VSP3 Vosponder

Voice Radio Interface Module



The VSP3 Vosponder, manufactured by DACOM Technologies, Inc., allows customers to call their site using a hand-held UHF or VHF radio and receive a verbal report of real-time site conditions. Ideal applications include fire weather, avalanche forecasting, local weather monitoring, irrigation control, water level monitoring, water quality, and industrial process control.

Customers initiate voice transmissions by pressing buttons on a hand-held radio. Once initiated, the Vosponder uses an SDI-12 interface to collect raw digital data from a Campbell Scientific datalogger. The Vosponder then converts the collected data into natural human speech and recites a verbal message.



The Vosponder is typically housed in an environmental enclosure with the datalogger, power supply, and RF310-series radio.

Features

- Allows customers to use a hand-held radio to call a Vosponder-equipped site and receive a verbal report of current site conditions
- Provides an almost unlimited vocabulary
- Includes the "Voice Image Builder" program that facilitates the development of voice messages
- Ensures message clarity by allowing customers to control speech rate and insert pauses between words or sentences
- Compatible with our CR800, CR850, CR10X, CR1000, and CR3000 dataloggers and our RF310series radios



You can use a handheld radio to call a Vosponder-equipped site and receive a verbal report of site conditions.



Radio Requirements

A minimum of two radios with matching frequencies is required. One radio connects to the Vosponder at the remote site, while the other radio resides at a mobile site or base station. The remote site radio is typically an RF310-series radio or a user-supplied Bendex or King radio. Other radios may be used at the remote site; contact Campbell Scientific for more information. The radio that resides at a mobile site or base station must have a speaker, a keypad, and the ability to issue Dual Tone Multi-Frequency (DTMF) tones.

Ordering Information

Voice Radio Interface Module

VSP3 DACOM Vosponder Voice Radio Interface

Common Accessories

17416 Cable to connect the VSP3 Vosponder to an RF310-series radio

17417 Cable to connect the VSP3 Vosponder to a Bendix or King radio

Specifications

Programming Interface Port: RS-232; communications

parameters, data rate 2400 bps, no parity, 8 data bits, 1 stop bit,

XON/XOFF

Data Interface Ports: SDI-12 three wire interface,

emulates either a record (master mode) or a sensor (slave mode) using a subset of the SDI-12 protocol

definition.

Power Requirements: 10 to 16.8 Vdc

Power Consumption

@ 12.6 Vdc: 25 mA quiescent, 75 mA active

Operating Temperature: -10° to +55°C

Humidity: 95% non-condensing

Weight: 0.9 lbs (0.380 kg)

Radio/Audio Interface Port

Input Level: 25 mV to 5 V (factory

adjustable)

Input Impedance: 10 kohms dc resistance

(not capacitor blocked)

DTMF Decoder: Twist -10 to +6 dB;

maximum signal-to-noise

ratio 10 dB; minimum detect tone

duration 40 ms; minimum interdigit time 30 ms.

Output Level: 10 to 2.5 mV

Output Impedance: 5 kohms nominal

(capacitor blocked)

Carrier Operated

Squelch Input: 1.5 to 5 Vdc @ 10 mA (max)