

GD-200 Battlefield Surveillance Radar

Man Portable Surveillance and Target Acquisition System (Detecting of tank, armored fighting vehicles, personnel etc...)



■[Mission]-The Man portable Surveillance and Target acquisition radar detects ground targets (including tank, armored fighting vehicles, personnel) and measures coordinates (range, azimuth) in any season, including poor visibility conditions. Man portable Surveillance and Target Acquisition Radar is a highly versatile low-power, high-performance ground surveillance radar. The Man portable radar provides wide-area surveillance to a maximum range of 10 km, day or night and in all weather conditions. This system can be carried by two persons, and put into action in less than five minutes. This radar can be installed at army barracks, police checkpoints for surveillance and operation as well as schools for security and protection [Concept of Operation]-Targets are

classified automatically using target clas-

sification in terms of Doppler effective-

ness, with output Doppler return being

channeled to the operator. ■[Operating Principle]-The radar detects and tracks several kinds of ground targets including a crawling person as well as vehicles in a high probability with a sophisticated device and signal processing technology such as LFM impulse compress, range side removing, frequency-agile, FFT filter group process, solid transmit technology. The target reflection signal into the antenna is input to RF front-end with SAW filter through the circulator. The target signal of intermediate frequency mixed with the local oscillation signal that comes from the local oscillation unit through the SAW filter and the limited amplifier. The digital target signal converted in the signal processing unit is processed, so the final target information (range, azimuth) is obtained. On the display, an operator simultaneously tracks the locus of several targets. And it identifies the kind of selected targets.

[Key features]

■ Easy to deploy in battle field ■ Operating in all seasons ■ High versatile low-power, high-performance ■ Maximum 10Km in day and night at all weather conditions ■ Wide usable area in army barracks, police check points for surveillance, VIP protection etc...

General Specifications

Detection range

Pedestrian Not less than 4km Moving vehicle Not less than 10km

Resolution

Range Less than 50m Azimuth Less than 1.6deg

Co-ordinate Measurement Precision

Less than 30m Range Less than 1deg Azimuth

Antenna directivity angle

Horizontal angle $(1.6 \pm 0.2) \deg$

Vertical angle $(3.5 \pm 0.5) deg$

Antenna azimuth operating range

±45deg

Antenna rotation speed Less than (4±1)deg/s

Target indication LCD, sound 2~60Km/h Moving target speed

Set-up/tear-down time 5 minute

Weight 32kg

458x408x230mm Size

Power source and consuming power

Power source DC12V

Consuming power Less than 30W

Environment

Operating temperature -30°C~+60°C -50°C~+70°C Storage temperature

Humidity 98%

Vibration MIL-STD-810E

Shock MIL-STD-810E



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Advantage

- Comfortable & durable so as to be set up at any place or vehicle to detect moving target within distance of 4km and radius of 6km.
- To be coupled with the computer system to detect the target moving in group when set up at the area where pedestrians are rare for security guarantee.
- To be set up on the top of the building to track the sniper target by detecting the movement of target such as the noise or hand motion
- For the security of special forces camping in tent, 4 sets of radars, for instance, can be set up to detect the approaching enemy, display its coordinates to be shown on the digital map for early warning.
- For protection of a certain building, it can be set up on the ladder or veranda to detect the terrorists within the random range of computer display.
- This radar is powered by a battery or any other 12V DC source.

GD-200 Battlefield Surveillance Radar Set



The Glocom GD-200 Battlefield Surveillance Radar Set is ideal for extended portable field operations providing the tactical user with effective, secure and comprehensive surveillance with remote sited command locations. It includes all necessary box, tripod, computer, antennas. There are also some options for vehicle in stallation, tool kits etc. The standard set comprises:-

•	Transceiver with antenna	GD-200-01
•	Tripod	GD-200-02
•	Remote control & display unit (PC)	GD-200-03
•	Headphone	GD-200-04
•	Ethernet cable (5m)	GD-200-05
•	Li-lon battery (12V/20A) with cable (1m)	GD-200-06
•	Battery charger	GD-200-07
•	320W power supply unit with cable	GA-34A
•	30 x time CCD Camera set	GD-200-09
•	Setup and application kit	GD-200-10





