

PERFORMANCE CHARACTERISTICS* OF THE MOBILE RADAR SYSTEM FOR SMALL-SIZED UAVS

No.	Denomination	Value
1	Range	S-band
2	UAV detection range in “line of sight” conditions: ^{**} UAV with RCS = 0.01 m ² , no less than UAV with RCS = 0.1 m ² , no less than UAV with RCS = 1 m ² , no less than	5 km 8.5 km 15 km
3	Automatic detection, target tracking, no less than	50 pcs.
4	Resolution: by range, no less than by radial speed, no less than	100 m 2.0 m/s
5	Measurement accuracy: by range, no more than in azimuth, no more than by elevation angle, no more than by radial speed, no more than	10 m 1.0° 1.0° ^{***} 1.2 m/s
6	View modes	Circular
7	Review period	4 s
8	Viewing area (working limits): in azimuth by elevation angle by range (instrumental in unambiguous measurement mode) by minimum target radial velocity by maximum radial target velocity	360° from 0 up to 80° ^{****} from 0.2 to 30 km 2.5 m/s no less than 100 m/s
9	Radar system deployment/tear-down time from transporting to working position, no more than	5 min
10	Power supply voltage	220 V ± 10% 50 Hz
11	Power consumption of AC mains, no more than	2500 VA
12	Operating temperature range for equipment	from – 30°C up to + 50°C
13	Crew	operator – 1 driver-technician – 1

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- * Technical characteristics of the Radar System may change as continuous modernization of the Radar system and UAVs opposing to it is carried out;
- ** At elevation angles of less than 6° interference “dips” in the detection range are allowed, depending on the topography of the surrounding area;
- *** At elevation angles of more than 6°;
- **** The viewing area in elevation is adjusted depending on the terrain and the location of the Radar System installation.