



T8-SML Energy data radio

Compact wireless transceiver for indoor/outdoor use. Pulse, Temperature, RH/T, and Low D.P. options.



Solar version.

Cabled antennas also available.

Battery version.

FEATURES

- **Power options**
Battery powered, externally powered, or solar powered. Long life and low maintenance.
- **Configurable input options**
Dual selectable inputs. One input jumper selectable pulse counting or voltage input. Second input selectable pulse counting or thermistor input. Models available with integral temperature sensing, external thermistor probe, RH/T humidity/temp sensor, or low differential pressure sensor.
- **Long-Range communication**
Long-range 2.4GHz radio link for reliable operation to 1,500 feet. High power 900MHz model available for reliable line-of-sight communication up to 3 miles with directional antenna.
- **Rugged**
Impact resistant polycarbonate enclosure with weather tight gasket and cable seals stands up to harsh environments.

OPERATION

Overview

T8-SML series count and accumulate pulse totals from energy, gas and water meters and reliably broadcast data over a proprietary radio link at programmable intervals. Compatible receivers (R8 series) collect data from up to 10 transmitters. Modbus RTU and BACnet MS/TP versions available for easy integration with building automation systems or PLC's.

Power

Replaceable alkaline battery provides long service interval. Solar charging and external powered versions also available. Data transmission rate is also programmable to optimize battery life and performance. Battery and solar versions also feature auxiliary power input for use with AC adapter or additional high-capacity battery.

Radio

Unlicensed frequency hopping technology provides long range, low-power performance in noisy RF environments. Antenna options are available for maximizing range when excessive obstructions are present.

Integrated Sensors

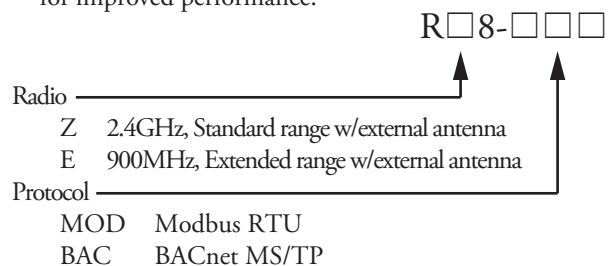
Sensor options include thermistor temperature sensor internally installed or as external probe for outdoor use. Combination relative humidity and temperature (RH/T) sensor available in vented internal and stainless steel external probe versions. Low differential, bi-directional, dry media pressure sensor option also available.

Non-Volatile Memory

Pulse totals are stored in memory when power is disrupted or batteries die.

RECEIVER

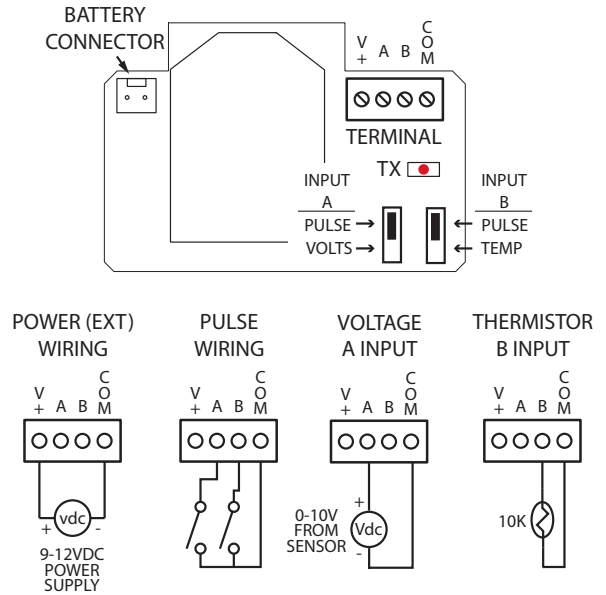
- **Compact Size**
Easily fits in tight control panels. Fits in 3" x 3" area.
- **Easy Integration**
Popular output types for compatibility with BAS systems, PLC's and DAQ's, and industrial automation systems.
- **Flexible antenna options**
Optional external wire whip for extended range. Yagi available for improved performance.



ORDERING INFORMATION

		T	8-SML-	-	-	-	-
Radio	Z	2.4GHz, Standard range w/internal antenna					
	E	900MHz, Extended range w/external antenna					
Power	B	Battery					
	S	Solar					
	E	External (6-12vdc)					
Inputs	0	Pulse/Voltage input + Pulse/Thermistor input					
	1	Pulse + Internal Thermistor					
	2	Temperature probe					
	3	RH/T external probe w/SS probe and filter					
	4	RH/T internal sensor w/vent plug					
	5	Low D.P. pressure sensor					
Pressure Range (Input option 5 only)	025	+/-25Pa (+/-0.1"WC)					
	125	+/-125Pa (+/-0.5"WC)					
	500	+/-500Pa (+/-2.0"WC)					

WIRING/CONFIGURATION



Note: V+ (external) power input may be safely connected on all versions including battery and solar models.

Temperature probe option (-2)	RH/T external sensor option (-3)	RH/T internal sensor option (-4)	Low D.P. sensor option (-5)

SPECIFICATIONS

Power	Battery (B) version	Internal (2 x AAA) alkaline battery. Also accepts external power.
	Solar (S) version	Internal rechargeable/replaceable Li-Ion battery with solar charger.
	External (E)	External only option: 9 to 12vdc input, 10mA min. (terminal block)
Inputs	Pulse	Dry contact or solid-state switch closure counting (Non-volatile storage)
	Thermistor (jumper selectable)	Thermistor input for external 10k type 2 or type 3
	Voltage (jumper selectable)	0-10vdc input, 47k input impedance
	Temperature probe option	10k thermistor in stainless steel probe
	Pressure sensor option	Dry media, flow-through type
Configuration/Setup		Temperature compensated, bi-directional, +/-3% reading accuracy
		Available ranges: +/-25Pa/125Pa/500Pa (+/-0.1"WC/0.5"WC/2.0"WC)
	RH/T option	Humidity sensor: 0-100% RH, -40 to 120°C, +/-2% accuracy over 20-80% RH
		Temperature sensor: Solid state, +/-0.3°C over 0-60°C range
	Transmit rate	Programmable interval (Factory set, or configurable from serial receiver)
Radio	Indicators	Internal transmit status LED
	Frequency	2.4GHz (TZ8) or 902-928MHz (TE8), Unlicensed ISM band, direct FM
	Range (TZ8)	1,000 ft. line of sight
Range (TE8)	1 mile outdoor line-of-sight. 3 miles with optional directional antenna	
Enclosure	UV stable polycarbonate, NEMA 4X, 3.7" x 2.35" x 1.5", with molded-in mounting brackets	