Trap Cameras
(Remote Surveillance in Mining)

Netra_M

Autonomously triggered, ruggedized digital cameras with motion sensors, designed for 24/7, low-light, and harsh environment monitoring.

Use Cases Of Trap Camera

- Mining and construction : Prevention of material theft, unauthorized access detection, and monitoring worker safety compliance.
- Railways: Trap cameras (also known as trail cameras, camera traps, or motion-sensor cameras) are highly useful for Indian Railways, particularly in preventing tragic collisions between trains and wildlife. These areas often pass through or near forests, national parks, elephant corridors, tiger reserves, and other biodiversity hotspots, where animals like elephants, tigers, leopards, deer, and others frequently cross railway tracks.
- Wildlife & Conservation Monitoring: Monitor endangered species without human interference, Capture real-time data for research and conservation, Understand animal movement and behavior patterns.

- Agriculture & Property Protection: Identify threats to crops or livestock from wildlife, Reduce losses from wild animals (e.g., boars, monkeys), Monitor remote fields or fencing without patrols
- Infrastructure & Road Monitoring: Support government compliance on environmental safety, reduce accidents, and capture all the incidents.
- Construction sites: Unauthorized Access Detection, equipment and Material Theft Prevention, remote Site Surveillance, Worker Safety Compliance Monitoring, environmental and Wildlife Activity Monitoring.
- Border Security & surveillance: Trap cameras can capture motion-triggered images or videos of individuals or vehicles attempting illegal entry across borders., Gather time- stamped photographic evidence, Operate 24/7 in remote or low-access zones, Ideal for rugged, forested, or mountainous border zones where regular patrolling is difficult or dangerous. Battery-powered and camouflaged trap cameras operate discreetly without needing electricity, making them perfect for covert operations

Technical specifications

4G Cellular Cloud Based Trail Camera

- 5MP–20MP Image Sensor
- Full HD 1080p Video Recording
- Ultra-Fast 0.20 Sec Trigger Speed
- 30M Infrared Night Vision
- Cloud Upload with HTTPS Security
- GPS Location, Date & Time Stamp
- Dual Power Option
- 2G/3G/4G Cellular Based Trail Camera.
- PIR sensor angle 60°/100°, upto 30m detection distance.

- Day and night operational
- IP66 waterproof level.
- Camouflage body
- 800gm including battery
- Photo type: Colour by day and infra red by night
- 2.0" TFT Screen 1-5P Multi shot
- Remote over-the-air(OTA) firmware upgrade.
- Build for the extreme conditions

Security and Risk Management Preventing Illegal Mining & Theft

- Mines are often located in remote areas, making them targets for thieves, illegal miners, or poachers. Trap cameras detect trespassers and illegal activities in real-time.
- Perimeter Protection: They can monitor remote boundary zones for unauthorized entry, with cellular models (2G/3G/4G/LTE) sending alerts to security teams immediately.
- Vandalism Prevention: The presence of these cameras acts as a deterrent against vandalism of expensive machinery and infrastructure.
- Safety and Operational Efficiency Safety Compliance: AI-enabled cameras can detect if workers are in restricted or hazardous zones and ensure they are wearing appropriate personal protective equipment (PPE).
- Traffic Management: They monitor traffic patterns and vehicle activity in open-pit mines to prevent collisions and ensure that large mining trucks adhere to designated routes.

- Asset Monitoring: They help monitor conveyor belts for issues like material skimming, jams, or deviation.
- Advantages in Mining Environments Non-Invasive: They monitor the environment with minimal disturbance.24/7 Monitoring.
- Infrared technology allows them to operate in complete darkness.
- Remote Operation: They can work unattended for weeks or months, and some models use solar panels for continuous power, making them ideal for remote, off-grid locations.
- Remote Alerts: Modern wireless cameras can transmit images via cellular/Wi-Fi, providing real-time data to operators in the office rather than requiring manual retrieval.
- Prevention of material theft, unauthorized access detection, and monitoring worker safety compliance.