

OPTICAL TARGET TYPE 570



This precision electronic target provides developers, manufacturers and trials and testing organisations with an accurate means of checking the performance of weapons and ammunition outdoors by measuring the co-ordinates of shots passing through the target area. Shot positions are instantaneously displayed on a graphical representation of the target area together with coordinate data and a running total of shots fired. A permanent record can be stored on disk or printed for subsequent analysis. A wide range of calibres can be detected and the detectable velocity range is similarly wide. Being an Optical Target, the type 570 is unaffected by wind and thus gives a high degree of accuracy of half-calibre or better.

In a system, the data recorded by the Optical Target is fed from the target to an MSI Range Processor Type 663, a PC compatible unit, for storage, display, analysis and printout.

The Type 663 is supplied with a comprehensive user-friendly software package which gives a graphical display of the shot locations and provides a range of statistical calculations that can be applied to the shots.

On completion of each firing test the results can be stored on disk and a graphical printout obtained.

The Range Processor type 663 also addresses a range of peripherals including meteorological stations and Barrel Pressure measurement devices. The target can operate at up to 1km from the Processor or up to 5km by use of a radio link operating in the UHF band and a battery power supply. Once installed, the system requires little maintenance and a self-generated functional check is carried out automatically at the beginning of each session.

The Optical Target type 570 consists of two sets of three Optical Sensors mounted a set distance apart and tilted at a pre-set angle. The signals generated by these detectors are used to calculate the position, azimuth, elevation and velocity of the shot with respect to the target. The arrays are mounted on a rigid metal framework along with a control unit, which performs the self-check, and data processing functions. The unit may optionally be provided with an integral GPS system. This is used to locate the target accurately on the range as well as provide an accurate event time using the UTC.

The Optical Target should be protected from direct fire.

SPECIFICATION

General		Environment	
Active Target Area	2.5m x 2.5m for 5mm calibre 4m x 4m for 120mm calibre	Humidity	The units are fully sealed
<i>Measurement Accuracy</i>		Operating Temperature	-25 °C to +60 °C
Position	5mm for 5mm calibre 10mm for 120mm calibre	Rain	The system operates in light rain
Angular Velocity	0.4° Elevation/1°Azimuth 0.2%	Wind	Accuracy is not affected by wind
Projectile Velocity (V)	50m/s to 1500m/s at target	Dimensions	
Projectile Calibre	5mm to 120mm	Height	800mm
Rate of Fire	1000rpm for V=50m/s 12000rpm for V=1500m/s	Width	600mm
Power	12v d.c..	Length	2300mm
		Weight	50Kg
		Options	
		Radio Link	Using transceiver type 593/594