

## MISS DISTANCE INDICATOR AS-113/12U



The universal 12-sector Miss Distance Indicator MDI AS-113/12U is intended to be installed in UAVs (Unmanned Aerial Vehicles).

The MDI is a universal type, i.e. it handles all target courses relative the firing gun or missile, i.e. all types of attacking and passing target courses.

The 12-sector MDI AS-113/12U detects acoustically the shock wave generated by the passing supersonic projectile.

The miss distance is determined by the amplitude of the shock wave while the angular position (sector) is determined from the hit order between the indicator's different pressure sensors.

The miss distance and sector of the projectiles are measured in real time and transmitted as raw data via the special designed VHF/UHF transmitter to the scoring station.

Since raw data is used, all calculations are made in the scoring station.

A recalculation of the scoring result, with later more accurate parameters, can easily be made in the scoring station for further improved accuracy.

The MDI consists of two Small Microphone Clusters SMC-3/left and right, a Target Unit Processor TUP-23, cables and an antenna.

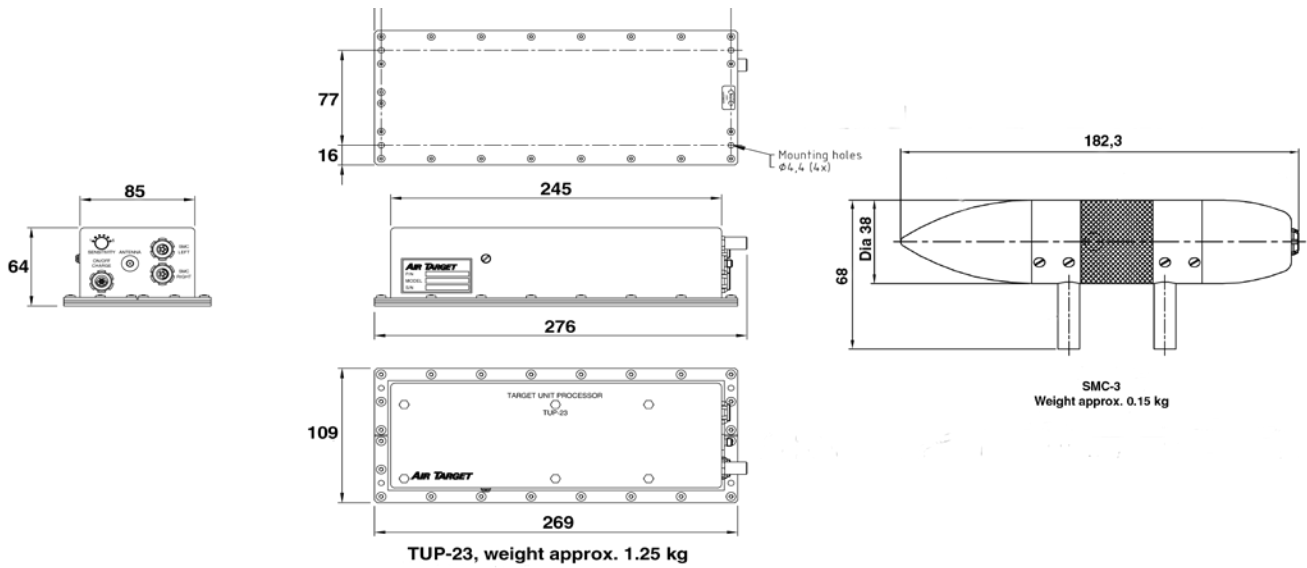
Several antenna types are available to fit the most common UAVs on the market.

The MDI is powered from a rechargeable battery which is housed in the TUP-23.

The TUP-23 unit is waterproof.

Air Target's products can very easily be modified to meet our customer's requirements.

## TECHNICAL DATA



All dimensions in millimeters  
NOT TO SCALE

### GENERAL

Power supply	Rechargeable NiMH battery
Battery operation time	Min. 6 h at +25°C
Supply voltage	+12 VDC
Operation temperature	-30°C to +55°C
Storage temperature	-40°C to +70°C
Total weight	Approx. 1.85 kg

### DATA

Scoring capacity	6000 rounds per minute, momentarily more
Scoring calibers	5.56 mm to 5"+ and missiles
Distance accuracy	min. ±1 m or ±15 % of the actual miss distance, whichever is the greatest
Angular accuracy	±15°
Sensitivity	6 selectable ranges

### TRANSMITTER

Carrier frequency	400 - 470 MHz, others optional
Channel separation	50 kHz
Radiated power	Min. 0,8 W
Deviation	2.5 kHz ± 0.5 kHz
Modulation	2-level FSK 4800 baud
CRC	Cyclic Redundancy Checksum, a method for ensuring data quality