

EMI Software R&S ESxS-K1

User-friendly EMI software under Windows

- ◆ Works with all R&S ESS, R&S ESHS, R&S ESVS and R&S ESCS30 test receivers
- ◆ Full on-screen setup entry and storage to disk, including limit lines and transducer factors
- ◆ Colour graphic display of scan data, with automatic data reduction
- ◆ Marker functions, including *Marker to Peak* and *Tune Receiver to Marker Frequency*
- ◆ Automated *Peak Search* function with user-definable acceptance margin and subranges
- ◆ *Peak List Edit* function for automatic or semi-automatic measurements
- ◆ *Find Worst Case* function for finding max hold level
- ◆ Report generation compatible with R&S ESxS receiver family using any printer supported by Windows

For Windows95, 98, ME, NT, 2000
incl. support for S-LINE700/1000
TEM cell measurements



ROHDE & SCHWARZ

Setup definition

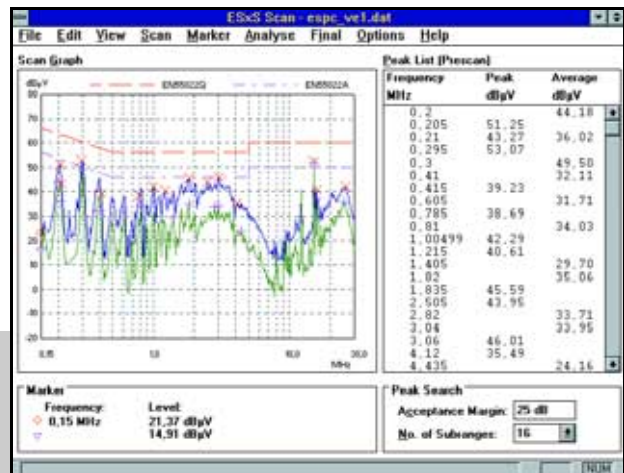
- ◆ Define any number of limit lines each with up to 50 points and store to disk
- ◆ Internal database including 60 standard limit lines and 69 transducer factors
- ◆ Define any number of receiver setups and store to disk
- ◆ Define and store peak list for final measurement
- ◆ Download new setup to receiver
- ◆ Upload current receiver setup into PC and store to disk

Scan mode and data capture

- ◆ Start, interrupt and end scan from PC keyboard
- ◆ Automatic data capture and colour graphic display
- ◆ *Marker to Peak* and *Tune Receiver to Marker Frequency* functions available during scan interrupt and after completed scan
- ◆ Resume interrupted scan with *Continue at Interrupt* or *Continue at Receiver Frequency*
- ◆ Zoom function, available after scan completion, expands frequency axis to display a part of the scan in greater detail, centered on the marker position

Peak search

- ◆ Automatic peak search with user-selectable acceptance margin and number of subranges or peak values
- ◆ Modify peak list with *Add Marker Frequency* and *Remove Frequency* functions, or edit peak list direct from keyboard
- ◆ Peak list values are highlighted on the scan graph and simultaneously displayed in a table



R&S ESxS-K1 is especially designed to provide users of all R&S ESS, R&S ESHS, R&S ESVS and R&S ESCS 30 receivers with a cost-effective Windows based remote-control display and storage solution.

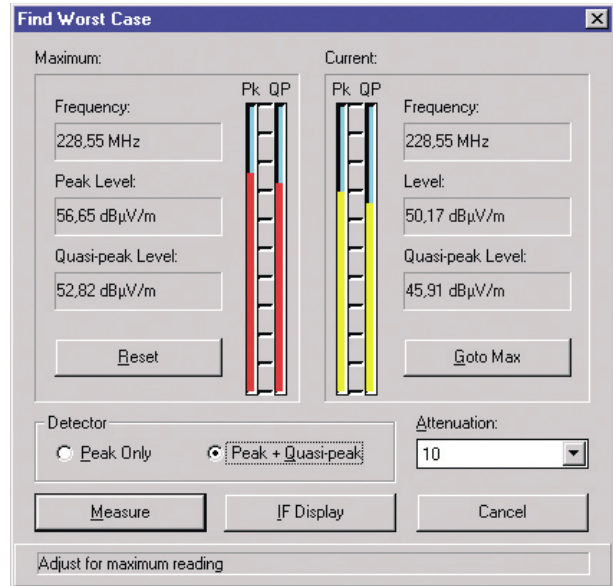
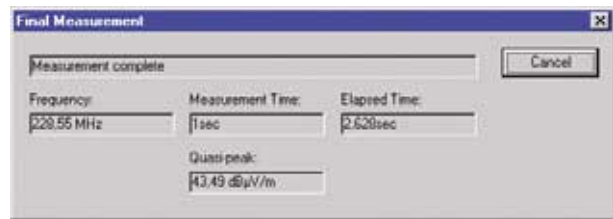
The main requirements of EMI emission measurements to civil standards are com-

bined in one easy-to-use application: measurement setup and storage, scan data capture and display with automatic data reduction, peak search with acceptance margin and selection of subranges or number of peaks, final measurement with worst case selection, report generation and storage of measured data.

