



## Detailed Technical Description of the Modular Transition and Remote Tripod Deployment

### 1. Dismounting and System Conversion

The **OPTIX Mobile Surveillance System** is engineered for maximum operational versatility, allowing the **MS One-V multi-sensor head** to be transitioned from its vehicle-integrated lifting mechanism configuration to a remote ground-based configuration.

The process begins with the operator (or personnel) utilizing specialized tools, part of the **Mobile surveillance system standard set**, to decouple the pan/tilt unit from the lifting mast's interface plate. This modular design ensures that the high-precision payload can be safely unmounted by personnel within minutes, maintaining the integrity of the optical sensors and the electronic connections throughout the transition.

### 2. Remote Tripod Configuration

Once decoupled, the multi-sensor head is secured onto a **heavy-duty tactical tripod Miller HDC100** included as part of the system's standard equipment. This tripod provides a stable, rigid platform capable of supporting the gyro-stabilized payload on uneven or sloped terrain.

To facilitate remote operations, the system includes a **50-meter specialized rugged cable** stored on a high-durability reel. This cable serves as the primary data and power link, connecting the tripod-mounted sensor head back to the vehicle's internal workstation or command platform.

This allows for:

- **Independent operation:** the system can be operated via the main vehicle or command platform.
- **Strategic Positioning:** The system can be placed at a high-vantage point (such as a hilltop or rooftop) up to 50 meters away from the vehicle.
- **Discreet Surveillance:** The vehicle can remain concealed or positioned behind cover while the sensor head maintains a clear line of sight on the target area.

### 3. Remote Operation and Performance

Even in the tripod-mounted configuration, the operator retains full control over the **MS One-V system** via the internal multifunction joystick, the PC workstation or the command platform. The system continues to provide high-definition MWIR and day-color feeds, with the 50-meter link ensuring zero latency in command and control. This "stand-off" capability significantly enhances the tactical flexibility of the unit during static observation missions.

### 4. Recovery and Re-integration (Reverse Sequence)

Upon mission completion, the process is reversed to restore the vehicle's mobile capability:

1. **Cable Retrieval:** The 50-meter rugged cable is retracted and stowed using the integrated reel.



2. **Payload Recovery:** The multi-sensor head is unmounted from the tripod and returned to the vehicle interior.
3. **Mechanical Re-coupling:** The unit is re-attached to the internal lifting mechanism and secured for transport.
4. **System Lockdown:** Once the tripod is placed in its position in the vehicle, the cable with the reel is placed in its place, the vehicle is ready for high-speed transition.