SAM Bn (SA-23 Gladiator/Giant [S-300V4 Antey-4000]) - 4x Bn + High Screen B + Bill Board B

Russia [1992-]

Type: Mobile Vehicle(s)
Commissioned: 2014
Operator: Army
Length: 0 m
Width: 0 m
Crew: 1

Sensors / EW:
- SA-23 TEL Illuminator - Radar, Radar Illuminator, Long-Range, Max range: 148.2 km
- Grill Pan [9S32M] - (SA-23) Radar, Radar, FCR, Surface-to-Air, Medium-Range, Max range: 250 km

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Weapons / Loadouts:
- SA-23b Giant [9M82M] - (S-300V4) Guided Weapon. Air Max: 250 km.
- SA-23a Gladiator [9M83M] - (S-300V4) Guided Weapon. Air Max: 148.2 km.

The improved 3K81M/S-300VM/VM1/VM2/VMD/VME/Antey-2500 or SA-23 is most easily differentiated from the 3K81/S-300V by the redesigned 9S32M/ME "Grill Screen" engagement radar, but no less importantly it employs kinematically superior 9M82M/ME missile rounds. The acquisition radars are the improved 9S15M/MV / "Bill Board B" and 9S19M2 Imbir / "High Screen B". Cited range performance for the 9M82M missile was initially 200 km against aerial targets, but more recently this is cited by the manufacturer at 250 km.

Cited range improvements for the 9S15M2 Bill Board B are 320+ km versus the Bill Board A, and for the 9S18M2 High Screen B 250 km versus 175 km for the High Screen A.

The most prominent change in the radar suite is the 9S32M Grill Screen, which employs the much larger space fed antenna design of the 9S32 High Screen, and a higher peak power. The cited range performance for a fighter sized target is in excess of 200 km, and likely better than 250 km given the more recently revised kinematic range for the 9M82M missile.

While the range performance of the 9M82M/ME and 9M83M/ME missiles against aerial targets is not as good as the contemporary S-400 / SA-21 40N6 missile, the 9M82M/ME matches the kinematic range of the S-400 / SA-21 48N6E3,

and outperforms the S-300PMU2 Favorit / SA-20B 48N6E2 missile, and all earlier 48N6 series missiles. In terms of performance against ballistic targets, the 9M82M/ME outperforms the 48N6E2 missile and provides almost identical performance to the much newer 48N6E3 missile.

Importantly, the two stage S-300V/VM missiles are built for much higher acceleration than the S-300P missiles, also reflected in launch footage. The result is that for engagements against aerial targets, the S-300V/VM missiles have a shorter time of flight, and at similar ranges will have considerably higher kinetic energy for endgame manoeuvres compared to their single stage 48N6 series cousins. The cited average speed for the 9M82 missile across the whole trajectory is around 85-90% of the maximum speed cited for the 48N6E2/E3 missiles.