

MMSB 01

Mobile Monitoring System in a Box

DESCRIPTION:

„The „MMSB 01 Mobile Monitoring System in a Box“ installed to vehicle roof has been designed to guard objects of interest and to monitor areas of interest. The main subsystem is the sensor unit comprising optical-electronic sensors operating both at visible and also at far IR spectrum. Colour TV camera provides operation at visible spectrum functioning as a day image sensor. Thermal camera with uncooled detector ensures night observation and detection of camouflaged objects during day. Both cameras /including GPS module/ are located at the direction positioner retractable from the roof autobox through motor operated lifting mechanism. System computer technology includes a 17.3" laptop with user SW installed. User SW is capable of various functions such as lifting mechanism control, monitoring and automatic surveillance of area of interest, creation of panorama, image saving, video recording, map operation, etc. Operating temperatures are ranging between -32° and +50 °C.



BASIC TECHNICAL PARAMETERS:

Roof Autobox

– Dimensions (l, w, h)	1 470 × 960 × 420 mm
– Mass (total, excl. cross bars)	70 kg
– Sensor unit retraction/extension time	35 s
– Height of sensor unit extension above autobox	50 cm

Day TV camera

– Image sensor	colour CMOS
– Image size	1 920 × 1 080
– Zoom optical / digital	30× / 12×
– FOV	59.3° × 46.0° to 2.2° × 1.6°
– Focus	automatic
– Rated static range to target type PERSON (1.8 m × 0.5 m) – narrow FOV, 20 km meteorological visibility, 30% contrast of target against background, 50% resolution probability:	
– Detection / recognition / identification	6.5 km / 3.0 km / 2.0 km

Thermal camera

– Detector	uncooled VOx microbolometer
– Detector resolution	640 × 512 (17 m)
– Spectral band	8 to 14 m
– Optical zoom	continuous
– FOV	24.5° × 18.5° to 4.2° × 3.1°
– Rated static range to target type PERSON (1.8 m × 0.5 m) – narrow FOV:	
– Detection / recognition / identification	4.0 km / 1.5 km / 0.8 km

Operator's terminal (laptop)

– Display	17,3" LCD, touchscreen
– Resolution	1 920(W) × 1 080(H)

Direction positioner

– Range of azimuth / elevation	n × 360° / -30° to +30°
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