie recording length	29 min. 59 s	
Other movie options	Time-lapse movies, electronic vibration reduction, time codes, movie log output (N-Log)	
Monitor		
Monitor	8-cm/3.2-in., approx. 2100k-dot tilting TFT touch-sensitive LCD with 170° viewing angle, approx. 100% frame coverage, color balance and 11-level manual brightness controls	
Playback		
Playback	Full-frame and thumbnail (4, 9 or 72 images) playback with playback zoom, playback zoom cropping, movie playback, photo and/or movie slide shows, histogram display, highlights, photo information, location data display, picture rating and auto image rotation	

	Z 7	Z 6
Interface		
USB	Type C connector (SuperSpeed USB); connection to built-in USB port is recommended	
HDMI output	Type C HDMI connector	
Accessory terminal	Can be used with MC-DC2 and other optional accessories	
Audio input	Stereo mini-pin jack (3.5-mm diameter; plug-in power supported)	
Audio output	Stereo mini-pin jack (3.5-mm diameter)	
Wi-Fi/Bluetooth		
Wireless (may differ by country or area)	<ul style="list-style-type: none"> • Standards: IEEE 802.11b/g/n/a/ac • Operating frequency: 2412 to 2462/2412 to 2472 MHz (channel 11/13) and 5180 to 5825/5180 to 5805/5180 to 5320/5745 to 5805/5180 to 5700 MHz • Maximum output power (EIRP): 2.4 GHz band: 7.0 dBm, 5 GHz band: 12.1/9.1 dBm • Authentication: Open system, WPA2-PSK 	<ul style="list-style-type: none"> • Standards: IEEE 802.11b/g/n/a/ac • Operating frequency: 2412 to 2462/2412 to 2472 MHz (channel 11/13) and 5180 to 5825/5180 to 5805/5180 to 5320/5745 to 5805/5180 to 5700 MHz • Maximum output power (EIRP): 2.4 GHz band: 7.4 dBm, 5 GHz band: 12.2/9.2 dBm • Authentication: Open system, WPA2-PSK
Bluetooth	<ul style="list-style-type: none"> • Communication protocols: Bluetooth Specification Version 4.2 • Operating frequency: 2402 to 2480 MHz (Bluetooth), 2402 to 2480 MHz (Bluetooth Low Energy) • Maximum output power (EIRP): 1.5 dBm (Bluetooth), 0 dBm (Bluetooth Low Energy) 	<ul style="list-style-type: none"> • Communication protocols: Bluetooth Specification Version 4.2 • Operating frequency: 2402 to 2480 MHz (Bluetooth), 2402 to 2480 MHz (Bluetooth Low Energy) • Maximum output power (EIRP): 1.9 dBm (Bluetooth), 0.4 dBm (Bluetooth Low Energy)
Range (line of sight)	Approx. 10 m/32 ft without interference; range may vary with signal strength and presence or absence of obstacles	
Power source		
Battery	One EN-EL15b Rechargeable Li-ion Battery; EN-EL15a/EN-EL15 can also be used, but note that fewer pictures can be taken on a single charge and that charging AC adapter can be used to charge EN-EL15b batteries only	
Charging AC adapter	EH-7P Charging AC Adapter (supplied with Z 7 only)	
AC adapter	EH-5c/EH-5b AC Adapter (requires EP-5B Power Connector, which is available separately)	
Tripod socket		
Tripod socket	1/4 in. (ISO 1222)	
Dimensions/Weight		
Dimensions (W × H × D)	Approx. 134 × 100.5 × 67.5 mm/5.3 × 4 × 2.7 in.	
Weight	Approx. 675 g/1 lb 7.9 oz with battery and memory card but without body cap; approx. 585 g/1 lb 4.7 oz (camera body only)	
Operating environment		
Operating environment	Temperature: 0 to 40°C/32 to 104°F; humidity: 85% or less (no condensation)	
Supplied accessories		
Supplied accessories (may differ by country or area)	EN-EL15b Rechargeable Li-ion Battery, MH-25a Battery Charger, EH-7P Charging AC Adapter (for Z 7 only), UC-E24 USB Cable, AN-DC19 Strap, BF-N1 Body Cap, DK-29 Rubber Eyecup, HDMI/USB Cable Clip, BS-1 Accessory Shoe Cover	

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