

SpectralO is an integrated wireless I/O solution powered by Airlinx high performance MHX series radios. SpectralO supports simultaneous serial data and analog Input/Output and digital Inputs/Outputs in Point-to-Point, Point-to-Multipoint & Repeater.



Applications:

- SCADA Systems
- Remote Switch Position
- Level / Pressure / Temperature Monitoring and Control
- PLC / RTU Extensions
- Water / Waste Water
- Sensor Monitoring
- Pump and Motor Control
- Utilities

Our proprietary radio technology excels in the most demanding RF and physical environments.

The SpectralO is designed with the latest technology in the field. Up to 32 units can be daisy chained to accommodate future expansion, so your investment is protected. You only need one radio when sharing expansion modules to extend the I/O capacity. This box is powered with our popular MHX modules giving long range wireless I/O.

Features of the SpectralO

- 1W FHSS radio operates on 900MHz or 2.4GHz license free ISM band
- Simultaneous Serial Data Support RS232/RS485/422
- 2 Analog inputs 4-20mA (16 bit 125 ohms)
- 2 Analog outputs 4-20mA (16 bit 125 ohms) optically isolated
- 2 Digital inputs optically isolated (5-36VAC/DC)
- 2 Digital outputs Dry Contact (250VAC/2A)
- Din Rail Mount
- Alarm output, Analog RSSI level reading and LEDs, Separate Diagnostics interface
- Point-to-Point, Point-to-Multipoint, Repeater
- Extendable up to 32 modules
- Certification: FCC(Part 15.247), IC (RSS210), CE

SpectralIO 100

Specifications (preliminary)

Radio		Networking	
Frequency	902~928MHz / 2400~2483.5MHz	Operating Mode	Point-to-Point, Point-to-Multipoint Repeater
Spreading Method	Frequency Hopping	Extensioin	Cascadable up to 32 modules
Power Output	100mW to 1W (30dBm)	Connectors	
Serial Baud	1200bps to 115.2kbps	Antenna	Reverse SMA
Error Check	CRC, ARQ	Config	Female DB9
Data Encryption	Dynamic Key Substitution	Environmental	
Sensitivity	-106 dBm	Temperature	-40 °C to +75 °C
RSSI	Analog Output (0~5 V) Visual LEDs	Humidity	5-95% non-condensing
Input/Output		Weight	Approx. 410 grams (0.90 lbs)
Supply Voltage	12V to 24VDC	Dimensions	4.80" x 3.26" x 1.59"
Digital Input	5~36VAC/DC opto isolated	Enclosure	Stainless steel
Channels	2 Analog Inputs 2 Analog Outputs 2 Digital Inputs 2 Digital Outputs	Mount	DIN-rail
Analog Input	4~20mA (16Bit, 125 ohms)	Approvals	FCC Part 15.247 IC RSS210
Analog Ouput	4~20 mA (16Bit Optically Isolated)	OEM Version	
Digital Output	0~250Vac/2A Dry Contact Relay		
Alarm Output	0~250Vac/2A Dry Contact Relay		
Status LEDs	RSSI, ALARM, Digital Inputs, Digital Outputs		
Sample Rate	Varies from 10 samples/sec		
Resolution	16 Bits	Specifications subject to change without notice.	
Response Time	< 500ms		

Contact Information

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