Part Number: AD-2005-TCVR-485

AVIDSmartSensor™ Wireless 900 MHz Transceiver RS485

Features

- **RS485 Master/Slave auto-sensing radio interface**
- **Integrated 100mw, 900 MHz. SSFH radio for long-range wireless interface**
- **Provides remote capability to RS485 Modbus networks**
- **Automatically senses Master or Slave data flow**
- **Multiple radios allow many remote RS485 network to coexist logically**
- **Provides means to convert legacy RS485 devices to wireless**
- **Range Indoor: up to 1300'**
- **Range Outdoor: 7mi. with dipole, >20 mi. w/ high gain antenna**
- **LED power and activity indicator**
- **Configuration parameters set by dipswitch**
- **Low power, 6-24 VDC at 200 milliamp transmitting, 70 milliamp receiving**
- **Astron AXH900RP SMA R Reverse Polarity SMA 6.5" Antenna**
- **High Impact ABS enclosure**

PARAMETER	MIN	TYPCL	MAX	UNITS
Supply Voltage	6.0	12	24	Volts
Supply Current	70	-	200	mA
Baud Rage	-	19200	-	Baud

The AVIDSmartSensor Transceiver uses an embedded 100-milliwatt frequency hopping wireless modem that provides communication between a local RS485 network and a remote network of RS485 connected devices. The AVIDSmartSensor Transceiver will automatically sense the direction of data flow and switch the RS485 and Radio devices accordingly. The AVIDSmartSensor Transceiver can be placed in a network of RS485 devices and appear as a slave repeater of remote RS485 devices or it can be placed in a network of one or many RS485 slaves and act as the RS485 repeater of a remote master. The radio operates within the 900 MHz ISM Band under Part 15 of the FCC Rules and regulations.

The AVIDSmartSensor Transceiver operates at 19200 Baud at either odd parity or no parity. Dipswitches select parity and one of 7 radio networks. Radios operating together must have the same radio network address (1-7 set by switches labeled A0-A2) Select a different radio network address to prevent interference from nearby networks that are not sharing information. The default radio network for Rooftop applications is 5. The user may choose another network address (1-7) if desired. While all radios in a network must have the same network address they do not have to have the same parity, the parity is local to the RS485 serial port on the AVIDSmartSensor Transceiver only. Parity information is not transmitted or received.

The AVIDSmartSensor Transceiver can also be used as a general purpose RS485 half duplex radio interface operating at 19200 Baud at either odd or no parity (dip switch selectable).

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