

# iFires



## Integrated Targeting System



### Main Advantages & Features

- Integration with leading EO sensors
- Targeting computer with comprehensive target acquisition software, including streamlined digital mapping capability for enhanced situational awareness
- Lightweight man portable package with low power consumption, high accuracy precision goniometer unit and lightweight tripod
- Accurate north reference capability via dedicated accessory modules
- Line of sight fine adjust control
- Reversionary mechanical scales
- DMC compatible

### Applications

- iFires is suitable for all Joint Fires observer tasks

Instro's CAT-I/II capable iFires system provides a modular open architecture targeting solution which can be integrated by Instro with any contemporary EO target locator.

The iFires system consists of a number of interoperable modules designed to extend the capability of the chosen sensor and provide significant operational advantage to the user.

Instro's focus on system flexibility means that users can make tailored selections from their equipment set to configure against the needs of their assigned mission, be it basic handheld use or long range target acquisition requiring accurate north reference and precise angle measurement.

As an aid to situational awareness, iFires features a streamlined mapping capability accessible from all operational screens. This capability provides the user with a useful visual overview of acquired targets with respect to the observers position.

## Compact Lightweight Modular Target Acquisition System for integration with leading EO sensors

### Outline Specification

#### Goniometer

Weight (approx)	2.5kg (5.5lbs)
Dimensions (approx)	178mm D x 173mm W x 124mm 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	±45° (800mil)
Azimuth range	Unrestricted, 360° full circle
Axis fine adjust	±0.8436° (15mil) both axes
Measurement accuracy	0.056° (1mil) 1σ both axes
Positional resolution	0.0056° (0.1mil) 1σ both axes
Mechanical scales	Yes
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 (lite version)
Environmentally sealed	Yes
Operating systems	Windows® Android™

#### Targeting App

Own position by:	-GPS -Resection -Manual entry
EO sensor data interface	Yes* <sup>1</sup>
North orientation by:	-Known point -Manual entry -Celestial alignment -Solar compass* <sup>2</sup> -Gyro Compass* <sup>2</sup> -Digital compass* <sup>2</sup>
World Magnetic Model	Yes
Target storage capacity	Built-in database
Gun laying capability	Yes
Fall Of Shot correction	Yes
Digital mapping capability	Yes, streamlined
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
* <sup>1</sup> Integration required	* <sup>2</sup> 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

#### Integration Options

- Digital interface for leading EO sensors
- Cable or Cable-less EO sensor interfacing
- Customer specific grid
- Power distribution unit with system cable