

SCOUT Mobile Ground Surveillance & Security System



Date Revised: 15 JUN 04

VENDOR DESCRIPTION

The mobile reconnaissance vehicle, with thermal camera and off-road capability, features complex equipment developed for nighttime and daylight observation. Basic components of the vehicle are a thermal imager, daylight camera, laser range finder, and electronic compass mounted on an extendable mast. An integrated GPS provides precise coordinates of the vehicle during its mission. All functions of the system are controlled by an integrated computer. An integrated communication system enables the vehicle to become a high-power surveillance device and work as a member of a reconnaissance system.

Data generated by the system appears on the screen of the computer installed in the observing compartment, combining the visual picture with a map. MGSSS is intended for use during night or day and in harsh environments.



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Business Category: Small Business

CDR

Main System Components Built Into Vehicle

Electro-Optical Head Functions:

- Thermal Imager (Infrared Camera)
- Daylight (CCD) Camera
- Laser Range Finder (LRF)
- North-finding Device (NFD)
- Pan and Tilt Unit (P&T)

Computer System Functions:

- Displaying maps, pictures presented by either thermal imager or CCD camera or both
- Two touch-screen

Telecommunication System containing

- Modem
- VHF radio sets (optional) for data and voice communication

Electro-mechanical extendable mast Battery set

GPS (Global Positioning System) Power generator

General Specifications of Vehicle

Total weight of vehicle	Less than 3.5 t
Operating temp of MGSSS outside (ambient)	-32° to +45°C
Storage temp	-32° to +70°C
Powered by built-in battery set	24 VDC
Uninterrupted operating time of MGSSS from battery set	Not less than 8 hrs
Powered by built-in power generator	230 VAC
Operating time of MGSSS from built-in power generator or line	No limitation
Ground clearance of vehicle under full loading	Not less than 20 cm

Electro-Optical Head

Infrared Camera (Thermovision 2000 QWIP)

Number of fields of view	3	Detection at Mid FoV	3.5 km
Mid FoV	6°x4.5°	Recognition at Narrow FoV	4 km
Narrow FoV	.99°x.74°	Operating temp range	-32 to +55°C
Wide FoV	25°x19°	Storage temp range	-40 to +70°C

Daylight (CCD) Cameras

Effective picture size [HxV]	782x582 pixels	Signal-to-noise ratio	57 dB
Resolution [HxV TV lines]	800x575	Frames/sec	25

Laser Range Finder

Measuring range	80 to 20,000 m
Range resolution	5 m
Multiple targets	First and last targets
Operating temp range	-32° to +55°C
Storage temp range	-40° to +70°C

Pan and Tilt Head (Variable Speed)

Pan range	0° to 435° (±217,5°)
Tilt range	±90°, limited to ±25°
Operating temp	-15° to +55°C (without heater) -30° to +55°C (with heater running)