WATER METER TRANSMITTER

APPLICATION:

The NexusData wireless transmitter for water meter applications is a radio signal device that permits offsite meter reading via radio signals. The transmitters are compatible with Invensys Intelligent Communications Encoder (ICE) registers. The transmitter is designed for non-pit installations to provide safe, offsite meter reading. The units eliminate a number of meter reading problems such as lockouts, entering unsafe meter locations, "curbside" reading estimates, estimated billing, and errors associated with manual meter reading methods.

OPERATION:

The water transmitter receives input from the meter and sends data to the NTR, or base station receiver at predefined and programmable intervals. Transmitter messages contain meter reading data, status and alerts. The transmitter consists of a power supply, direct sequence spread spectrum transmitter, printed circuit antenna, micro-controller and meter interface. Readings can be transmitted in pre-selected intervals, typically daily.

POWERFUL TRANSMISSION:

The most significant advantage of the module is its powerful one watt transmitter. The strong signal coupled with the use of strategically placed NTR repeaters, minimizes the number of base station receivers and lowers your deployment costs. Transmitter units operate on lithium thionyl chloride batteries in conjunction with a hybrid layer capacitor (HLC) that provide over ten years of service life under normal conditions.

INSTALLATION EASE:

The transmitter is delivered as a self-contained module. A handheld terminal with a wireless interface programs the initial settings – initial ID information, reading intervals, etc. This eliminates the need to open the module. The transmitter is easily mounted on any pipe or wall.

SPECIFICATIONS

RF OUTPUT	30dBm (1 Watt)
RANGE	Urban area (typical) – 5 miles (8 km)
DATA RANGE	4KBps
CHIP RANGE	1Mchip/sec
FREQUENCY RANGE	903.8 – 926.2 MHz, 57 channels x 400 kHz steps
MODULATION	Direct Sequence Spread Spectrum with BPSK
MEMORY	Non-volatile
POWER SUPPLY	Lithium Thionyl Chloride Batteries in conjunction with a hybrid layer capacitor (HLC)
BATTERY LIFE (TYPICAL)	Over 10 years for daily reads (Based on a maximum of four (4) transmissions per day.)
COMPLIANCE	FCC Part 15.247 unlicensed operation
OPERATING TEMPERATURE	-30 C to +80 C
ALERTS	Cut wire and encoder communication error
WARRANTY	10 years from date of shipment
COMPATIBILITY	Invensys ECR II and ICE registers