

SeDAC™ DATA SHEET

Data acquisition and control

Dynamics SeDAC™ data acquisition and control system, is an advanced total solution for computerised protection, control and monitoring.

It is fully engineered according to each application, using our proven rectifier modules and leaves our facility fully tested and 'ready to go' with no client or onsite setup. Application specific screens are easily navigated from a web browser with data provided in a spreadsheet compatible format.

Dynamics started manufacturing transformer rectifiers for cathodic protection in 1974 and designed its first data acquisition system in 1980 for use on North Sea oil platforms. The latest web enable system, Dynamics third generation SeDAC™ was launched in 2002 and is now well established in applications including concrete, pipelines and tank farms.

SeDAC™ comprises:

- Local Rectifier Units (LRUs)
- Interface Unit (IU)
- Control Unit (CU) or Remote Monitoring Unit (RMU)

The LRUs are thyristor controlled with outputs available from 1A to 1000A.

The IU is the hub of the control system whereby the operator's instructions are turned into control signals to the LRUs using an industrial embedded PC.

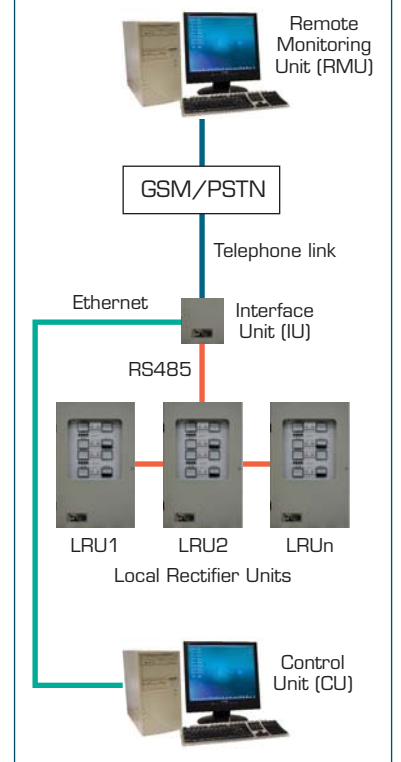
The CU or RMU is the operator access point, such as the client's laptop or office PC.

SeDAC™ features:

- Robust thyristor controlled transformer rectifier power supply units from our established 1A to 1000A range
- Constant Current, Voltage or Reference Electrode Control
- Optional manual control
- Automatic logging of output Volts, Amps and Reference Potentials
- User selectable logging interval from 1 minute to 1 year
- Viewed using an internet browser - no proprietary software or training required
- Clear screens showing Volts, Amps, Reference Potential, etc. designed to suit each application
- Spreadsheet compatible data files with meaningful headers with fast download times
- User defined Voltage, Current and Reference Potential Alarms
- 'Alarms Present' screen and 'Alarms History' screens
- Password level options for various user/security groups



Typical SeDAC™ layout



Options

- Automatic email facility of scheduled data
- Function check regime (primarily for concrete industry) consisting of:
 - 'On Demand' function check
 - Automatic Scheduler at user defined day/time
 - Storage for up to twenty five Function Checks
- Performance Verification regime (for concrete) consisting of:
 - 'On Demand' Performance Verifications
 - Nine user defined hourly record points
 - Automatic Scheduler at user defined month/day/time
 - Storage for 12 to 40 Performance Verifications
- Instant-off potentials taken within 0.1 to 0.4s (as opposed to 0.1 to 1s) simultaneously

SeDAC™ hardware specification

- Embedded Windows CE 300MHz Industrial PC
- 64MB SDRAM Flash memory
- Distributed I/O with >10MΩ Input Impedance using RS485 coms
- Reference Potential Measurement: 16-bit, Accuracy better than 0.1%, Resolution 1mV
- Current and Voltage Set-point 0.01A and 0.01V resolution respectively (or less, down to 1mA and 1mV on smaller PSUs)
- Output Relay option for true instant offs
- Modular PSUs for each zone on smaller units

Dynamics CP Ltd., Unit 1, Evercreech Way, Walrow Industrial Estate,
Highbridge, Somerset TA9 4AN, United Kingdom
T: +44 (0) 1278 780222 **F:** +44 (0) 1278 781824 **E:** sales@dynamicscp.com

www.dynamicscp.com