# instr⊕

## **Targeting System**

Compact Lightweight Modular Target Acquisition System based around Instro's THOR Digital Goniometer and Targeting App



## **Main Advantages & Features**

- Lightweight man portable package
- Targeting computer with comprehensive target acquisition software app
- Low power consumption, high accuracy precision goniometer unit
- Matching lightweight tripod
- Angle measurement to 0.056° (1mil) with line of sight fine adjust control
- Payload quick release interface
- Reversionary mechanical scales
- DMC compatible

## **Applications**

- Target Acquisition / Designation
- Artillery and Mortar fire control
- Special Forces, JFO and JTAC's
- Gun laying

Modern military equipment needs to be flexible so that it can be configured to suit each mission requirement.

This is true of targeting equipment where some missions will require only a handheld sensor whereas others will demand very accurate target co-ordinates requiring additional pieces of equipment.

Instro's CAT-I/II capable Targeting System has been designed specifically with this in mind, users can make tailored selections from the equipment set to specifically satisfy the needs of their assigned mission.

### **Accessories**

- SAMOS Solar compass module
- ERMOS Gyro compass module
- MAMOS Digital compass module
- Payload interface adapters
- Dual interface for coaxial sensor mounting
- Tactical backpacks and carry pouches

## **Targeting System**

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## **Outline Specification**

#### Goniometer

Weight (approx) 2.5kg (5.5lbs)

Dimensions (approx) 210mm L x 174mm W x 130mm H

Construction Aluminium with matt paint finish

Mounting 5/8" 11 UNC female for drawbolt

Payload capacity 12kg (26.5lbs)

Alternate payload Selectable counterbalance
Payload attach Quick release for matching

adapter

Payload connection Cable or optional Cable-Less smart

interface

Elevation range  $\pm 45^{\circ}$  (800mil) Elevation fine adjust  $\pm 0.8436^{\circ}$  (15mil)

Azimuth range Unrestricted, 360° full circle

Azimuth fine adjust ±0.8436° (15mil)

Positional accuracy  $0.056^{\circ}$  (1mil)  $1\sigma$  both axes Positional resolution  $0.0056^{\circ}$  (0.1mil)  $1\sigma$  both axes

Communications RS422

System connection 38999 Style connector

Power 6 - 32Vdc

Levelling Illuminated circular bubble

Environmentally sealed Yes

Temperature range -33°C to +55°C

#### **Targeting Computer**

Weight (approx) 0.54kg (1.19lbs)

Dimensions (approx) 202.7mm W x 132mm H x 18mm D

Internal battery Yes, rechargeable
Mains charger Yes, included
DC charger cable Yes, included

GPS Yes

Installed software Targeting App

Environmentally sealed Yes

#### **Targeting App**

Own position by: -GPS

-Resection
-Manual entry

EO sensor data interface Yes\*

North orientation by: -Known point

-Manual entry
-Celestial alignment
-Solar compass\*\*
-Gyro Compass\*\*
-Digital compass\*\*

World Magnetic Model Yes

Target storage capacity Limited only by hardware

memory

Gun laying capability Yes
Fall Of Shot correction Yes

Standard grid systems UTM, BNG, MGRS,

LAT LONG

Other / Custom grids Yes (Option)

Angle measurement Mil (6400,6300,6000)

Degrees (DMM,DMS)

Emergency data delete Yes

\* Integration required

\*\*Accessory module

#### **Tripod**

Instro Trilite or Medium Duty family of tripods

-Weight range 1.1kg (2.42lbs) to 2.72kg (6lbs)

-Working height range 140mm to 1500mm

-Construction Carbon fibre or Aluminium

## **Options**

■ Digital interface to customer sensors

■ Customer sensor interfacing cables

■ SMART interface for Cable-Less connection to

payload

Customer grid options

Power distribution unit with system cables



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