CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

COM220
Phone Modem

Ideal for Remote Sites
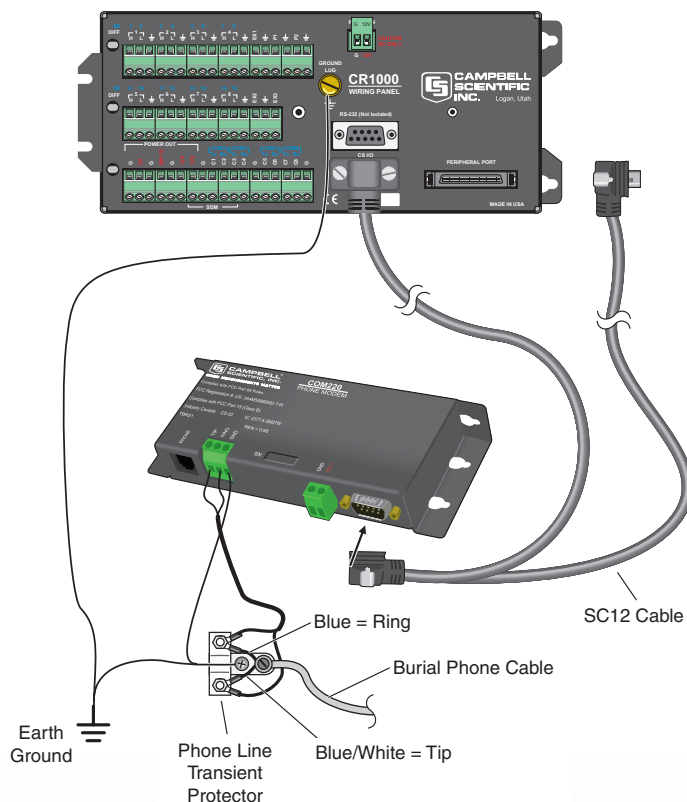**Low power use; wide operating temperature range**

Overview

The COM220 phone modem enables communications between a computer and a Campbell Scientific data logger over a public switched telephone network. A Hayes-compatible modem is required at the computer site. The COM220 connects to the data logger at the field site.

Benefits and Features

› Wide operating temperature range and low power requirements make it ideal for use at remote sites

› Supports communication rates up to 115.2 kbps between modem and data logger. In practice, data transmission through phone lines is generally constrained to 33.6 kbps.

› Compatible with most Campbell Scientific data loggers

› Offers both modem enabled (ME) and synchronous device communications (SDC) modes

› Allows user to set the number of rings before answering call

Technical Description

The COM220 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 using 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 COM220 with a phone line using a surge protector.
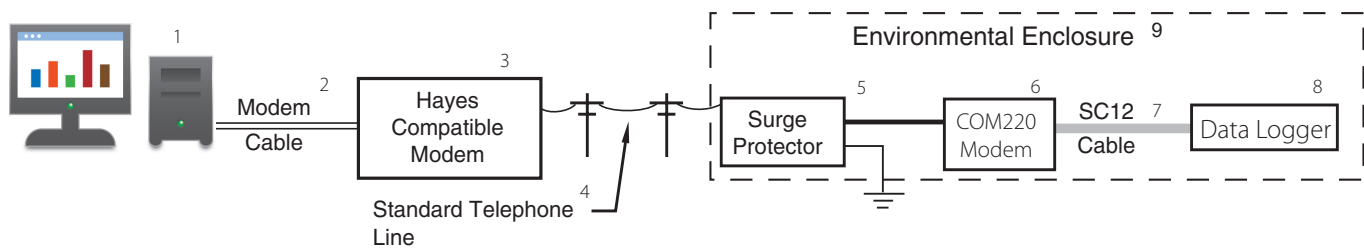

A COM220 is connected with a CR1000 and a surge protector.

Hardware Requirements

At Computer Base Station

(1) User-supplied computer running PC400 or LoggerNet Data Logger Support Software

(2) 7026 serial cable or equivalent

(3) Customer-supplied, Hayes-compatible modem

(4) Switched telephone network that connects the computer base station with each data logger field site

At Field Site

(5) Telephone surge protector if the telephone company has not installed surge protection

(6) COM220 modem

(7) SC12 cable (included with COM220); the SC12R-6 may be purchased if a longer cable is required.

(8) Data logger

(9) Typically an ENC12/14, ENC14/16, or ENC16/18 enclosure

(10) Power supply, usually the data logger's sealed rechargeable battery recharged with ac power or solar panel

Specifications

> Standards: V.92, K56Flex, V.90, V.34, V.32bis, V32, V23, V22bis, V22, V.21, B212, B103

> View EU Declaration of Conformity at: www.campbellsci.com/com220

> Operating Voltage: 12 Vdc

> Operating Temperature: -25° to +50°C

> Communication Rate Between Data Logger and COM220 (selected by user): 9600, 38400, 57600, 115200 bps)

> Operation: Full-duplex over standard analog phone lines

> 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)

Registration

> FCC US: 3A4M508BSM2-T-W

> IC 2377 A-SM2TW

> TBR21

Current Drain

> Quiescent: ~120 µA

> Active: ~30 mA