

Field Monitoring System

Features

- ✓ 900 MHz @ 100 mW FCC/IC License-Free
- ✓ External Antenna FDU; Internal Antenna ZDU
- ✓ Compatible with Multiple Sensor Devices
- ✓ USB Powered ZDU; AAA Cell Battery Powered FDU
- ✓ Optional Battery Recharger Kit Available

The Field Monitoring system from Cervis, Inc. makes gathering important analog data in the field quick and easy. The system consists of a ZigBee® Datacom Unit (ZDU) which connects to an open USB port on a laptop or tablet computer. This ZDU receives power from the computer via its USB connection and relays the data collected from the Field Data Unit (FDU) modules to the data collection software. Three alkaline or rechargeable nickel metal hydride (NiMH) AAA batteries power each FDU for approximately 12 hours of continuous operation.



ZDU Specifications

Power

Operating Voltage 5 VDC (from USB)

Radio

Frequency 906–924 MHz @ 100 mW

License FCC/IC License-free

Modulation Channel-Hopping DSSS

Antenna Internal

Indicator (Two Red LEDs) Patterns

No Pattern Unit disconnected from PC; no transceiving

Lower LED Blinks 2x/sec Standby Mode

Both LEDs flash A-periodically Unit transceiving with FDUs

Upper LED flashes A-periodically Search Mode

USB Information

Minimum Operation USB v1.X

Baud Rate 115.2 Kbps

Stop Bits 1

Data Bits 8

Parity None

Flow Control None

FDU Specifications

Power

Operating Voltage 4.5 VDC

Environment

Operating Temp –4° to 131° F (–20° to 55° C)

Storage Temp –40° to 185° F (–40° to 85° C)

Humidity 0 to 100%

Indicator (Blue LED) Pattern

Solid Power on/off

A-periodic Flashing Data transmitting

Blinking 1x/sec Low battery power

Rapid Flashing Standby Mode

Enclosure

Material Cast Aluminum

Dimensions inch: 3.66 x 2.76 x 2.05
mm: 93 x 70 x 52

Weight 0.9 lbs. (0.41 kg)

Radio

Frequency 906–924 MHz @ 100 mW

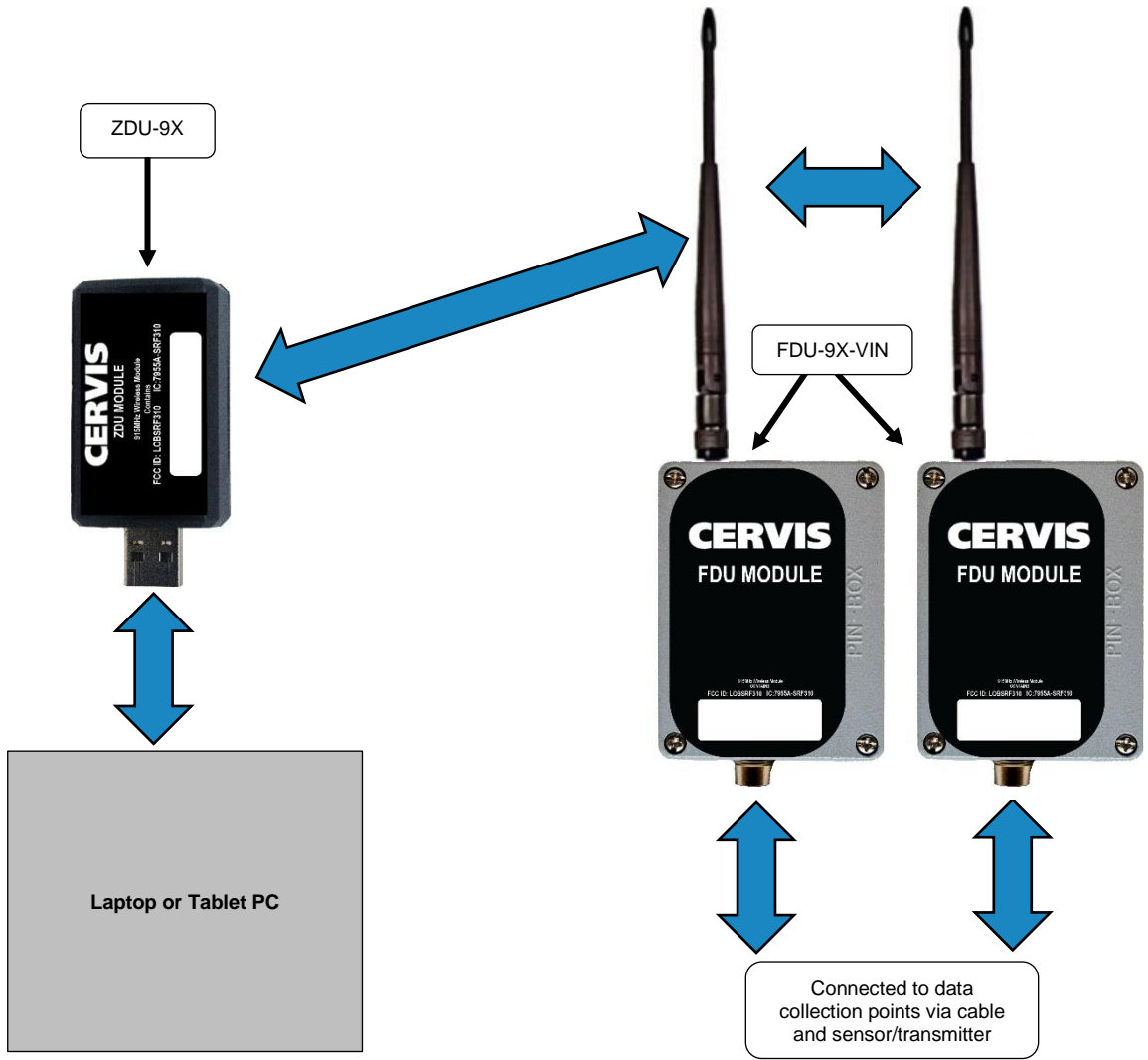
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Modulation Channel-Hopping DSSS

Antenna External

Inputs

Analog One @ 0.5–4.5 VDC



Simplified Field Monitoring System Diagram

The Field Monitoring System is compatible with numerous sensor devices.

✓ **Note:** The table below is not a comprehensive list of compatible sensors. Contact Cervis, Inc. to verify if the sensors you wish to use are compatible with the Field Monitoring System.

Qty	Part #	Description
8 (or less)	52077756	WIKA 500 PSI pressure sensor
	927102	HYDAC 250 PSI pressure sensor/transmitter (pictured on first page)