Meggitt Defense Systems

Electronic Systems > Projectile Tracking

Shrink Vector Doppler Scoring System (SVDOPS)

CMDI-125A



The SVDOPS Vector Doppler Scorer model CMDI-125A, is a non-cooperative missile-scoring radar that is optimized for use with mid-scale aerial targets.

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 target set, along with a compatible ground station, provides a complete vector score with associated attitude for all missile types, and includes a reconstruction of the missile trajectory throughout the entire scoring volume.

Both color-graphical and standard-text displays are presented to the operator by either computer monitor or hardcopy. Field tested since 1998, the SVDOPS provides proven non-cooperative vector scoring capabilities.

Key features

- Scoring range 30.5m (100 ft) maximum
- 3D trajectory and weapon attitude measurements
- Operating frequency 2433.5 MHz
- Two field selectable radar operating frequencies
- Closing velocity measurement range 180 to 1830 m/s (600 to 6,000 ft/s)
- L or S band telemetry
- Supports embedded GPS timing in telemetry data stream
- Standard installation kits BQM-34





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Specifications

0 to 30.5m (0 to 100 ft) Scoring range

Vector score accuracy (rms)

0 to 7.62 m (0 to 25 ft) 0.76 m (2.5 ft) 7.62 to 30.49 m (25 to 100 ft) 10% of range

Attitude accuracy (rms)

0 to 15.24 m (0 to 50 ft)

15.24 to 30.5 m (50 to 100 ft) $5^{\circ} + 0.1^{\circ}$ /ft for each ft beyond 50 ft

Scalar miss distance accuracy (rms)

0 to 50 ft 0.31 m (1.0 ft) 50 to 100 ft 2% of range

Spherical coverage provided via six separate antenna locations on Scoring coverage

target platform

1 PPS GPS timing input

Telemetry

5 watts

Frequency (one of three bands) L-band (1435.5 to 1540.5 Mhz) S-band (2210.5 to 2290.5 Mhz)

SH-band (2310.5 to 2390.5 MHz)

10.45 kg (23 lbs)

Bandwidth IRIG 106-93 2.5 Mb/s

KGV-68 built into scorer Encryption (optional)

Target formations

2 targets 200-ft separation

1400-ft separation (optional) 4 targets

22 - 32 V dc @ 5.0 A (max) Power requirements

Mechanical (radar unit only)

Weight

Dimensions (maximum)*

Lenath

33.17 cm (13.06 inches) Width 22.53 cm (8.87 inches) 13.34 cm (5.25 inches) Height

* Excluding telemetry transmitter and encryption support package.

Specification subject to change - TCO Review #140

Contact

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