



## Advanced Infantry Soldier System

AISS is a modular, field commander-assistant tool for situational awareness and integrated sensor operation at the tactical level. It combines vital combat building blocks – computing, target observation and acquisition, display, communication and navigation/orientation capabilities – in one, lightweight, interchangeable suite, to create the ultimate system-of-systems.

AISS is powered by a rechargeable Lithium-ion battery that enables 6 hours of operation. AISS components can be used as one complete system, or as individual units, depending on operational needs and provisions.

- Supports communication via serial or USB port to any Customer-furnished radio,.
- Ideal for military operation in urban terrain (MOUT); infantry combat missions in open terrain; observation, target acquisition and surveillance; artillery forward observers (FO); remote sensor control and display; and mission and training debriefing

- ☞ Terrain Analysis
- ☞ Navigation
- ☞ Friendly-Force Tracking
- ☞ Rapid target acquisition
- ☞ Situational awareness
- ☞ Fire correction and support
- ☞ Remote briefing
- ☞ Debriefing



## AISS

### Contents

#### Interchangeable Sensors (sample list)

- **EXPLORER family** Long-range multi-functional target acquisition thermal imaging binocular with continuous zoom; hand-held, tripod mounted or with pan-and-tilt system (Explorer RPM)
- **COBRA** Compact, lightweight laser rangefinder for day operation
- **N/CROS** Day/night compass laser rangefinder
- **SOS** Enhanced spatial orientation system
- **CTAS** Compact add-on module for transforming a LRF into a C<sup>2</sup>-enabled target acquisition system.

#### Interchangeable Near-Eye Displays




- **Hand-Held Display (HHD)** Full color OLED,
- **Head-Mounted Display (HMD)** SVGA

#### Micro Tactical Computer (MTC)

- Power Source** Rechargeable battery; up to 6 hr operation
- Power Consumption** ~5 W
- I/O** RS-232, USB, LAN
- Operating System** Windows XP
- Weight** ~600 gr (including battery)
- C<sup>4</sup>I support** Dedicated software (optional)



## CONFIGURATIONS (examples)

AISS Component(s)	Description	Supported Scenario
	Hand-Held Display (HHD) – stand-alone	Vehicular and on-foot navigation in conjunction with Customer's existing navigation systems; Avoids light emission at night; Operates system computer using integral mouse; Orientation using integral digital magnetic compass.
	Micro Tactical Computer (MTC) – stand-alone	Wearable tactical computer for infantry, in vehicle and on-foot.
	HHD + MTC	Mission planning, navigation, orientation and enhanced situational awareness.
	HHD + MTC + Transceiver	Mission planning, navigation, orientation and enhanced situational awareness, with full connectivity between AISS users: displaying friendly-force location, enabling tactical layer transmission and reception in real time.
	CTAS (with Customer's LRF) + MTC + Transceiver	Supports entire target acquisition process including automatic calculation of target-position; Supports display & manipulation of C <sup>2</sup> application; Transmission and reception of target data and other information between AISS users.



## APPLICATIONS

**Observation & Target Acquisition:** Enabled by using one of the interchangeable target acquisition/intelligence gathering devices, allowing the commander to direct interception and other close-combat forces to points of interest and suspected hostile activity.

**Dismounted Mission:** Continuous, efficient mission execution when on-the-move in an equipment-intensive environment.

**Split Force:** Friendly-force tracking and link-up and/or splitting with clear force identification and mission coordination.

**Navigation & Orientation:** Display of self-position on map/aerial photos supporting pinpointed urban navigation and navigation aids.

**Direct Air Support:** quick closure of sensor-to-shooter fire cycle, by means of quick target acquisition and automatic transmission/receipt of target coordinates. All of the target inputs can be transferred to selected shooter or supporting platform (fixed wing, mortar, etc.)

**Rescue and Evacuation:** more efficient coordination and synchronization of response.

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