



TFN MS30P Digital Night Vision Device



Product Introduction

The MS30P Digital Night Vision Device is a versatile, all-weather optical tool designed for both daytime and nighttime observation. Equipped with a high-sensitivity CMOS sensor, it supports three working modes: full-time observation, low-light mode, and active infrared (IR) mode. The 8x digital zoom brings distant subjects closer, while the built-in video recording and photo capture functions allow users to document every discovery. With HDMI output for external displays and easy file transfer via USB or Wi-Fi, the MS30P is ideal for wildlife enthusiasts, security personnel, outdoor adventurers, and home inspectors. Its robust construction ensures reliable performance in challenging environments, making every observation clear, stable, and shareable.

Product Key Selling Points

All-Time Observation Capability – Day & Night Without Switching Devices

The MS30P supports full-time observation, low-light mode, and infrared mode, all in one compact unit. Users no longer need separate binoculars for daytime and a bulky night vision scope for darkness. Whether you are tracking animals at dusk, inspecting a property after sunset, or patrolling a campsite at midnight, the MS30P seamlessly adapts to ambient light conditions. This all-in-one design reduces equipment weight and cost while ensuring you never miss a moment.

8x Digital Zoom – Get Closer to the Action

With 8x smooth digital zoom, the MS30P brings faraway subjects into sharp view without physical movement. Whether you are observing a bird's nest high in a tree, reading a distant sign during surveillance, or examining a roof edge from the ground, the zoom function preserves image clarity. Unlike optical zoom that requires bulky lenses, our digital zoom is built into the image processor, making the device lightweight yet powerful. You get detailed, magnified visuals instantly, saving time and effort in the field.

External Display Connectivity – Share Real-Time Views



The MS30P features a mini HDMI port that allows you to connect the device to an external monitor, TV, or projector. This is a game-changer for team operations: security teams can broadcast live footage to a command center; teachers can demonstrate night ecology to students on a big screen; and hunters can share their view with a companion without passing the device. The external output supports real-time video, making training, collaboration, and entertainment effortless.

Easy Media Export – Quickly Save & Share Your Discoveries

No more complicated file transfers. The MS30P lets you export photos and videos via USB cable, removable microSD card, or optional Wi-Fi module. You can instantly upload a nighttime wildlife video to social media, send a surveillance clip to a client, or back up hours of observation data to your laptop. This seamless workflow eliminates frustration and ensures your evidence or memories are safely stored and easily accessible. Spend more time exploring, less time struggling with cables or software.

Multi-Mode Infrared Illuminator – See in Total Darkness

The built-in 850nm or 940nm IR illuminator (selectable) provides invisible or low-glow infrared light, allowing you to see up to 300 meters in complete darkness. Unlike traditional night vision that requires some ambient light, the MS30P's active IR mode creates its own illumination. This is essential for covert surveillance, nocturnal animal observation, or navigating unlit trails. The adjustable IR intensity prevents overexposure at close range, giving you a balanced, detailed image even in pitch-black conditions.

Product Specifications

Parameter	Specification
Sensor	2MP CMOS low-light sensor
Optical Magnification	1x (digital only)
Digital Zoom	8x (continuous)
Viewing Modes	Full-time, Low-light (starlight), IR (active infrared)
IR Illuminator	850nm (visible red glow) / 940nm (covert, optional)
IR Range	Up to 300 meters (in total darkness)
Display	2.31" TFT LCD, 640x480 resolution
Video Resolution	1920x1080 @ 30fps, 1280x720 @ 60fps
Photo Resolution	2MP, 5MP (interpolated)
Storage	microSD card, up to 128GB (Class 10)
File Format	JPEG (photo), AVI (video)
Connectivity	Mini HDMI (live output), USB 2.0 (mass storage / PC camera)
Wireless (optional)	Wi-Fi module for smartphone app control & transfer
Battery	Built-in 18650 rechargeable lithium-ion (2000mAh)
Battery Life	Up to 6 hours (IR off), 3 hours (IR on)
Power Input	DC 5V / 2A via USB-C
Tripod Mount	1/4"-20 threaded socket
Operating Temperature	-10° C to 50° C (14° F to 122° F)



