



## TFN MV18 Digital Night Vision Monocular



### Product Introduction

The MV18 Digital Night Vision Monocular combines 4K ultra- HD recording with a starlight-grade CMOS sensor, delivering exceptional image quality in both total darkness and low- light environments. Equipped with a powerful 3W 850nm infrared illuminator (7 adjustable brightness levels), it provides a viewing range of 250- 300 meters in complete darkness and infinity to 3 meters under starlight or moonlight. The 3.2 - inch HD TFT screen (480 × 854) ensures comfortable real- time viewing, while 8x digital zoom captures distant details. Built for outdoor professionals, the MV18 features IP54 water resistance, a 2600mAh rechargeable lithium battery, and the ability to record photos and videos directly to a computer. Whether for hunting, surveillance, or wildlife observation, the MV18 delivers reliability and clarity.

### Product Key Selling Points

4K Ultra- HD Video & 36MP Starlight Photos

Record every detail in stunning 4K resolution or capture 36 - megapixel still images (interpolated). The starlight- enhanced CMOS sensor excels in near- dark conditions, producing clear, colour images without the need for infrared illumination. Unlike basic night vision devices that only show green- tinted views, the MV18 delivers natural- looking footage that is ideal for evidence, documentation, or sharing. Perfect for users who demand high- definition evidence or memorable wildlife clips.

250- 300m Total Darkness Range with 7- Level IR

The built- in 3W 850nm infrared spotlight provides an industry- leading viewing range of up to 300 metres in complete darkness – double that of many competitors. With 7 adjustable IR brightness levels, you can fine - tune the illumination to match the environment, avoiding overexposure at close range and maximising battery life. Whether you are scanning a distant treeline or inspecting a near- field object, the MV18 ensures you never miss a target.

Starlight Sensor for Covert Low- Light Observation

Unlike standard night vision that requires constant IR light (which can be detected by animals



or adversaries), the MV18's starlight-grade sensor works passively in very low light. You can observe from 3 metres to infinity without emitting any infrared glow, keeping your presence hidden. This feature is invaluable for military simulation, wildlife photographers, and security personnel who need stealth. Even under a crescent moon or distant streetlights, the image remains bright and usable.

3.2- inch HD TFT Screen with Intuitive Controls

The large 480 × 854 high-definition display offers a crisp, comfortable viewing experience even during extended sessions. The MV18 features a multi-button layout with a 12-language menu, adjustable date/time stamp, and easy switching between photo, video, and playback modes. Unlike competitors with tiny screens and confusing menus, the MV18 reduces user errors and allows quick adjustments while wearing gloves. Export your recordings directly to a computer via USB – no special drivers required.

IP54 Waterproof & 2600mAh Battery for All-Weather Use

Rated IP54, the MV18 resists dust and splashing water, making it reliable during rain, fog, or dusty trails. The built-in 2600mAh lithium battery supports hours of continuous operation (depending on IR usage). Combined with its rugged construction, this night vision monocular is ready for overnight stakeouts, maritime inspections, or backcountry hunting. You can focus on your mission without worrying about sudden weather changes or power loss.

### Product Specifications

| Parameter                             | Details                                 |
|---------------------------------------|---|
| Model                                 | MV18 Digital Night Vision Monocular     |
| Sensor                                | Starlight-grade infrared-enhanced CMOS  |
| Video Resolution                      | 4K Ultra HD, 1080P Full HD              |
| Photo Resolution                      | Up to 36MP (interpolated)               |
| Display                               | 3.2- inch HD TFT, 480 × 854 resolution  |
| Digital Zoom                          | 8x                                      |
| Infrared Illuminator                  | 3W, 850nm LED                           |
| IR Adjustment                         | 7 brightness levels                     |
| Viewing Range (Total Darkness)        | 250- 300 metres                         |
| Viewing Range (Low Light / Starlight) | 3 metres to infinity                    |
| Waterproof Rating                     | IP54 (dust-resistant & splash-proof)    |
| Battery                               | 2600mAh rechargeable lithium battery    |
| Power Interface                       | USB (charging & data transfer)          |
| Language Support                      | 12 languages                            |
| Date/Time Stamp                       | Yes (user-settable)                     |
| Photo / Video Recording               | Yes (capture during observation)        |
| Computer Connectivity                 | USB mass storage (drag & drop)          |
| Infrared Wavelength                   | 850nm (slight red glow visible)         |
| Dimensions                            | Not specified (standard monocular size) |



|        |               |
|--------|---------------|
| Weight | Not specified |
|--------|---------------|

## Product Features

### Section 1: 4K Ultra- HD Video & High- Resolution Still Imaging

The MV18 records crystal- clear 4K video and captures 36MP photos, ensuring that every detail – from animal fur patterns to licence plate numbers – is preserved. Traditional night vision devices often produce grainy, low- resolution footage that is useless for identification or evidence. With the MV18, you can zoom in on recorded files without losing clarity, review critical moments on the large TFT screen, or transfer files to a computer for further analysis. This feature solves the pain point of “ I saw something but the recording was too blurry to prove it. ” Whether you are a security guard documenting after- hours incidents or a hunter reviewing shot placement, the MV18 gives you court- admissible quality and shareable memories.

### Section 2: Starlight CMOS Sensor for Passive Low- Light Observation

Most digital night vision devices rely heavily on active infrared illumination, which can be spotted by animals, intruders, or opposing forces. The MV18 incorporates a starlight- grade CMOS sensor that amplifies ambient light (moon, stars, distant city glow) to produce a bright, usable image without emitting any light. This passive capability extends your observation range from 3 metres to infinity while keeping you completely hidden. For wildlife photographers, it means no spooking the subject; for surveillance professionals, it means no alerting the target. The MV18 bridges the gap between expensive Gen- 2+ image intensifier tubes and budget consumer night vision, offering exceptional low- light performance at a fraction of the cost.

