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.
**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](http://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