

AutoRead® Handheld Device / Programmer

Standard Model - AR 5501 RadioRead™ Model - AR 5502

APPLICATION — METER READING:

The Sensus AutoRead® Hand-Held Device [HHD] is primarily designed to collect and store utility meter readings with built-in capability for expanded uses. The HHD interfaces to a personal computer [PC] through a communications/charging stand used for uploading pre-programmed meter reading route information. The computer must be equipped with Sensus AutoRead® System software.

The Model AR-5501 accepts meter reading data entered manually on a built-in keypad, or electronically, through TouchRead® System reading guns used for interrogating encoders. Reading gun options include cable-connected and RF (no cable required) styles.

The Model AR-5502 includes all features of the Model AR-5501, plus it can read Sensus RadioRead® Meter Transceiver Units [MXUs].

PROGRAMMING:

The AR5500 series HHDs are designed for collecting meter readings as well as programming RadioRead MXUs, FlexNet SmartPoints, and ICE registers.

CONSTRUCTION:

The HHD is housed in a weather-resistant, high impact, UV-stabilized plastic. Surface-mounted circuitry in the specially designed, watertight case allows the HHD to be used in rugged field conditions over a wide range of temperatures.

ERGONOMIC DESIGN:

The HHD's ergonomic-minded design offers a well-balanced, easy-to-handle unit. It includes a graphical liquid crystal display [LCD] for ease of viewing during operation. The contrast value of the LCD automatically adjusts based on the ambient temperature, but can also be easily field adjusted to compensate for use in varying lighting conditions. The HHD can be manually carried during operation, or function in the optional HHD carrier harness.

BACKLIGHTING:

A backlight feature provides illumination to the LCD for convenience in data entry and ease of reading data in areas with insufficient lighting.



SPECIFICATIONS

PRIMARY	Hand-held electronic meter reading collection and data storage device for manual, TouchRead System, and RadioRead meter reading.
OPTIONAL	Programmer for Sensus SmartPoints and ICE registers
PHYSICAL CHARACTERISTICS	Case material molded of high impact, UV-stabilized plastic. Orange color standard. Reading device/ programmer connection built in. Carrying harness included.
DIMENSIONS	10" [254 mm] (H) x 5.25" [133.35 mm] (W) at display and 3.1" [78.74 mm] (W) at its narrowest point x 2.75" [69.85 mm] deep and 1.5" [38.1 mm] at its shallowest
WEIGHT	29.5 oz (836 grams)
OPERATING SYSTEM	Microsoft Windows Mobile 6 Microprocessor: Intel XScale® processor, 624 MHz Operating Memory: 128 MB SDRAM Data Storage Memory: 1GB
KEYPAD	Alpha and numeric. Large keys can be operated while wearing gloves
DISPLAY	Backlit color LED screen. Will display meter reading information, route information from hand-held, and any additional system information.
POWER SUPPLY	Lithium Ion batteries, field replaceable battery packs maintain functionality of up to 1,500 touch type or RadioReads (AR5002 only) readings for at least 12 hours
OPERATING TEMPERATURE	-22° F to 130° F (-30° to 54° C)
HOUSING	Tested to withstand being dropped on any surface from a 4 foot height without damage. Tested to MIL-STD 810F and IP67 for waterproof, dustproof, and shockproof (drop) standards.
READING COMPATIBILITY	Able to read Sensus encoders, Sensus MultiRead Modules, Badger ADE and Neptune Proread (ARB VI).
COMMUNICATIONS/CHARGING STAND	Holds one HHD per stand. Microprocessor controlled. Load/Unload speed: 115k Baud Communications Interface: Serial RS 232C Bluetooth® Class I approved Certifications: FCC Class B, CE, Rotts Compliant, EN60950

FLEXIBLE DATA ENTRY:

When used with a Sensus TouchRead AutoGun, the HHD automates the reading process. Reading data from Sensus and compatible absolute encoder equipped meters is obtained and stored in the HHD. Manual entries can also be made using the keypad, which features elastomeric, tactile response keys. Preprogrammed "high" and "low" range limits, calculated and passed from the utility billing software, can be sent to alert the user of possible reading errors. In addition, the Model AR 5502 provides expanded features for reading and programming Sensus RadioRead MXUs.

CORDLESS AUTOGUN:

Used in conjunction with the AutoRead HHD, the cordless AutoGun provides the ability to perform TouchRead readings without the need for cables from the AutoGun to the AutoRead HHD. Information is stored in the AutoRead HHD through a bi-directional, low-power RF link.

AUTOMATIC, ERROR-FREE DATA COLLECTION:

When used with a TouchRead AutoGun, the HHD collects and stores readings automatically from Sensus or compatible absolute encoders. Regardless of the route sequence programmed into memory, the HHD software identifies each meter encoder using the encoder's internal identification number. The software then searches the route program and automatically stores the meter reading in the correct customer account. When the utility's meter readers hear an audible alert tone from the HHD, it is alerting them to a special condition or hazard. They need only refer to instructions on the HHD screen on how to proceed. This process eliminates errors and increases meter reading speed.

AUDIBLE VERIFICATION/WARNING:

The audible tone confirms completed TouchRead and RadioRead System readings or alerts the user to faulty or out-of-limit readings. Tones can also be programmed with notes to alert the meter reader to hazardous situations or to respond to field survey questions.

COMMENTS/NOTES:

The HHD uses preprogrammed, utility-defined note codes, or free form notes [using the alpha and numeric keypad].

Meter readers can identify accounts requiring special attention, or they can note unusual conditions and account survey information.

REPLACEABLE BATTERY:

The rechargeable, self-contained Lithium Ion battery pack is field-replaceable to minimize downtime. The HHD is also equipped with a lithium battery backup to maintain date and time.

PRODUCTIVITY MONITORING:

The HHD's built-in clock can record the time and day of each meter reading. The software can note and store the type of reading made: manual, automatic, and/or multiple data entry. These reads provide an overview of time spent reading the route and special problems related to readings or equipment use.

SERVICE AND WARRANTY:

No service should be necessary if reasonable care is given during normal use. Sensus offers the Sensus Equipment Maintenance Program [SEMP] to extend the protection of HHDs and related equipment beyond the one [1] year warranty covering materials and workmanship. Warranty and service policy details are available from Sensus representatives and authorized AMR distributors.

TouchRead AutoGun or AutoGun PitProbe can be used with the HHD for electronic reading of meters equipped with TouchRead System encoders: AutoGun reading gun and PitProbe extension can be used without a connecting cord.

The Sensus 5500 Series HHD provides flexibility for utilities needing a reliable electronic hand-held meter reading and programming device. In addition to accepting meter readings via its keypad, the HHD also accepts readings from TouchRead® System and RadioRead® System equipped meters where those systems are used.