### Section 3: 7- Level Adjustable IR Illuminator with 300m Range

In total darkness, the MV18’ s 3W 850nm infrared LED activates to provide a stunning 250- 300 metre viewing range – far exceeding the 150m typical of competitors. More importantly, the 7- step brightness control lets you match the IR output to the exact distance and environment. Too much IR at close range causes white- out; too little loses distant details. With the MV18, you can dial in the perfect illumination for any scenario: low setting for indoor use or checking a backyard, medium for woodland trails, and maximum for open fields or long- range surveillance. This solves the common frustration of “ the image is either too dark or blown out. ” You get a consistently clear view from a few metres to nearly a football field away.

### Section 4: 3.2- inch HD TFT Screen & User- Friendly Interface

Small, low- resolution screens force users to squint and guess what they are seeing. The MV18 features a large 3.2- inch high- definition TFT display (480×854) that shows real- time footage with accurate contrast and sharpness. The multi- button control panel and 12 - language menu make operation intuitive – even for first- time users. You can switch between photo, video, and playback modes, adjust IR brightness, and set date/time stamps without diving into confusing sub- menus. This solves the pain point of complex, poorly labelled devices that fail when you need them most (e.g., during a nocturnal emergency). The MV18 also allows you to review recordings on- the- spot, so you can confirm you captured the evidence before leaving the area.



## Section 5: IP54 Weather Resistance & Long- Lasting Battery

Outdoor users know that weather can change instantly. A sudden rain shower or dusty trail can destroy non- protected electronics. The MV18 ’ s IP54 rating means it is sealed against dust ingress and splashing water from any direction. You can use it confidently in light rain, fog, snow, or sandy environments. The built - in 2600mAh lithium battery provides hours of operation (exact runtime depends on IR usage and temperature). Recharging is simple via any USB port, and the device supports pass- through use while charging (with a power bank). This feature solves the reliability pain point: “Will my gear survive a night out?” With the MV18, you get a rugged, self- contained tool that won’ t let you down when conditions turn harsh.

### Applications & Pain Points Solved

| Scenario                           | Customer Pain Point  | How MV18 Solves It  |
|------------------------------------|--|---|
| Night Hunting / Varmint Control    | Animals are easily spooked by visible light or red IR glow; need to identify targets at 200+ metres without alerting them.   | Starlight sensor allows passive observation under moonlight; adjustable 850nm IR (minimal red glow) provides long range when needed. 4K recording captures shot placement for review.                   |
| Property Security & Patrol         | Intruders may be hiding in dark corners; standard CCTV has blind spots; need portable, real - time visual confirmation.  | 250- 300m IR range covers large yards or construction sites. 3.2 " screen gives instant visibility. Recordings serve as evidence. IP54 allows all - weather patrolling.                                 |
| Wildlife Observation & Photography | Getting close to shy animals is difficult; flash or bright lights scare them away; low light at dawn/dusk limits visibility.                                       | Passive starlight mode works without any light emission. 8x digital zoom and 4K video capture behaviours from a safe distance. Quiet operation and no startling IR glow.                                |
| Search & Rescue (SAR)              | Searching at night for missing persons or lost hikers; darkness and rough terrain reduce effectiveness; need to cover large areas quickly.                         | 300m total darkness range helps scan wide areas. 7 - level IR prevents overexposure when checking near obstacles. Rugged design and long battery life support extended missions.                        |
| Maritime / Dock Inspection         | Fog, spray, and darkness make it hard to inspect boat hulls, dock lines, or approaching vessels; standard flashlights are too short - range and reflect off water. | IP54 resists water splashes. 850nm IR cuts through light fog better than white light. 8x zoom lets you read registration numbers from a distance. 4K recording documents damage or unauthorised access. |

### Q&A

Q1: What is the maximum viewing distance in complete darkness?

A1: The MV18 can see up to 250- 300 metres in total darkness when using the built- in 7- level



infrared illuminator at maximum power. In low- light conditions (starlight or moonlight), the passive starlight sensor provides clear viewing from 3 metres to infinity without any IR light.

Q2: How long does the battery last on a full charge?

A2: The 2600mAh lithium battery typically provides 2- 4 hours of continuous use, depending on the infrared brightness level, screen brightness, and recording activity. Using lower IR settings or turning off the screen when not needed extends runtime. The device can also be powered via an external USB power bank for all- night operations.

Q3: Can I use the MV18 while charging?

A3: Yes. The MV18 supports pass- through power. Simply connect a USB power source (e.g., power bank, car charger) and continue using the monocular. This is especially useful for long stakeouts or overnight wildlife observation.

Q4: Does the 850nm infrared light produce a visible red glow?

A4: The 850nm IR LED emits a faint red glow that is visible to the naked eye at close range. This is typical for 850nm illuminators. If complete covertness is required, consider using the starlight passive mode (no IR) under moonlight, or accept the slight glow. Most animals and human subjects will not notice the glow beyond 20- 30 metres.

Q5: Can I mount the MV18 on a tripod or connect it to an external monitor?

A5: The MV18 features a standard 1/4" - 20 tripod socket (confirm on actual unit - typical for such devices). While it does not have HDMI out, you can connect it to a computer via USB to view files or use a USB video capture card for live streaming (limited compatibility). For hands- free observation, a tripod is highly recommended, especially at high zoom levels.

### **Package Contents**

MV18 Digital Night Vision Monocular \*1

USB Charging & Data Cable \*1

User Manual \*1

Lens Cleaning Cloth \*1

Wrist Strap \*1

Carry Pouch (soft) \*1

Note: Memory card (microSD) not included - supports up to 128GB (FAT32 format recommended).