

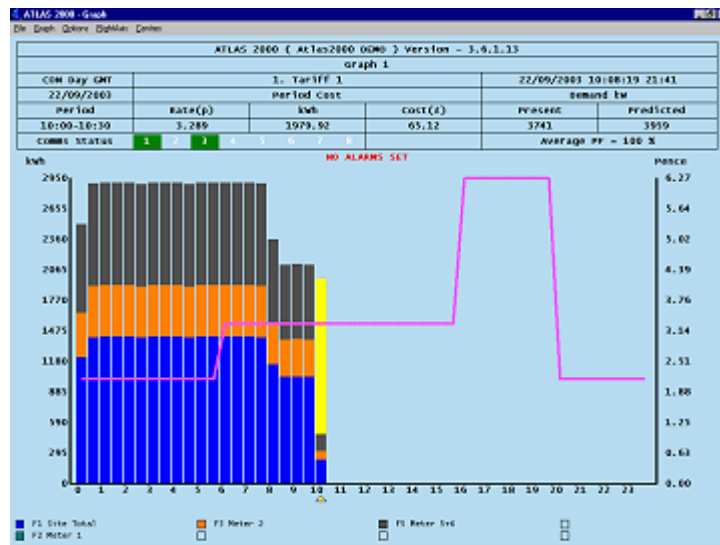


Authorised User No. 00443

The ETL symbol is a UK registered certification mark of the Carbon Trust

Mini-ATLAS

Energy Monitoring System



Mini-ATLAS is a powerful, easy to use, energy monitoring and reporting system for a Windows® 95, 98, ME, NT/2000 or XP environment created for those resource users looking to increase operational profitability by improved management of energy use. The system can be used to monitor and record electricity and other resource usage for individual sites, for cost centres within these sites and even for widespread sites within a national or international group.

The accumulated information is permanently stored and can be used for tariff comparison, production of consumption and cost profiles, efficiency studies and give useful information on many aspects of plant operation. Furthermore Mini-ATLAS can be used in an on-line configuration to provide full management capability, including warnings of potential excessive use or equipment malfunction.

The system can be easily re-configured to meet the changing needs of its users without expensive equipment replacement.

THE SYSTEM

Designed to continuously monitor the pulsed outputs from energy meters such as electricity meters gas, water, effluent, steam or other meters if desired, the modules of the system are:

LOGGER OUTSTATIONS

Designed for use with several ATLAS 4 channel μ -Loggers [or one 40 channel ATLAS IV Logger] Mini-ATLAS can be configured as a small compact energy monitoring system with strong growth potential. Loggers will normally be located adjacent to the meters being monitored or at some other convenient point to minimise plant cabling costs. A meter to Logger distance of 800 metres is not unacceptable. A μ -Logger has 4 inputs in addition to the half-hour synchronisation pulse from the Electricity Supplier metering. Multiple Loggers can be readily accommodated up to a maximum of sixteen in the standard software package. These Loggers need not be at the same geographical location, telephone (and radio) modem communication is readily used.

The Loggers are normally mains powered. In the event of local power loss ATLAS μ -Loggers will operate fully for up to 24 hours on the internal battery providing full pulse collection and communication with the system PC. ATLAS IV Loggers will operate on their battery for a few days depending on battery condition and activity. The system software provides a warning of battery operation to initiate user investigation.

For most applications pulses will be accumulated into half hour [15 minutes is an option] consumption periods. The Logger has memory capacity to provide for more than a month [30 min config] of data before it is necessary for the System PC to copy this recorded data. A typical system will, however, operate with the System Computer collecting data several times each day from Loggers and probably each few minutes to provide regular updating of System displays.

SYSTEM COMPUTER with ANALYSIS SOFTWARE

This unit is based on an IBM compatible personal computer with the following **minimum** specification:

- A Pentium [400MHz min] Personal Computer with 256 Mbytes RAM.
- A 10 Gbyte hard disc plus CD drive.
- A 15" SVGA colour monitor and graphics adaptor [min 800x600 resolution]
- 2 Serial Ports and 1 Parallel Port

In a basic system the System Computer could be located adjacent to the Logger but to derive the maximum benefit from the system it is recommended that this PC is located in a manned control room or similar location where the alarm and display facilities will provide clear information to operatives.

The System Computer need not be totally dedicated to Mini-ATLAS use and is available for other tasks with data collection operating as a background task.

CONFIGURATIONS

As described above a standard Mini-**ATLAS** System will normally comprise a System Computer with Analysis Software plus one or more Loggers.

Some possible configurations are:

- a) System Computer remote from Logger Outstations on same site.
 - 1) Single Logger up to 50 metres, normal RS232. Multi-drop also possible for adjacent Loggers.
 - 2) Up to 4000 metres, with multiple Logger Outstation's, RS485 twisted pair network.
 - 3) Using your internal telephone system with dial-up modems.
 - 4) Using radio modems when internal telephone system not available.
 - 5) Using the site ethernet network with TCP/IP protocol
- b) System Computer remote from Logger Outstations on different sites across the country.
 - 1) Private telephone line via modems.
 - 2) Normal subscriber lines via dial-up modems



Mini-ATLAS SOFTWARE

For normal operation the System Computer will communicate with the Logger at regular, user set, intervals. This can be typically once or twice a day or continuously if Demand Management capability is desired. Collected data is stored on the PC hard disc and systematically backed-up each day to a user specified path to minimise the possibility of data loss due to computer malfunction.

The Mini-**ATLAS** software is designed to be easily used by persons familiar with Windows. It is extremely versatile allowing easy system configuration and includes a number of readily pre-formatted reports.

Some of the features of Mini-**ATLAS** software are:

- a) The data can be organised into logical, named, Analysis Centres by adding or subtracting meter channels or a proportion of a channel (e.g. Meter 7 + Meter 9 + 60% of Meter 8 - Meter 2).
- b) Any number of Tariffs can be entered by the user, catering for multiple time bands, fixed charges, CCL etc.
- c) Daylight Saving Time (or equivalent) is automatically accounted for.
- d) User set analysis periods are catered for e.g. invoice months, accounting periods, production periods etc.
- e) Graphical and numerical reports on Period & Daily Consumption and Cost can be produced for any centre. Further reports include Tariff Analysis, Year by Month and Centre Comparison.
- f) Reports can be saved in several formats and, along with Display Graphs can be printed on the system printer.

Additional reporting capabilities are available with **ATLASXtra** software, see leaflet AtlasXtr04.

MULTIPLE USERS/ LOCAL AREA NETWORKS

It is very simple for the Mini-**ATLAS** System Computer to provide data to a LAN file server for sitewise analysis and reporting. Cost effective multiple user or sitewise software licences are available where required.

NewFound Energy Ltd

Park View House - Worrall Street - Congleton - Cheshire - CW12 1DT - England
 Tel: +44 (0)1260 290151 Fax: +44 (0)1260 290811
 e-mail sales@newfound-energy.co.uk
www.newfound-energy.co.uk