

The universal 12-sector Miss Distance Indicator MDI AS-113/12U/TUP-30 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 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 transmitter to the scoring station.

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

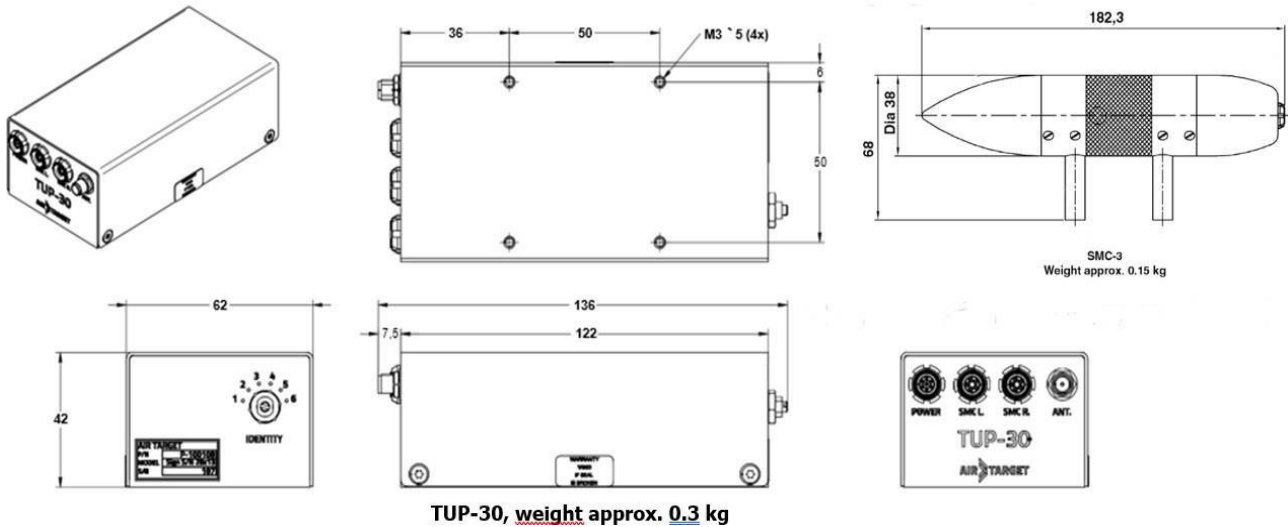
A recalculation of the scoring result, with later more accurate parameters, can easily be made in the scoring station for further improved accuracy.

The MDI consists of two Small Microphone Clusters SMC-3/left and right, a Target Unit Processor TUP-30, 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-30. 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		DATA	
Power supply	External	Scoring capacity	6000 rounds per minute, momentarily more
Operation voltage	10 V to 14 V, typ. 12 V	Scoring calibers	5.56 mm to 5" and missiles
Operation temperature	-30°C to +55°C	Distance accuracy	±1 m or max ±15% (on the average) of the actual miss distance, whichever is the greatest
Storage temperature	-40°C to +70°C	Angular accuracy	±15°
Total weight	Approx. 0.7 kg	Sensitivity	6 selectable ranges
TUP-30 weight	Approx. 0.3 kg		
SMC-3 weight	Approx. 0.2 kg		
TRANSCEIVER			
Carrier frequency	Frequency within 330-473 MHz		
Channel separation	12.5 kHz		
Radiated power	typ. 1.0 W		
Link type	Half-Duplex		
Data transfer rate	Radio 9600 bps		
Optional	Encryption AES128		