

# ZERA

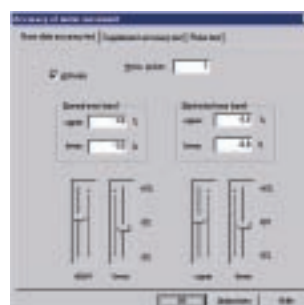
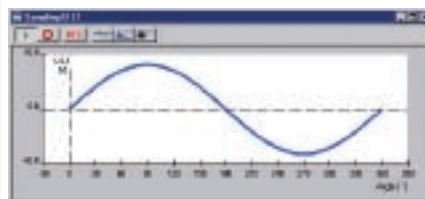
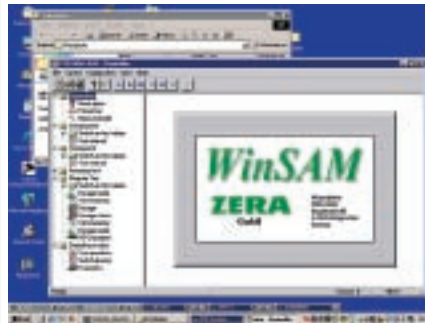
## WinSAM



## User Software

Windows®-Version



**WinSAM  
Software-Package****Curve-Sampling****Harmonic Analysis****Setting Test Values****Source Control****Meter Errors  
Basic Data**

## APPLICATION

Highly flexible, future-oriented, easy-to-operate software platform for control of ZERA meter testing systems. The user software designed to run on WINDOWS® operating systems (98/ME/NT4/2000/...) has been consistently advanced on an object-oriented basis and provides an incremental editor and elementary test elements for simple and clear compilation of test routines. Purchasing of finished routines allows even further reduction of the programming work. Data storage at the Access database level ensures secure data transfer to mainframe computers.

In addition to use with the new ZERA testing systems, the new generation of meter software is also suitable for application in combination with automatic ZERA systems with error processors beginning with Model DS 3xx or frequency generators beginning with Model FG111.

**Characteristics:**

- Future-oriented concept,
- High degree of abstraction,
- Device drivers as modules,
- Relatively easy interchangeability of equipment,
- Consistently developed on object-oriented basis,
- Test sequence is composed of elementary test elements (test steps) => High flexibility,
- Additional test elements (test steps) can be supplied later,
- Easy integration into Windows® operating system (98/ME/NT4/2000/...),
- Data storage in an Access database,
- Every test element (test step) has an interactive mode adapted especially to the task,
- Subdivided into editor and job control for two different operator groups,
- Editor can be operated intuitively by drag and drop of test steps,
- Preconfigured collections of test steps,
- No limitations in the selection of serial interfaces,
- Print layout is defined in the Access evaluation program,
- Separation of intermediate and final results.

### Separation of program package into individual programs.

The program package consists of a number of individual programs. This makes it possible to allow access by the individual operator groups to only the functions they require in the program package.

This makes it practical for experts in the laboratory to complete the planning for the test sequence with the aid of the **Sequence-Editor**. The test itself is then accomplished by other personnel on the system with the **Sequence-Control**. The **Evaluation Program** module was created to allow adaptation to special customer requirements, particularly during log printout without having to change the editor or job control.

The **Manual Control** included in the program package also provides a significant aid for preparation of the automatic test sequence

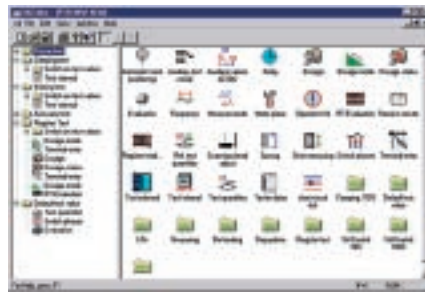
### Subdivision of a test routine into defined elements

In the WinSAM program the test sequence is subdivided into small elements, which can be put together as required with the editor provided. During start-up of the test sequence the user simply enters the required parameters, which can also be changed and adapted later. The test sequence can be started after completing another program stage. The individual test steps are checked for plausibility one after another before the test is performed subsequently.

At the end a program is automatically called for evaluation of the data collected. This evaluation program then takes care of log printout, archiving, generation of ASCII files, connection to external databases, etc.

