



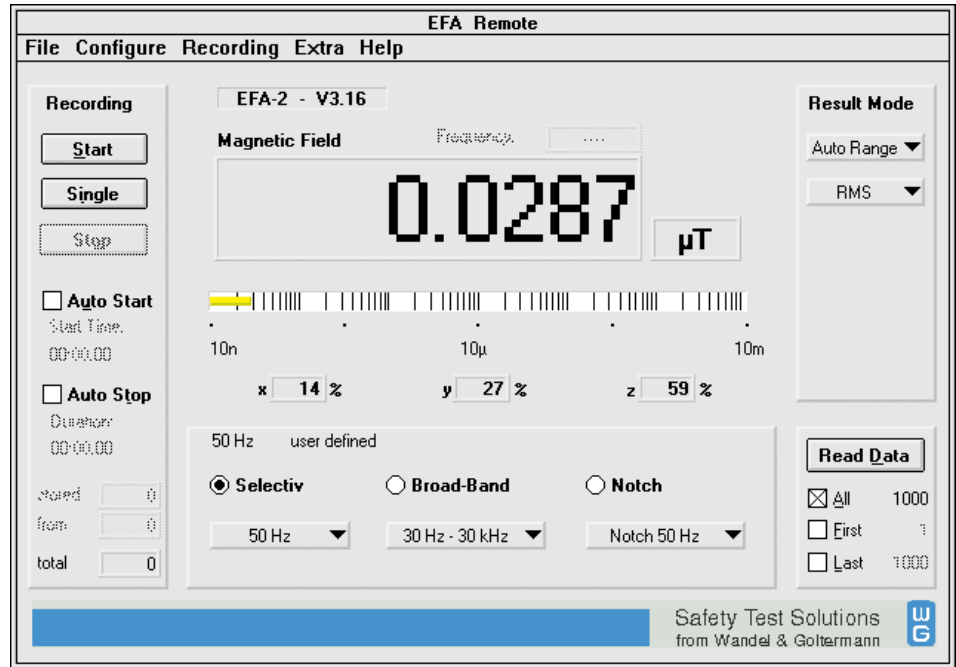
Wandel & Goltermann Germany



ETS-1

for Windows™ 3.11/
Windows™ 95/98, NT

Software for EMF test sets
EFA-1 to 3, EMR-20 to 300
and RadMan ESM-20



- Remote control
- Readout of current measurement data
- Readout of stored measurement data
- Timed measurements
- Easy-to-use user interface (LabWindows™)
- Automatic configuration / preset of PC serial interface
- Comprehensive help function

Applications

The ETS-1 PC Transfer Set is the link between the EMF measuring instruments in the EMR / ESM and EFA ranges and your PC. A simple mouse click reads the measurement data into the computer where it can be further processed using standard evaluation software such as Excel™. If measurements of very high field strengths or long-term measurements need to be made, the remote control function provides valuable support. The function is available with almost all the instruments in the range.

Features

The ETS-1 PC Transfer Set comprises hardware and software. The hardware consists of an opto/electric (O/E) converter, one 2 m and one 20 m fiber optic cable and an adapter for the RS 232 serial interface. The "Applications" disks contain the ETS-1 software for the various types of instrument (EFA/EMR/ESM). The instrument software is selected after installation. The software runs under WIN 3.11 or WIN 95/98, NT and has an easy to use LabWindows/CVI user interface. The RS 232 serial interface is configured by the software depending on the instrument connected, so that e.g. the ideal baud rate is set. For ESM and EFA instruments without the Remote option, the interface is pre-set, so you only have to select the COM port.

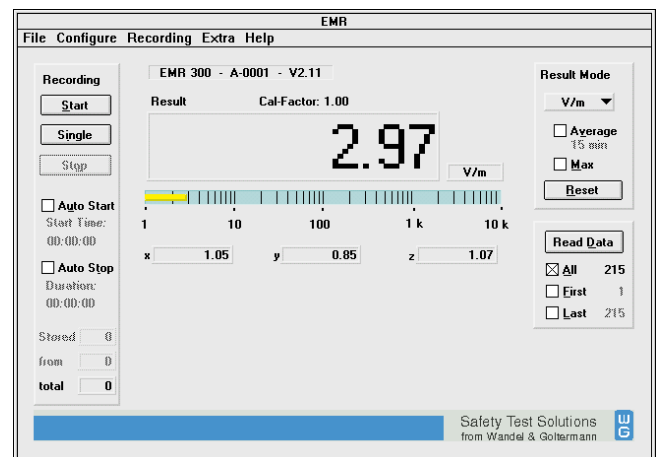
Parameters that are often used can be set directly from the user interface. Other parameters are accessed from the task bar, giving experienced users the means to change less common settings.

The following basic operating modes are provided by the ETS-1 software:

Live mode: Readout and display of current measurement data.

Read data: Readout of measurement data saved in the instrument with intermediate storage in buffer RAM.

