China Moneypro MPY166 Ground Surveillance Radar (GSR) – Next-Generation Battlefield Surveillance System

#### **Product Overview**

China Moneypro MPY166 Ground Surveillance Radar (GSR) is a cutting-edge, all-weather, multi-target battlefield surveillance system engineered for real-time detection, tracking, and classification of personnel, vehicles, and low-flying aerial targets. Combining compact design with advanced digital signal processing, the system achieves superior mobility, rapid deployment, and high anti-jamming resilience.

It is suitable for **vehicle-mounted**, **tripod-mounted**, **or man-portable configurations**, enabling flexible operation across battlefields, border surveillance, coastal defense, and critical infrastructure security.

## **Key Features & Capabilities**

- All-Weather, Day/Night Operation: Effective in rain, fog, and dust with low false alarm rates.
- Multi-Target Tracking: Simultaneous tracking of >200 moving targets, including crawling personnel, armed soldiers, vehicles, tanks, and boats.
- Detection Range:
  - Personnel (1.5 m² RCS): ≥18 km
  - Light Vehicles (10 m² RCS): ≥25 km
  - o Tanks / Heavy Vehicles (30 m<sup>2</sup> RCS): ≥35–40 km
  - o Low-flying UAVs (0.01–0.05 m<sup>2</sup> RCS): ≥8–12 km
- Accuracy:
  - Range accuracy: ≤5 m
  - Azimuth accuracy: ≤0.3°
  - Radial velocity accuracy: ≤0.2 m/s
- Target Classification: Al-enhanced algorithms distinguish crawling individuals vs. walking soldiers, and light vehicles vs. heavy armor.
- ECCM Performance: Adaptive frequency agility, sidelobe cancellation >60 dB,

- and resistance to co-channel jamming with >90 dB J/S ratio tolerance.
- **Deployment**: Lightweight (system weight <30 kg in man-portable configuration), **setup time <10 minutes**.
- **Power Supply**: Vehicle DC, battery, or portable generator; continuous operation >24 h.

# **Applications**

- Battlefield Reconnaissance & Monitoring: Detection of soldiers, vehicles, and UAVs; battle damage assessment; mission support for artillery and UAV strike coordination.
- Homeland Security & Counter-Terrorism: Protection of airports, dams, power stations, pipelines, ports, and major events with 24/7 surveillance and alarm functions.
- Border & Coastal Defense: Persistent surveillance of personnel, vehicle movement, and maritime traffic; deployable on UAVs, ships, or land-based stations.

# **Comparison with Leading International Systems**

| Parameter                         | Elta EL/M-<br>2112 (Israel) | Thales BOR-A 550<br>(France) | China MoneyPro UAV - GSR              |
|-----------------------------------|-----------------------------|------------------------------|---------------------------------------|
| Personnel Detection<br>Range      | ~10–12 km                   | ~15 km                       | ≥18 km                                |
| Vehicle Detection<br>Range        | ~20 km                      | ~24 km                       | ≥25 km (light), ≥35–<br>40 km (heavy) |
| UAV Detection (small RCS 0.01 m²) | ~5–6 km                     | ~7–8 km                      | ≥8–12 km                              |
| Simultaneous Targets              | ~100–120                    | ~150                         | >200                                  |
| Range Accuracy                    | 10 m                        | 7 m                          | ≤5 m                                  |
| ECCM Performance                  | Frequency                   | Frequency agility +          | Adaptive ECCM, >90                    |

| Parameter             | Elta EL/M-<br>2112 (Israel) | Thales BOR-A 550 (France) | China MoneyPro UAV - GSR               |
|-----------------------|-----------------------------|---------------------------|--|
|                       | agility                     | sidelobe cancelation      | dB J/S ratio                           |
| Weight (portable set) | ~35–40 kg                   | ~32 kg                    | <30 kg                                 |
| Deployment Time       | ~15–20 min                  | ~15 min                   | <10 min                                |
| Integration           | Vehicle & fixed             | Vehicle & tripod          | Vehicle, tripod, UAV pod, man-portable |

# Why Choose China MoneyPro - GSR Ground Surveillance Radar?

- Superior Range & Accuracy: Detects personnel beyond 18 km and vehicles up to 40 km, outperforming most international peers.
- **AI-Powered Target Classification**: Enhanced identification of target type and movement pattern.
- Compact & Rapidly Deployable: <30 kg modular design with setup under 10 minutes.</li>
- Versatility: Operable on vehicles, UAVs, ground stations, and naval platforms.
- **Future-Proof**: Open architecture for integration with C4ISR networks, UAV strike systems, and counter-drone solutions.

The China MoneyPro Ground Surveillance Radar sets a new benchmark for battlefield surveillance by combining extended detection range, superior anti-jamming, multi-platform adaptability, and AI-enhanced classification. It is the ideal solution for clients seeking world-class ISR (Intelligence, Surveillance & Reconnaissance) capabilities for defense, homeland security, and border protection.

### Learn More & Contact Us

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