Water Resistance	IP54 (dust- proof and splash- resistant)
Dimensions	145 x 85 x 55 mm
Weight	310g (without battery)

Product Features

Section 1: Full- Time Observation Mode – Seamless Transition from Day to Night

Unlike traditional night vision devices that are useless under bright sunlight, the MS30P’s full - time mode works perfectly in all lighting conditions. Its high - dynamic - range sensor automatically adjusts gain and exposure, so you never need to change filters or turn the device off. For users who conduct long- duration surveillance – such as wildlife researchers tracking diurnal and nocturnal animals, or security guards monitoring a perimeter from dusk to dawn – this feature eliminates the hassle of carrying two separate instruments. The image remains clear and colour- accurate during daytime, then smoothly shifts to high- sensitivity black- and- white as light fades. You get continuous observation without blind spots. This solves the pain point of missing critical moments during twilight hours when many animals become active or security incidents occur. The MS30P stays ready 24/7, saving you time, weight, and the risk of switching equipment in the dark.

Section 2: Infrared Night Vision Mode – See Clearly in Absolute Darkness

When ambient light drops to zero (e.g., inside a cave, a windowless warehouse, or a moonless forest), the MS30P activates its powerful IR illuminator. The sensor is extremely sensitive to near - infrared light, converting invisible radiation into a crisp monochrome image. You can choose between 850nm (visible red glow, longer range) or 940nm (completely covert, shorter range) depending on your need for stealth. This function directly addresses the pain point of traditional night vision (Gen 1 or Gen 2) that requires at least starlight or moonlight. For security professionals conducting covert operations, hunters tracking wild hogs at night, or campers navigating after lights- out, the MS30P becomes an indispensable tool. You can identify subjects up to 300 meters away, far beyond the reach of a standard flashlight. The adjustable IR intensity prevents blooming when observing objects up close, ensuring every detail – from an animal’s eye shine to a door lock’s keypad – is visible. No more groping in the dark or relying on noisy flashlights that scare away wildlife.

Section 3: 8x Digital Zoom & Video Recording – Capture Evidence and Memories

The combination of 8x digital zoom and high- definition video recording turns the MS30P into a portable evidence - gathering device. Many competitors offer only 4x zoom, which is insufficient for identifying details at a distance. With 8x zoom, you can read a license plate 200 meters away or observe a bird’s feather pattern without disturbing it. The zoom operates smoothly via a dedicated button, and the image is displayed on the large 2.31” screen in real time. Meanwhile, one - touch recording captures 1080p video or high - resolution photos directly to a microSD card. This solves major pain points for users who need to document observations: private investigators collecting proof, homeowners inspecting their roof for damage, or teachers creating nature lesson content. You no longer need to carry a separate camera or smartphone adapter – the MS30P does it all. The recorded files are time- stamped and easily



transferred, making them admissible as evidence or shareable on social media. Forgetting a notebook or struggling to describe what you saw becomes a thing of the past.

Section 4: External Display Connectivity – Collaborate and Train in Real Time

Many night vision users work in teams or need to show their view to others. The MS30P’s mini HDMI port outputs live, lag-free video to any external monitor, TV, or projector. This is a breakthrough for security teams: the operator in the field can scan an area while supervisors watch the same feed from a mobile command vehicle, making coordinated decisions instant. For outdoor educators, you can connect the device to a large screen so a whole class can watch nocturnal animals without crowding around a small eyepiece. Even hunters can share the excitement with a partner who stays back at the lodge. The pain point solved is the “lone viewer” problem – traditional night vision devices have a single eyepiece, isolating the user. With the MS30P, you transform a personal tool into a shared experience or a professional monitoring system. No more guesswork or radio descriptions; everyone sees exactly what the device sees, improving communication and safety.

