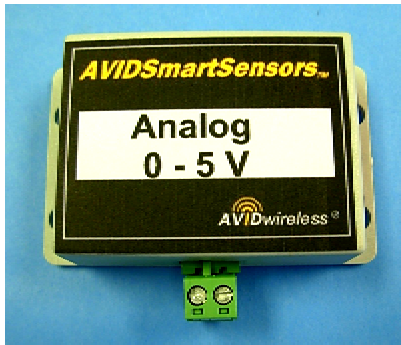


AVIDSmartSensors™ - Analog to Digital Converters



Main Features

- § Analog input
- § 12-bit Analog to Digital Conversion
- § Transmits Unique ID and analog value
- § Up to 600-foot transmission range
- § Transmission intervals from 10 to 17 seconds random
- § Patent Pending Modulator
- § Battery life up to 5 years
- § Very small (1.3" X 2.1" X .6") ABS Enclosure
- § Complies with part 15 of the FCC rules
- § Water resistant coating on PCB
- § Internal Loop antenna

AVIDSmartSensors Analog wireless transmitter is a battery operated 12 bit analog-to-digital converter with a microprocessor controlled 418 MHz. FCC certified radio transmitter . The Sensor has an on board time of day clock that allows it to spend most of the time in a low power quiescent state. At predetermined time intervals the clock will wake up the onboard microprocessor. Unique serial number information is read from a Dallas Semiconductor 1-wire digital device and analog data is read from a 12-bit analog to digital converter. This information is combined with a CRC-16 error check and transmitted in a very short data packet that results in a transmitter on time of only 15 milliseconds. This architecture allows the Sensor to consume very little energy and a battery life of 2 to 5 years results.

The electronics are coated with a conformal material that provides a moisture barrier against condensation. Submersion in water is not recommended. The service switch has two functions:

1. The Sensor is shipped with the transmitter turned off (anytime the Sensor is to be shipped the transmitter should be turned off or must be placed in a shielded container to prevent interference that might cause shipping problems). Start the Sensor by removing the paper insert from the battery and pressing the service switch on the top of the unit (you will feel the button click).
2. The service switch is used as an aid to installation. When the service switch is pushed a data transmission occurs immediately and a special mark is introduced in the ID field of the transmitted data packet to indicate which sensor is in service or installation.

Option	Input
5 V	100k Ohms, 0-5 volts. 12-bit resolution, 5 VOLT=4096
10 V	62K Ohms, 0-10 Volt. 12-bit resolution, 9.99V=4095
20 mA	121 Ohms, 0-20.66 milliamp. 12-bit resolution, 20 mA=3965

Parameter	Units
Transmission Rate	10-17 seconds random
Shelf Life with Battery Installed	5 Years in quiescent mode (10 years with optional battery)
Dimensions (enclosure)	1.5 W X 2.1 H X .6 D (inches)
Weight	1.5 oz.
Operating Temperature	-40° to 85° C
Input	-40° to 70° C
Humidity	0% to 90% non-condensing
Battery Life with Transmission	2-5 years with TX period of 10-17 seconds
Battery	3.6 Volt Lithium
FCC Certified	FCC ID: M5ZWOWANA



AVIDwireless
 2129 Martin Way, Ste 200
 Bedford, TX 76021
 817-510-5301

Email: sales1@avidwireless.com
 Website: www.avidwireless.com