

Electronic Systems > Projectile Tracking

Vector Scoring System (VSS)



The Vector Scoring System (VSS), is a noncooperative missile-scoring radar that is optimized for use with the QF-16 full 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 VSS target set, along with a compatible ground station, provides a complete vector score with missile 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.

Key features

- Scoring range 30.5m (100 ft) maximum
- 3D trajectory and weapon attitude measurements
- Operating frequency 2433.5 MHz
- Closing velocity measurement range 200 to 6,000 ft/s
- L band telemetry
- Standard installation kits QF-16

Electronic Systems > Projectile Tracking

Vector Scoring System (VSS)

Specifications

Scoring range	0 to 30.49m (0 to 100 ft)
Type	RF, non-cooperative, vector, 6 channel
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)	≤ 5°
15.24 to 30.48 m (50 to 100 ft)	≤ 10°
Scalar miss distance accuracy (rms)	
0 to 25 ft	± 2.5 feet
25 to 100 ft	10% of range
Scoring coverage	Spherical coverage provided via six separate antenna locations on target platform
Telemetry	
Power	5 watts
Frequency	S-band (2210.5 to 2290.5 Mhz)
Bandwidth	IRIG 106-93
Bit rate	2.5 Mb/s
Target formations	
2 targets	200-ft separation
Power requirements	22 - 32 V dc @ 5.0 A (max)
Mechanical (radar unit only)	
Weight	11.4 lbs
Dimensions (maximum)	(Excluding telemetry transmitter and encryption support package)
Length	9.7 inches
Width	7.3 inches
Height	5.1 inches

Specification subject to change - TCO Review #174

Contact

Meggitt Defense Systems

9801 Muirlands Blvd
Irvine, CA 92618, USA
Tel: +1 (949) 465 7700
Fax: +1 (949) 465 9560

www.meggittdefense.com
www.meggitt.com

Meggitt Defense Systems

Our product competencies and services:
Ammunition Handling Systems | Thermal Management | Countermeasures | Towed Targets | **Electronic Systems**

MEGGITT
smart engineering for
extreme environments