![Campbell Scientific Europe logo - WHEN MEASUREMENTS MATTER]

COM220 Telephone Modem

Enables communication between a computer and a Campbell Scientific datalogger over a public switched telephone network

Description

The COM220 modem can be used with all current Campbell Scientific dataloggers. The COM220 is connected to the datalogger; a Hayes-compatible modem is required at the computer end of the link.

Function

When used with a PC running Campbell Scientific LoggerNet datalogger support software, COM220 telephone modems allow data retrieval, uploading and downloading of datalogger programs and remote monitoring.

The datalogger can also be programmed to call back to the PC on a timed, or conditional, basis e.g. for an alarm function.

LoggerNet also supports error checking, manual or automated dialling and can run unattended in order to take advantage of lower, off-peak, telephone charges.

Operational Requirements

At the Computer Base Station:

- A PC running PC400
  or
  LoggerNet datalogger support software

- A suitable modem cable

- Hayes-compatible modem

At the Datalogger Site:

- A COM220 modem for each datalogger

- SC12 cable (supplied)

- A Campbell Scientific datalogger (all current models except CR200 series and CR9000)

- An enclosure for field use

- An appropriate telephone surge protection device

Approval

The COM220 is compliant with Council Decision 96/482/EC for pan-European single terminal connection to the PSTN (known as CTR21). See 'Statutory Note' overleaf.

Key Features

Transmission at up to 33.6 kbaud

Full duplex over normal telephone lines

Can be used with most datalogger models

Will operate reliably unattended unlike low cost commercial modems

Easy to install

Low power consumption

Built-in speaker enables you to monitor call progress

Operates in extreme environmental conditions

Approved for use on European telephone networks
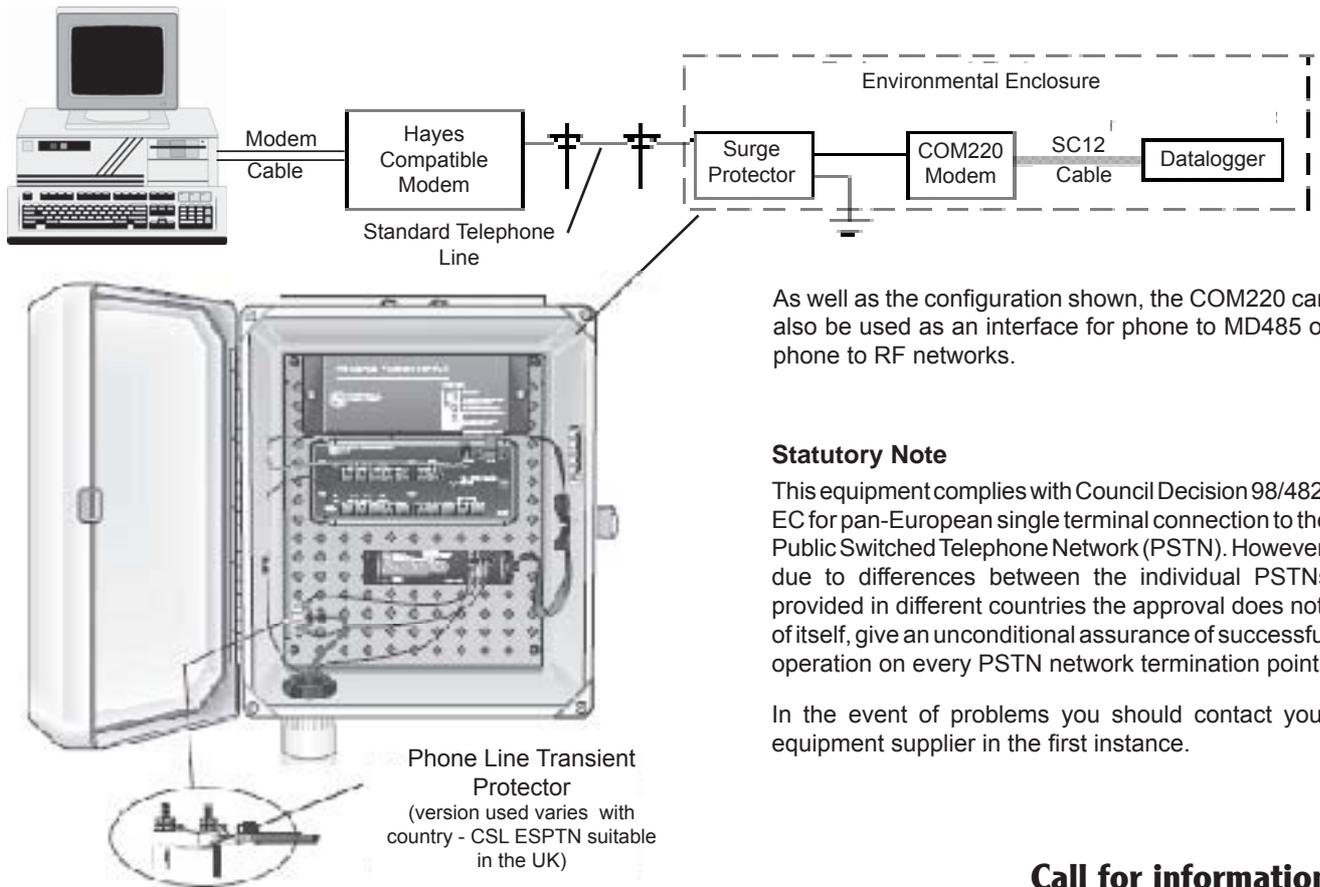
Typical Applications

Accessing an automatic weather station from anywhere that has telephone access

Communication with a datalogger in a harsh environment

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Typical System Configuration

As well as the configuration shown, the COM220 can also be used as an interface for phone to MD485 or phone to RF networks.

Statutory Note

This equipment complies with Council Decision 98/482/EC for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems you should contact your equipment supplier in the first instance.

Phone Line Transient Protector
(version used varies with country - CSL ESPTN suitable in the UK)

COM220 in environmental enclosure with CR10X datalogger, PS12E-LA power supply and enclosure mounted transient surge protector.

Call for information on alternative communication links

Specifications

Communication

Data Rate: Full duplex at up to 33.6 kbaud with Campbell Scientific dataloggers.

Compatible with standards:

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

Hayes AT command set

EU CTR21 (pan-European) compliant

EMC Compliant to EN61326:1998

Connections

RJ-11C telephone jack and screw terminal, plus an appropriate country-specific adapter.

Direct connection to, and powered by, the datalogger

Protection from Electrical Transients

The COM220 has some internal transient protection, but, for full protection the telephone line should be fitted with an appropriate lightning surge protector.

NOTE: Campbell Scientific will not accept any warranty claims where damage to the COM220 has occurred due to lightning damage.

Operational Details

The COM220 is designed for operation on standard analogue telephone lines. It will not work with digital lines. For best results it should be used on a dedicated, unshared telephone line.

Physical & Environmental

Power Supply: 12V DC unregulated

Standard Operating Temperature: -25°C to +50°C
Extended Operating Range (-40°C to +85°C) available to special order

Current Drain: ~120µA quiescent
~30mA active

Campbell Scientific products are available from: