

DATA SHEET

GSQ-106C Vector Ground Scoring Set



01 Description

Meggitt Defense Systems, Model GSQ-106C series ground sets are designed to receive/time tag, process, monitor, record and display vector scoring data telemetered from the sensor during live-fire training and evaluation missions. The GSQ-106C is an automated ground based scoring processor that is programmable for different drone types, and MDSI scoring sensors.

The GSQ-106C ground set is based on an Intel Pentium personal computer (PC). The unit can be configured to receive L or S band PCM telemetry for CE telemetry format and a time tags the data using standard IRIG A,B,G timing. The unit can also receive downconverted PCM data or PCM formatted clock and data from range telemetry receivers.

The PC contains two hard drives, one is removable for control of classified scoring data. Optionally, a network interface card (NIC) may be installed.

The ground station consists of the following components: PC unit; display; scoring software; keyboard and mouse/trackball.

Additionally, the system can be ordered with a printer and/or an uninterruptable power supply (UPS).

02 Key features and benefits

- Time correlated 3-dimensional trajectory and missile attitude
- Real-time auto-detection and time tagging of projectiles
- Multiple-simultaneous projectile capability
- Quick-look scalar results in minutes
- Hardcopy graphical report generation
- User friendly software
- Compatible with IRIG A, B and G timing signals and standard telemetry equipment
- Proven accuracy

03 Applications

- Live-fire training

04 Contact

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05 Specifications

Performance	
Range	0 ft to 100 ft
Time correlated vector position accuracy	2 ft or 8% of range, whichever is greater 90% probability of vector score within accuracy limits
Attitude accuracy	5 degrees maximum 0 to 50 ft 10 degrees maximum 51 to 100 ft
Intercept velocity	600 - 6500 ft/s
Velocity accuracy	<1%
Relative motion	
Target maneuvers	200 degrees/sec roll, 25 degrees/sec pitch
Missile maneuvers	Up to 40 g's
Multiple objects in scoring volume	Multiple missiles/objects separated by 15 ft minimum
Missile types supported	Minimum radar cross section of 0.1 ft ²
Processing time (vector)	Quick vector <10 minutes, Final vector <2 hours
Electrical	L or S bands RF telemetry (N-type)
Inputs	PCM clock and data from standard bit synchronizer (BNC female):
Levels	TTL
Frequency	2.5 MBPS IRIG A/B/G standard time code formats (BNC female)
Outputs	Display of intercept with full rotation capability Hardcopy of intercept Three-dimension time correlated position versus time ASCII file. Simulated video of intercept
Power requirements	110 V ac, 60 Hz, 220 V ac, 50 Hz
Options Available	Rack mount option for ground station components in 19-inch standard racks. Portable