

## NEW: Advantage™ S System

Same Great Advantage Technology in a Smaller, Lighter Unit That Makes Measuring and Mapping Fast and Simple.

### Simple, Single-operator Tool

The Advantage S Laser Measuring and Mapping System is a highly flexible tool that lets a single operator stand at a safe and convenient vantage point and quickly measure or map anything in sight. Measure wirelines and poles, communications towers, bridge piers and industrial areas or Map GIS and CPS points, construction and excavation as-builts and take-offs. Nothing is as simple and quick as the Advantage S laser system

- Target an object in the head-up display and pull the trigger to take a measurement
- Calculates:
  - Straight-line distance
  - Horizontal missing-line distance between two points
  - Angles, areas and elevations
  - Heights and vertical distance between two objects or points
  - GPS offset coordinates of a targeted, remote position
- Single-person operation or use with reflector/surveyor pole
- Displays measurement values in head-up display and on rear LCD screen
- Record values to a data collector, handheld computer or laptop and can directly populate coordinates in many GIS and COGO software packages
- Onboard PCMCIA slot for SRAM Type 2 memory card stores ASCII data of each shot

### Wide Variety of Configurations for Your Measuring and Mapping Needs

The Advantage laser measurement system is a full-featured solution that can be configured to provide mapping and measurement functions for a variety of applications.

#### Internal Compass

- Measures bearing, angles or horizontal distances

#### Internal Inclinometer

- Gathers incline, vertical and elevation measurement data

#### High-precision Encoding Tripods

- Vertical, horizontal or dual encoder bypasses compass and/or inclinometer functions for accuracies of  $\pm 1$  degrees

#### Monopole - Alone or with GPS systems

- Places GPS antenna directly above rangefinder for higher accuracy readings and provides all day comfort for any Advantage application use



Easy to use menu and clearly displayed readings on screen and in head-up display



Flexible solution for your measuring and mapping needs



- **New:** 8X Monocular Scope Available
- **New:** 9V Battery Handle
- **New:** BLUETOOTH Technology now available
- Lighter, Smaller System in a portable, durable carrying case
- Weighs only 3.9 Lbs/1.77 Kg including the battery handle
- Internal compass and inclinometer
- Simple to use, plain-language menu
- Measures to a vertical surface 2,000 feet/600 meters away and prisms up to 30,000 feet/9,100 meters
- Perfect for rough, congested terrain or any other inaccessible and dangerous area
- Variety of data collection methods, Compatible with most GPS, GIS and COGO systems and software
- PCMCIA slot for on-board data capture

The Advantage S is a productivity tool that takes any measurement quickly and makes impossible measurements easy

## Advantage™ S Specifications

Dimensions:	w3.8 x h7.3 x d6.4 in. (w9.6 x h18.5 x d16.2 cm)
Weight:	3.9 pounds with battery (1.77kg)
Temperature:	Operating: -22°F to 140°F (-30°C to 60°C) Storage: -40°F to 176°F (-40°C to 80°C)
Humidity:	90% non-condensing
Environmental:	Water and dust resistant
Head-up display:	LED aiming sights and 1 line x 4 character readout
Rear panel display:	4 line x 20 character LCD
Keyboard:	Membrane keypad
Data:	RS-232 serial port PCMCIA slot for SRAM Type 2 card
Power source:	Rechargeable battery handles, Nickel Metal Hydride (NiMH)
Recharge time:	Standard: 8-10 hours Smart charging station: 2 hours for 2 batteries
Light source:	Semiconductor pulsed laser 904nm
Laser:	FDA Class 1 eye-safe (21 CFR 1040)
Divergence:	3 milliradians (30cm/100m)
Measurement type:	Time of flight, averaged across at least 72 pulses
Measurement time:	0.33 seconds minimum
Range:	2,000 ft (600m) passive 30,000 ft (9,100m) to prism
Accuracy:	+/- 0.50 feet ( 15.2 cm) 3 sigma +/- 0.25 feet ( 7.6 cm) 1 sigma
Resolution:	0.1 ft (1cm)

<b>Compass</b>	
Type:	Triaxial magnetometer
Range:	0.0° to 359.9°
Accuracy:	± 0.8° RMS when level
Resolution:	0.1°
Repeatability:	± 0.05°

<b>Inclinometer</b>	
Type:	Dual Axis Liquid
Range:	± 50° from level
Accuracy:	± 0.4°
Resolution:	0.1°

## Advantage S System Description

The Laser Atlanta Advantage S laser system has **GE Lexan** ABS alloy housing constructed with space between outer case and inner components for shock resistance.

The **head-up display LED** has aiming sights and the user can select to view readings for range/ distance, inclination, bearing or rotate between all three values. The **rear LCD screen** also displays these continually updated measurement values and presents a plain-language system menu.

**Inclinometer and compass** functions are internal and can be augmented with an encoding tripod. Onboard PCMCIA slot for memory card captures shot data simultaneously with the RS232 port to which a data collection device can be attached. Unit is compatible with most GPS systems and RS232 devices. Power is supplied by a rechargeable nickel metal hydride battery handle. The unit includes a one-year warranty.

## Advantage "NSG" Solution Near Survey Grade accuracy using our encoding Tripod products



## Encoding Tripod Specifications

### Horizontal Encoder

Immune to magnetic influence	
Type:	8,000 count optical
Range:	0.00° to 359.95°
Accuracy:	± 0.1°
Resolution:	0.01°
Repeatability:	± 0.05°

### Vertical Encoder

Type:	8,000 count optical
Range:	limited to tripod movement
Accuracy:	± 0.08°
Resolution:	0.01°
Repeatability:	± 0.05°



## Ordering

### Advantage S Base Package

Part Number: 3SC1  
Package Includes: Advantage S Laser Range Finder, (1) NiMH Rechargeable Battery Handle, 120VAC Charger, Softside Carry Case and Users Guide

### Wire / Sag Measurement Package

Part Number: 6U00  
Package Includes: (1) NiMH Rechargeable Battery Handle, Smart Charging Station, RS232 Data Cable, Pelican Yellow Hard Case, Vertical Encoding Tripod with Case and Users Guide

## Options

### Battery handle

Part Number: 5HT0  
Spare battery for extended use.

### 9V Battery handle

Part Number: 5H90

### 8x monocular Scope

Part Number: 5MS0  
Scope on tip-off mount.

### Smart charging battery station

Part Number: 5CS0  
Includes 120VAC and 12VDC cigarette lighter power cords.

### Hardshell Case

Part Number: 5PS0

### Add BLUETOOTH Technology

Part Number: ASB0

### Bogen Tripod

Part Number: 5TB0

### Horizontal encoding tripod

Part Number: 5TH0

### Vertical encoding tripod

Part Number: 5TV0

### Dual encoding tripod

Part Number: 5TD0

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