

DATA SHEET

# Shrink Vector Doppler Scoring System (SVDOPS-A) CMDI-125B



## 01 Description

The SVDOPS-A Vector Doppler Scorer model CMDI-125B, is a non-cooperative missile-scoring radar that is optimized for use with mid-scale aerial targets, but can be configured for land and sea targets as well.

Integration of the radar unit with any target vehicle is made via a customized installation kit that contains the required installation hardware (cables, antennas, and mounting hardware). The SVDOPS-A target set, along with a compatible ground station, provides a complete vector score with associated attitude for all missile types, and includes a 3D reconstruction of the missile trajectory throughout the entire scoring volume. Trajectory data of the projectile is time-tagged with customer supplied timing information for absolute time-position information of the passing projectile.

Reconstructed animations of projectile intercept, color-graphical and standard-text displays are presented to the operator by either computer monitor or hardcopy. Continuing a legacy which has been field tested since 1998, the SVDOPS-A provides proven non-cooperative vector scoring capabilities.

The SVDOPS-A is the latest generation vector scorer from Meggitt Defense Systems. Utilizing the latest advancements in RF design and improved performance over the legacy system, SVDOPS-A builds upon proven technologies to deliver the most accurate and reliable vector scoring system for the most demanding applications.

## 02 Key features and benefits

- Scoring range 30.5m (100 ft)
- 3D trajectory and weapon attitude measurements
- Operating frequency 2433.5 MHz
- Two field selectable radar channel frequencies for multi-drone missions
- Closing velocity measurement range 180 to 1830 m/s (600 to 6,000 ft/s)
- L or S band telemetry

## 03 Applications

- Projectile tracking for training and evaluation missions
- Standard installation kits BQM-167i and BQM-167A

## 04 Contact

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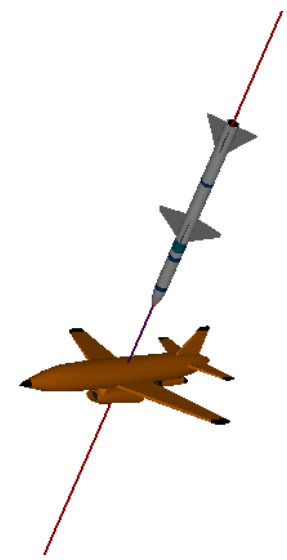
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### 05 Specifications

(Accuracy/Coverage metrics based on the BQM-167 Installation)

Scoring range	0 to 30.5m (0 to 100 ft)
Vector score accuracy (rms)	0.76 m (2.5 ft)
0 to 7.62 m (0 to 25 ft)	10% of range
7.62 to 30.49 m (25 to 100 ft)	
Attitude accuracy (rms)	5°
0 to 15.24 m (0 to 50 ft)	10°
15.24 to 30.5 m (50 to 100 ft)	
Probability of producing a scalar result	99%
Scoring coverage	Spherical coverage provided via six separate antenna locations on target platform
Telemetry power	5 watts
Frequency (one of two bands)	L-band (1435.5 to 1540.5 Mhz) S-band (2200.5 to 2290.5 Mhz)
Bandwidth	IRIG 106-15
Bit rate	2.5 Mb/s
Encryption (optional)	KGV-135 (provided separately)
Target formations	200-ft separation
2 targets	10,000-ft separation (optional)
4 targets	22 - 32 V dc @ 5.0 A (max)
Power requirements	
Mechanical (radar unit only)	
Weight	6.8 kg (15 lbs) max
Dimensions (maximum)	
Length	28 cm (11 inches)
Width	17.75 cm (7 inches)
Height	10.2 cm (4 inches)

When combined with Meggitt Defense Systems Ground Station



### 06 Outline details