### Modularization of interface to system

The individual elements in the test sequence are served by so-called device drivers, and do not have any direct contact with the equipment in the test system. They are also designed with a consistent modular concept and managed by a device manager. The device specifications are integrated in these device drivers. The purpose here is to ensure that the system is equipped for the future, because adaptation to future hardware can be accomplished simply by replacing the driver modules.



Sequence-Editor



Sequence-Control



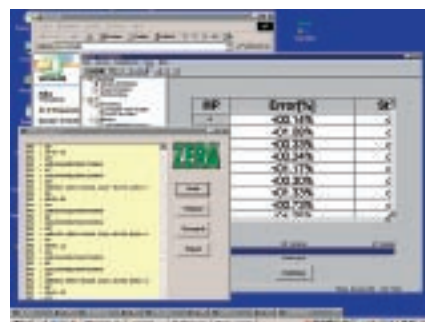
Evaluation Program



Manual Control

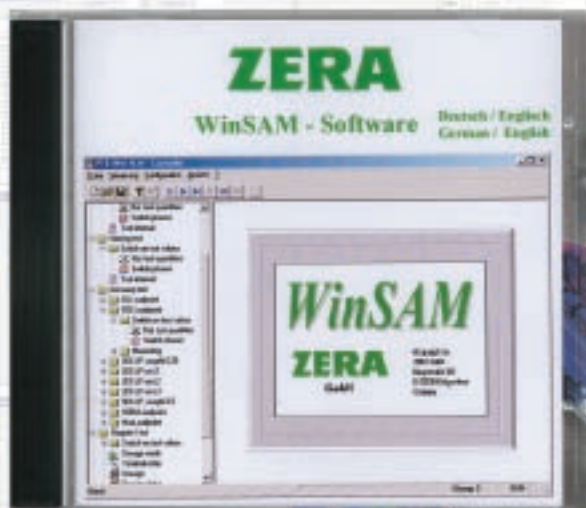


Auxiliary Circuit

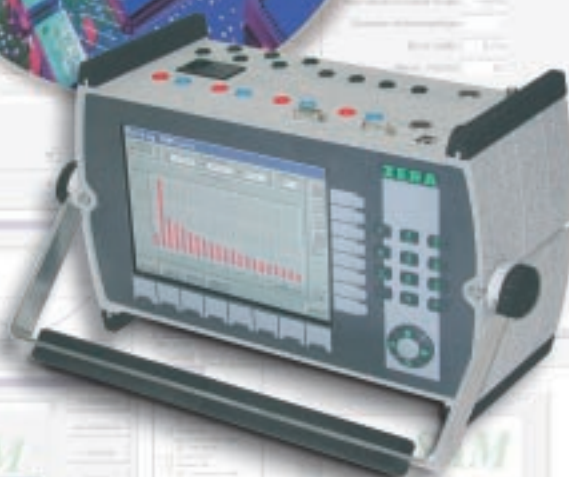


WinSAM Interfaces





ZERA GmbH  
WinSAM  
Build 0162  
ZERA GmbH  
Hauptstraße 392  
D-53639 Königswinter  
Tel: +49 (0)2223 704-0  
Fax: +49 (0)2223 704-70  
E-Mail: [info@zera.de](mailto:info@zera.de)  
www: [www.zera.de](http://www.zera.de)



### Other Products:

Stationary Test Systems  
for Electricity Meters

Portable  
Meter Test Equipment

Stationary and Portable  
Power Sources

Insulation Testers

Test Systems for  
Instrument Transformers

Test Systems for  
Circuit Breakers and  
Switch Gears

Voltage Stabilizers

Test Equipment for  
Ripple-Control Receiver

Primary Injection Test Sets

Secondary Injection Test Sets

Stationary and Portable  
Test Systems for Calibration  
of Measuring Transducers

Modernisation of  
Meter Test Systems

## ZERA®

ZERA GmbH  
Hauptstraße 392  
D-53639 Königswinter

Tel.: +49 (0)2223 704-0  
Fax: +49 (0)2223 704-70

[info@zera.de](mailto:info@zera.de)  
[www.zera.de](http://www.zera.de)

Commercial Register  
Inferior Court  
HRB 1600