

## SPREAD SPECTRUM RADIOS

Wireless communication without an individual FCC license



Rugged, Reliable, and Ready for any Application



Spread spectrum radios spread the normally narrowband information signal over a relatively wide band of frequencies. This allows the communications to be more immune to noise and interference from RF sources such as pagers, cellular phones and multipath. Spread spectrum radios do not require an individual license nor frequency coordination through a regulatory agency.

Our spread spectrum radios provide wireless data communications, and support point-to-point and point-to-multipoint datalogger communications. They can serve as a field modem/radio while connected to the datalogger, a stand-alone repeater, or as a base station modem/radio when connected to a computer.

MAJOR SPECIFICATIONS		Frequency Range	Country Used In	Power	Transmission Distance <sup>1</sup>	Communication Ports	Transmits To:
RF401A   900 MHz Spread-Spectrum Radio	Residence of the second of the	910 to 918 MHz	US, Canada	5 to 250 mW, software selectable	Up to one mile with om- nidirectional antenna; up to 10 miles with higher gain directional antennas at ideal conditions	CS I/O, RS-232, USB	RF401A, RF401, RF430, RF400, and internal radio in CR206(X), CR205, AVW206
RF411A   922 MHz Spread-Spectrum Radio	Element of the second of the s	920 to 928 MHz	Australia, Israel	5 to 250 mW, software selectable	Up to one mile with om- nidirectional antenna; up to 10 miles with higher gain directional antennas at ideal conditions	CS I/O, RS-232, USB	RF411A, RF411, RF431, RF410, and internal radio in CR211(X), CR210, AVW211
RF416 <sup>2</sup>   2.4 GHz Spread-Spectrum Radio	State of the state	2.45 to 2.46 GHz	many countries worldwide	50 mW	Up to one mile with om- nidirectional antenna; up to 10 miles with higher gain directional antennas at ideal conditions	CS I/O, RS-232	RF416, RF432, RF415, and internal radio in CR216(X), CR215, AVW216
RF432 <sup>2</sup>   2.4 GHz Spread-Spectrum Radio	MI SCHOOL CO.	2.45 to 2.46 GHz	many countries worldwide	50 mW	Up to one mile with om- nidirectional antenna; up to 10 miles with higher gain directional antennas at ideal conditions	USB, RS-232	RF432, RF416, RF415, and internal radio in CR216(X), CR215, AVW216
RF450   900 MHz, 1 W Spread-Spectrum Radio	SCAMPATING  TO SENSOR AND	902 to 928 MHz	US, Canada, Australia, Israel	1 W	Maximum distance of 60 miles, and realistic reliable transmission distance of ~ 13 miles	CS I/O, RS-232	RF450

<sup>&</sup>lt;sup>1</sup>Transmission distances assume line-of-sight and appropriate antenna (line-of-sight obstructions, RF interference, and antenna type will affect transmission distance).









<sup>&</sup>lt;sup>2</sup> Purchase of the RF416 or RF432 is not recommended for new networks deployed in the European Union (EU) that may require future expansion. This and other RF compatible products will not be available for sale in Europe after 1/1/2015 due to changes in EU legislation.