Figure 1 EMR user interface



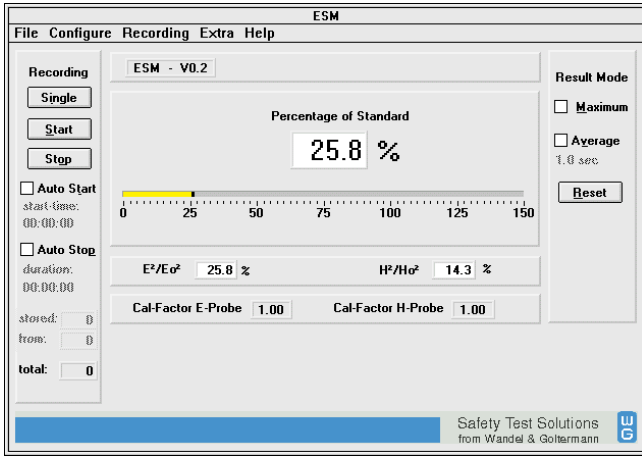


Figure 2 ESM user interface

Recording: Performs single and continuous measurements with and without timer control, storing the results on the PC. All data is saved to a hard disk buffer and is available for further processing using other software applications.

Live mode (current measurement value)

Once the test set has been connected to the PC using the hardware supplied, the correct COM port is detected and configured automatically (exceptions: ESM and instruments without Remote option).

After initialization, ETS-1 displays the current measurement value. Standard parameters such as units and evaluation type can be simply selected (exception: "EFA PRINT").

Comprehensive information is displayed, in contrast with the instrument display. For example, the display for ESM additionally shows the measured value as a percentage of both the E and H limit values. For the EMR, the values for the x, y and z axes are displayed in addition to the equivalent field strength.

Read data (readout of results memory)

ETS-1 organizes readout of data from EMR and EFA instruments fitted with the Remote option. A mouse click triggers the procedure. By additionally specifying FIRST and LAST MEMORY positions, the data can be read out in segments, e. g. corresponding to the actual sequence of collection on site. The measurement data format allows easy further processing using standard evaluation software such as Excel™.

This process can also be triggered by the PRINT command from EFA PRINT instruments.

Recording (remote-controlled measurement)

Many instrument functions can be remote-controlled by the software. Wherever the application demands unmanned operation at the point of measurement, ETS-1 provides the following possibilities:

- Single measurements
 - Start / Stop measurements
 - Timer-controlled measurements (AUTO START / AUTO STOP)
- Timer-controlled measurements can be continued for as long as required. The start time must be within the next 24 hours but not necessarily on the same calendar day.

Help

ETS-1 includes a Help function which doubles as a comprehensive on-line operating manual.

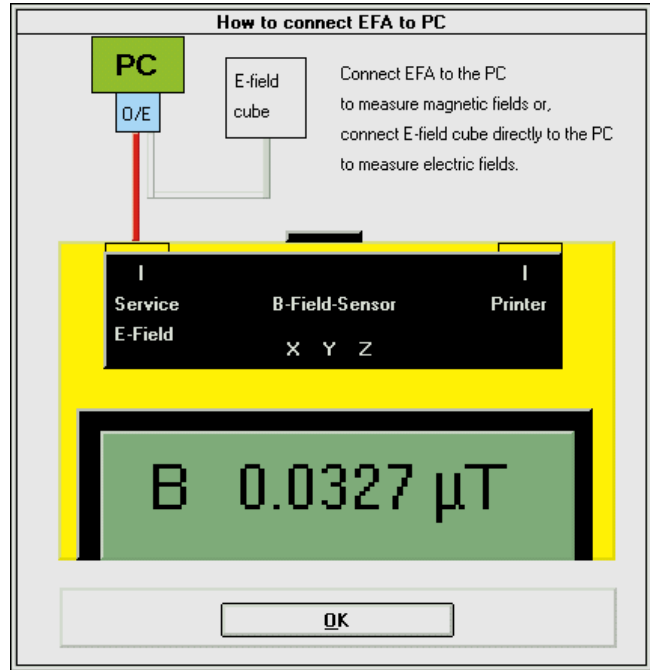


Figure 3 EFA setup

Programming information

If the ESM, EMR and EFA instruments are used as part of a system, or if customized programs are to be used for remote control, the complete set of remote control commands and syntax is also supplied on the "Documentation for Programmers" disk.

System requirements

- MS DOS version 3.1 or above
- Microsoft® Windows™ operating system, version 3.1 or above
- PC with at least a 80 386/50 MHz CPU or more modern processor
- VGA resolution or better, Video adapter
- Mathematical co-processor
- At least 4 MB RAM and 5 MB free hard disk space

Hardware: Fiber optics cables, O/E converter

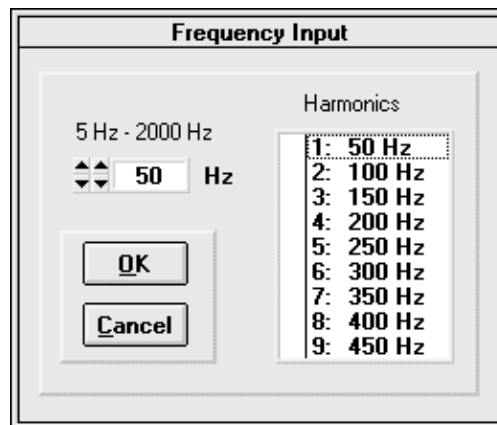


Figure 4 Selective measurement of harmonics

Ordering information

ETS-1 PC Transfer Set	BN 2244/90.34
(includes 2 m and 20 m fiber optics cables, O/E converter, RS 232 adapter, ETS-1 software disks)	

