



Voice Synthesizer

Make your datalogger speech-capable

Overview

The COM320 is a voice-synthesizer modem that adds speech capability to a CR6, 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 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 data logger 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
- ▶ Supports communication rates up to 115.2 kbps between modem and data logger
- ▶ Includes a speaker that aids troubleshooting in the field

Technical Description

The COM320 has a CS I/O port, power terminals, screw terminals, and an RJ-11C jack. The data logger connects with the CS I/O port via an SC12 or SC12R-6 cable. The RJ-11C jack is for attaching a surge-protected telephone line. Alternatively, the screw terminals (GND, RING, TIP) can be used to connect the COM320 with a phone line via a surge protector.

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.

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 data logger 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)



- › CR6, CR800, CR850, CR1000, or CR3000 datalogger
- › Environmental enclosure
- › Power supply, usually the data logger's sealed rechargeable battery recharged with ac power or solar panel

Data-logger-to-computer communication also requires, at the computer site, a PC or laptop running PC400, LoggerNet, or RTDAQ data logger support software, 7026 serial cable or

equivalent modem cable, and a user-supplied Hayes-compatible modem.

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Specifications

Transmission Distance or Area	Worldwide
Operation	1200 to 115200 baud digital communications over phone lines
Operation	<ul style="list-style-type: none"> › Touch-tone selection voice responses › Generated voice messaging for incoming or outgoing calling
Operating Temperature Range	-25° to +50°C (standard)
Operating Voltage	12 Vdc
Current Drain	<ul style="list-style-type: none"> › ~100 µA (quiescent) › ~35 mA (active)

Communication Rate	9600, 38400, 57600, 115200 bps (between data logger and COM320, and selected by user)
Data Logger Interface	CS I/O, SDC9 (not changeable)
Standards	V.92, K56Flex, V.90, V.34, V.32bis, V32, V23, V22bis, V22, V.21, B212, B103
Registration	<ul style="list-style-type: none"> › IC 2377 A-SM2TW › FCC US 3A4M508BSM2-T-W › TBR21
Service Requirements	If not available at the site, phone lines must be installed.
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)

For comprehensive details, visit: www.campbellsci.eu/com320 



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