SHM COMMUNICATIONS LTD
Engineering for Energy Information

Valley House, Winnall Valley Rd, Winchester SO23 0LD
Tel: +44 (0)1962 865142 www.shmcomms.co.uk
email: sales@shmcomms.co.uk

Application Note AN015

Guide to use of CSV for Data Collection from SHM Data Loggers

The UCSV Utility is a simple utility which performs data collection from SHM data loggers. It is designed to be used under manual control and has no automated scheduling or data base building routines. UCSV may be used in situations where the user requires a simple software tool and is prepared to operate data recovery on a routine and manual basis, and utilise another program such as Microsoft Excel as the analysis and reporting tool.

If sophisticated software features are required then SHM XLeMs or Stark Reality Software is available which incorporate the SHM logger protocol and routinely interrogates any number of SHM outstations, as well as automatically generating user defined reports on a scheduled basis.

The following notes are provided to assist in the use of UCSV.

1. UCSV will operate reliably over a local RS232 or RS485 connection. UCSV will also operate reliably via remote connection. It is especially important to note these points when operating via remote data collection.
2. UCSV is a Windows application.
3. UCSV is virtually unrestricted allowing up to 10,000 readings per channel to be collected in one operation.
4. UCSV may be used simply as a direct local data collection tool using COM: ports on a PC or lap-top.
5. UCSV may be used with an external or internal modem, or in TCP/IP mode via Ethernet/Internet connection.
6. When operating UCSV via modem the modem built into the remote SHM logger will disconnect if there is no data activity on the connection for 60 seconds. So to prevent this happening while program parameters are being adjusted the connection to the logger can be maintained by operating a 'read time' or 'monitor channels' function from time to time. This will prevent the 60sec time-out on the telephone connection from expiring and dropping the line.
7. UCSV expects by default to see a UL8 at the end of the line. So before operating data collection it is best to do a 'monitor channels' operation so the program will sense the type of logger and importantly the number of channels in operation.
8. Before collecting data make sure that the 'choose channels' operation has been completed to select only the particular logger data channels required. This prevents unnecessary collection of data from unused or unwanted channels.
9. Ensure whenever possible that the data requested from the remote logger is set to start at the required date and continues to the present time. That is request data in a single block of readings; avoid collecting in a number of blocks.
10. The number of readings requested during data collection is best set so that it is equal to the number of readings from the required start date and time up to the present date. That is requesting the correct number of readings required so that there is no overlap of 'empty' readings into the future.

If difficulties are still encountered contact SHM Customer Support for further advice.