Touchread AMR

Advanced Meter Reading Technology for Utilities

"Sensing the Future with Advanced Automatic Meter Reading Technology for Utilities"

THE TOUCHREAD® SYSTEM OFFERS FAST, ACCURATE METER READING AND BILLING.

Since 1984, the TouchRead System has helped thousands of utilities increase meter reading speed and efficiency with fewer errors compared to manual entry reading methods. Using the TouchRead System, a utility meter reader can electronically read meters equipped with Sensus ICE Registers in less than two seconds.

TOUCHREAD FEATURES –

- **Increases speed and efficiency** – Reads inside sets and pitset meters with "just a touch." Cuts reading time by one half or more.
- **Eliminates errors** – caused by incorrect manual entries in route books or computers.
- **Ends underground meter reading problems** – Eliminates pump-outs and OSHA confined space entry restrictions. Operates accurately in flooded pits or vaults.
- **Easy to use** – Meter readers are guided along their routes as each address is displayed on the hand-held device's display screen. Allows for meter reading in or out of route sequence. Readings verified by audible and visual signals.
- **Flexible and versatile** – Manual readings, route surveys, and exception notes can be entered on the hand-held device's builtin keypad.
- **Easily migratable** to TouchCoupler technology.

A VERSATILE METER READING SYSTEM DESIGNED TO MEET A VARIETY OF NEEDS.

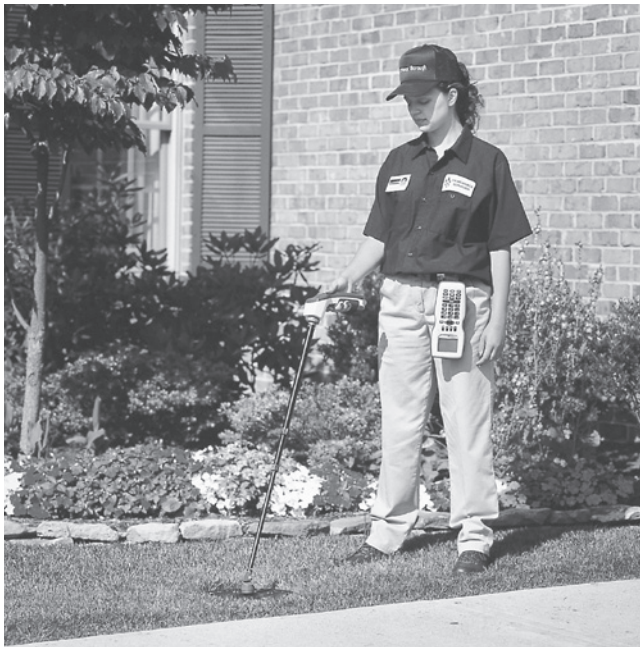
The patented* TouchRead System is highly flexible. It can be used as a meter reading system or for solving reading problems, such as large underground meters located in hazardous areas. Reading data can be obtained by electronic reading guns or manually entered, when required.

Using the wireless feature of the Sensus AutoGun, inside meter remote TouchPads or underground meters equipped with TouchRead PitLid (TR/PL) units are read in less than two seconds. (below and right)

This remarkable meter reading system uses the same ICE Registers used by other Sensus AMR systems. The TouchRead System provides an excellent migration path to a Sensus RadioRead® or PhonRead® meter reading system.

*Equipment covered under patent numbers 3,748,654, 4,132,981, 4,758,836 others pending.

(above) At the utility office, the handheld devices are "downloaded" to a PC. The data can be used to generate useful management reports or for the automatic printing of customer invoices.



TOUCHREAD® SYSTEM REGISTERS OFFER UTILITIES A WIDE RANGE OF OPTIONS INCLUDING THREE LEVELS OF ODOMETER RESOLUTION

Advanced design TouchRead System registers from Sensus incorporate a visual eight-wheel odometer for higher resolution and a combination testing pointer and leak detector. The data collected electronically will depend on the particular register version used by the utility. Utilities billing meters in common units, such as thousands of gallons or hundreds of cubic feet are able to use the electronic meter readings without performing intermediate calculations.

The chart below identifies the values which are electronically read from each TouchRead System register version, depending on the size and type of meter being used. Each odometer is shown as it would appear on the meter register for visual meter reading. The electronic reading is read to the nearest whole number value listed below the odometer wheel.

IMPROVED RESOLUTION FOR TESTING AND VISUAL READING

With its eight active odometer wheels, testing the accuracy of a water meter fitted with an ICE Register is greatly enhanced. Visual readings are more precise by a factor of one hundred, thereby enabling a precise comparison with the volume "standard" of the testing equipment. Decimal points on the dial face are used to separate whole units from fractional measurement units. Following tradition, the meter's unit of measurement, gallons, cubic feet or cubic meters, is imprinted on the dial face.

ELECTRONIC READING VALUES

Residential	Gallons Registers	Cubic Feet Registers	Cubic Meters Registers
5/8", 3/4" and 1" SR II and SR	0,000,000	0,000,000	0,000,000
1-1/2" SR	0,000,000	0,000,000	0,000,000
2" SR	0,000,000	0,000,000	0,000,000
5/8", 3/4" and 1" PMM	0,000,000	0,000,000	0,000,000
1-1/2" and 2" PMM	0,000,000	0,000,000	0,000,000
Commercial			
1-1/2" – 3" Turbo 2" and 3" Compound 3" Propeller	0,000,000	0,000,000	0,000,000
4"and 6" Turbo 4" and 6" Compound 4" Propeller	0,000,000	0,000,000	0,000,000
8" – 10" Turbo 6" – 24" Propeller	0,000,000	0,000,000	0,000,000
16" Turbo 30" – 36" Propeller	0,000,000	0,000,000	0,000,000

SENSUS
P.O. Box 487 | 450 North Gallatin Avenue
Uniontown, PA 15401 USA
T: 1-800-638-3748
F: 1-800-888-2403
www.sensus.com/water
h2oinfo@sensus.com