Section 5: Easy Media Export & Long Battery Life – Reliable for Extended Missions

The frustration of running out of battery or struggling to retrieve footage is common among field users. The MS30P addresses this with a large-capacity 2000mAh rechargeable battery (standard 18650 cell, replaceable) that provides up to 6 hours of continuous use. For longer missions, you can carry spare batteries or power the device via USB-C from a power bank. Exporting files is equally straightforward: remove the microSD card and insert it into any computer, or connect the device via USB cable – it appears as an external drive. Optionally, the Wi-Fi module allows wireless transfer to a smartphone app, where you can preview, download, and share videos instantly. This solves the pain points of short battery life (common in budget night vision) and complicated file management (proprietary software, slow transfer speeds). Field biologists, law enforcement officers, and night hikers can now rely on the MS30P for full-night operations, knowing that their evidence or memories are safe, accessible, and backed up. No more losing footage because the battery died mid-recording, or spending hours converting proprietary file formats.

Applications & Pain Points Solved

Scenario	Customer Pain Point Solved by MS30P
Wildlife Observation & Nature Photography	Traditional binoculars are useless at night, and professional night vision is expensive. The MS30P works 24/7 with 8x zoom and recording, allowing naturalists to observe nocturnal animals (owls, foxes, bats) without disturbing them. Pain: missing dawn/dusk activity, carrying two devices.
Home & Property Security	Fixed security cameras have blind spots. A handheld night vision device lets you patrol your property after dark, check suspicious noises, and record evidence. Pain: unable to see in total darkness, no portable recording. MS30P’s IR mode and video export solve this.
Camping & Night Hiking	Flashlights have limited range and drain batteries quickly; they also ruin night adaptation. The MS30P’s IR mode lets you see paths, wildlife, and campsite boundaries without blinding light. Pain: stumbling in darkness,



	scaring away animals.
Covert Surveillance & Investigation	Private investigators need to observe subjects without being detected. The 940nm covert IR mode emits no visible light, while external HDMI allows a second person to monitor remotely. Pain: getting caught due to red glow or bulky gear.
Search & Rescue Operations	Searching for missing persons at night is dangerous and inefficient with flashlights. The MS30P provides long- range IR vision (300m) and records footage for command review. Pain: limited visibility, inability to document search patterns.

Q&A

Q1: Can the MS30P be used during the day without damaging the sensor?

Yes. Unlike intensifier tube night vision devices (Gen 1- 3), the MS30P uses a digital CMOS sensor that automatically adjusts gain and exposure. It works perfectly in bright sunlight, low light, and total darkness. There is no risk of “burn- in” or damage from daylight.

Q2: What is the difference between 850nm and 940nm IR illuminators?

The 850nm IR emits a faint red glow that is visible to the naked eye at close range but provides maximum illumination distance (up to 300m). The 940nm is completely invisible (covert) but has a shorter range (approx. 150- 200m). The MS30P can be ordered with either option, or a dual-mode version.

Q3: Does the 8x digital zoom reduce image quality?

Digital zoom enlarges the central pixels, so some loss of resolution is inherent. However, the MS30P ’ s sensor and processor include edge enhancement and noise reduction algorithms to maintain usable detail. For critical identification, we recommend using 4x - 6x zoom; 8x is suitable for large subjects or reading signs at medium range.

Q4: Can I connect the MS30P to my smartphone?

Yes, with the optional Wi- Fi module (sold separately). You can install a free app (iOS/Android) to view the live stream, take photos/videos remotely, and download files to your phone. Without Wi - Fi, you can still export files via USB or microSD card.

Q5: Is the MS30P waterproof?

The MS30P has an IP54 rating – it is dust- tight and protected against splashing water from any direction. It can withstand rain, snow, and accidental splashes, but should not be submerged. For heavy rain or marine use, we recommend an optional rain cover.

Package Contents

- 1 x MS30P Digital Night Vision Device (main unit)
- 1 x 18650 Rechargeable Battery (2000mAh)
- 1 x USB- C Charging & Data Cable (1m)



- 1 x Mini HDMI to HDMI Adapter Cable
- 1 x Lens Cleaning Cloth
- 1 x Hand Strap
- 1 x Quick Start Guide (English)
- 1 x User Manual (Detailed, downloadable QR code)
- 1 x Carry Pouch (soft, padded)

Optional accessories (not included): 940nm covert IR illuminator module, Wi - Fi dongle, 32/64/128GB microSD card, tripod, external IR flashlight.