

Voice Phone Modem



# Voice Synthesizer Make your datalogger speech-capable

## Overview

The COM320 is a voice-synthesizer modem that adds speech capability to a CR800, CR850, CR1000, or CR3000 datalogger. This capability allows the user to call a site for a spoken summary of

real-time or historical data. The COM320 can also act as a standard telephone modem.

### **Benefits and Features**

- Allows anyone to call a COM320-equipped site from any phone (including cellular) to receive a verbal report of current site conditions
- > Enables the datalogger to call you and recite a verbal warning if specified conditions occur
- Reports specific conditions or allows selection of information by pressing numbers on a touch-tone telephone
- > Uses voice strings created with CRBasic code
- Operates over a wide temperature range; extended temperature testing available

Air temperature is 82.15 degrees Fahrenheit. Wind speed is 2.4 mph.

You can use any phone to call a COM320-equipped site and receive a verbal report of real-time conditions

- > Supports communication rates up to 115.2 kbps between modem and logger. (In practice, data transmission through phone lines is generally constrained to 33.6 kbps.)
- Comes with a speaker that aids troubleshooting in the field





# **Required Equipment**

- Phone. Typically a touch-tone phone, but a rotary phone can be used to receive a verbal report only when the report does not require user participation.
- Analog phone line. Some DBX office phone lines are digital and cannot be used with the COM320
- Surge protector at the datalogger site if one is not installed by the phone company. Campbell Scientific offers model 6362 (mounts inside enclosure) or model 4330 (similar to the 6362 but without enclosure mounts).
- COM320 voice-synthesizer modem (includes SC12 cable)
- → CR800, CR850, CR1000, or CR3000 datalogger
- > Environmental enclosure
- Power supply, usually the datalogger's sealed rechargeablebattery recharged with ac power or solar panel

Datalogger-to-computer communication requires, at the computer site, a PC or laptop running PC400, LoggerNet, or RTDAQ datalogger support software, 7026 serial cable or equivalent modem cable, and a user-supplied Hayes-compatible modem.

# Standard Word List

The COM320 has a standard word list (see Word List brochure). Campbell Scientific may eventually add more words to the standard list. Customer-requested words for specific applications can also be included; consult the factory for details. The COM320's sentences are programmed using CRBasic code.

# **Ordering Information**

#### **Voice Phone Modem**

COM320 Voice Synthesizer Modem

#### **Temperature Range Options (choose one)**

-ST Tested for -25° to +50°C range. -XT Tested for -55° to +85°C range.

#### Country of Usage Options (choose one)

-US Set for use in US or Canada -UK Set for use in the UK. -AU Set for use in Australia.

#### Accessories

4330 Surge Protector 2-Wire, JOSLYN 2374-01

6362 Surge Protector Kit for 2-Wire Modem with Mounting for

Enclosure Use.

17648 USB Cable that is required to change the COM320 operat-

ing system or to change settings such as the number of

rings before answering a call.

CABLE2CBL-L 2-conductor, 22-awg cable with user-specified length; en-

ter length, in feet, after the -L. Typically, this cable is used when the COM320 is housed in a prewired enclosure. For this application, order the -PW option (see below).

#### Cable Termination Options for CABLE2CBL (choose one)

Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.

-PW

Cable terminates in a connector for attachment to a

prewired enclosure.

# **Specifications**

- > Standards: V.92, K56Flex, V.90, V.34, V.32bis, V32, V23, V22bis, V22, V.21, B212, B103
- > CE Compliant
- Operating Voltage: 12 Vdc
- Communication Rate Between Datalogger and COM320 (selected by user): 9600, 38400, 57600, 115200 bps
- Operation: Full-duplex over standard analog phone lines
- Datalogger Interface: CS I/O, SDC6 (not changeable)
- Dimensions: 16.5 x 2.5 x 6.6 cm (6.5 x 1.0 x 2.6 in)
- Weight: 0.16 kg (0.35 lb)

## Operating Temperature Range

> Standard: -25° to +50°C

Extended: -55° to +85°C

#### Registration

- FCC US: 3A4M508BSM2-T-W
- ) IC 2377 A-SM2TW
- TBR21

# **Current Drain**

Quiescent: ~100 μA

Active: ~35 mA

