



## Get Connected!

### 2 Day Communications Course

#### Overview

Our 2 day communications course is aimed at intermediate to advanced users of Campbell Scientific dataloggers wanting to learn how to program for and connect their dataloggers to communication networks. The course covers cell phone modems, ethernet networks and spread spectrum radios, how to connect them to the datalogger and how to program for these devices to provide information over services such as Email, FTP and SMS. We also cover methods for connecting to and administering a datalogger via Loggernet over these communications devices.

There is some intermediate level programming to be done in this course. Please make sure that you have had some experience with programming the dataloggers before attending or you may not gain the full value of the material. Ideally you will have previously attended the 2 Day Datalogger Programming Course and had time to practice the concepts from that course.

#### Communications Course will cover:

- › Brief Introduction to communications with Campbell Dataloggers
- › Different methods of communicating with Campbell Dataloggers
- › Useful applications of communication methods
- › Useful tools to assist with communications
- › Satellite and radio communications
- › Konect and Mobile Data Assistant
- › RTMC Pro and web page hosting

##### *Ethernet Connections*

- › Direct Ethernet connections
- › IP Networks

##### *Serial Communications*

- › Datalogger Serial Ports
- › Using Terminal Emulator
- › String Operations in CRBasic

##### *PPP Connections*

- › Connecting to the Internet using a Modem
- › Cellular Modem Contexts
- › Controlling Internet Connection Time
- › Static versus Dynamic IP Addresses

##### *Internet Protocols*

- › Sending data via FTP
- › Sending an Email
- › Accessing the Datalogger Web Page

##### *Program Execution Options*

- › Pipeline versus Sequential Mode
- › Slow Sequences

##### *Saving Data to a File*

- › The TableFile instruction
- › Custom File Formats

##### *Data Logger Call Back*

- › Land Line Call Back
- › IP Based Call Back

##### *Pakbus Networking*

- › Network Examples
- › Spread Spectrum Radios
- › Data Logger Configuration
- › Loggernet Configuration
- › General information

## General information

Campbell Scientific offers training courses for our dataloggers and software. These comprehensive courses are designed for those without much datalogger experience, or for those wanting to increase their knowledge. The courses have an emphasis on programming; see individual courses for itinerary. "Hands-on" programming exercises and course handouts are used to reinforce the concepts covered by the instructors.

Training can be provided by any of the European offices (UK, France, Germany or Spain) - dates given on our website are for the UK where we have dedicated training facilities. For training at the other offices please contact them directly. We can also run training courses externally, either at your premises or any suitable venue. This might be more economical if you have several people requiring training.

## Booking for a course?

A few details . . .

- All courses are taught using the latest version of LoggerNet software.
- Price includes refreshments and a buffet lunch. Please advise of any special dietary requirements prior to the commencement of the course.
- Attendees will be provided with access to a computer and suitable connections for the course. Customers with specific questions relating to their set-up can bring their own computer for this purpose.
- Course commences 9.00 a.m. each morning and finishes at 5.00 p.m.
- All fees must be paid in full prior to the commencement of the course by either credit card or invoice (for credit approved clients). Full refunds are given up to 2 weeks before the course, cancellations after this time attract a charge of 20% of the course fee. No refund is given for cancellations 24 hours prior to commencement.
- Participant substitutes are welcome at any time prior to commencement of the course. No substitutions will be accepted after the course has begun.
- To book a course contact Campbell Scientific Ltd by phone on 01509 828888 or email [sales@campbellsci.eu](mailto:sales@campbellsci.eu)

## Courses

For an up to date list of all our current courses please visit our website: <http://www.campbellsci.eu/training>