All the benefits of Windows are available including keyboard and mouse operation, full colour display, report printout on any printer supported by Windows, and dynamic data exchange (DDE). An online help explains all software functions so that a user manual is not required.

Final measurement

- ◆ Three options available:
 - Automatic measurement: cycles through peak list and automatically measures levels at each frequency using the detector(s) specified in the setup
 - Semi-automatic measurement: same as automatic measurement, but runs *Find Worst Case* function for each frequency
 - Manual measurement: operator selects frequencies from peak list and runs *Find Worst Case* function
- ◆ *Find Worst Case* function: on-screen level display shows current level and max hold level, is continuously updated while operator fine-tunes receiver, and adjusts EUT position and operation for worst case; press *Measure* button to record final value in results list
- ◆ Results added to peak list and indicated on scan graph
- ◆ Stores complete results to disk
- ◆ R&S S-LINE 700 and R&S S-LINE 1000 support: Results of emission measurements taken with compact Shielded TEM Cell R&S S-LINE 700 or R&S S-LINE 1000 are supported by automatic calculation routines that provide the field-strength values to be expected for OATS measurements



Report

- ◆ Receiver-compatible report generation
- ◆ Preview on screen
- ◆ Output to any printer supported by Windows
- ◆ Individual report fields may act as DDE link servers allowing realtime display of R&S ESxS-K1 result data in other Windows applications such as Winword and Excel

ROHDE & SCHWARZ
RFI Voltage Test

EUT: PC Power Supply
Manuf: PC & POWER
Op Cond: Standard
Operator: V.Janssen
Test Spec: EN 55022 with Test Receiver ESFC
Comment: Prescan (PE-grounded) - Final (all phases & PE grd / float)

Scan Settings (1 Range) |----- Receiver Settings -----|
Start Freqs Step IF BW Detector M-Time Atten Preamp OpRge
150k 30M 5k 10k PK+AV 20ms AUTO LN OFF 60dB

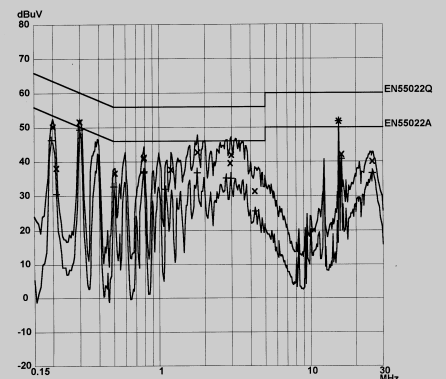
Final Measurement: x QP / + AV Measure Time: 1 s
Subranges: 16
Acc Margin: 25dB

Final Measurement Results:
Indicated Phase/PE shows Configuration of max. Emission

Frequency MHz	QP Level dBµV	QP Limit dBµV	Phase	PE
0.20000	50.2	63.6	L1	gnd
0.29000	45.9	60.6	N	gnd
0.29500	51.6	60.3	N	gnd
0.59500	35.7	56.0	L1	gnd
0.78500	41.9	56.0	N	gnd
0.79500	43.3	56.0	L1	gnd
1.20000	37.9	56.0	L1	gnd
1.79000	42.9	56.0	L1	gnd
1.79500	41.9	56.0	L1	gnd
3.16000	42.5	56.0	N	gnd
4.33500	33.5	56.0	L1	gnd
15.36000	55.4	60.0	L1	gnd
21.03500	35.5	60.0	N	gnd
25.63000	39.4	60.0	L1	gnd

Frequency MHz	AV Level dBµV	AV Limit dBµV	Phase	PE
0.19500	46.6	53.9	L1	gnd
0.29000	38.0	50.6	N	gnd
0.30000	49.5	50.2	N	gnd
0.49500	32.2	45.1	N	gnd
0.78500	37.8	46.0	N	gnd
0.79000	37.9	46.0	N	gnd
1.39000	32.1	46.0	L1	gnd
1.57500	36.8	46.0	N	gnd
2.74500	35.5	46.0	L1	gnd
2.94000	36.8	46.0	L1	gnd
4.33000	27.2	46.0	L1	gnd
15.36000	15.4*	50.0	L1	gnd
16.00000	33.6	50.0	L1	gnd
25.63000	35.8	50.0	L1	gnd

* limit exceeded



Ordering information

EMI Software R&S ESxS-K1 1082.9678.02

Hardware requirements

Runs on any IBM-compatible PC under Windows95, 98, ME, NT or 2000.
Requires an IEC/IEEE bus interface card for receiver control, such as R&S PS-B4 (model 04) or PCIIA, AT-GPIB from National Instruments.

Certified Quality System

ISO 9001

DQS REG. NO 1954

Certified Environmental System

ISO 14001

REG. NO 1954



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