

EMI-LAB Emissions Lab Software

Product Overview

Ease of Use TDK Emissions Lab makes it simple to perform radiated and conducted emissions measurements in a shielded room, in a chamber, or on an open area test site (OATS).

Performance Enhance test lab performance by maximizing repeatability of automated measurements using consistent, proven algorithms. TDK Emissions Lab includes support for turntable and antenna tower manipulation and is compatible with many turntable and antenna tower controllers, including those from ETS-EMCO, Frankonia, Inco, Kagaseiko, Shoshin, Sunol Sciences and TDK.

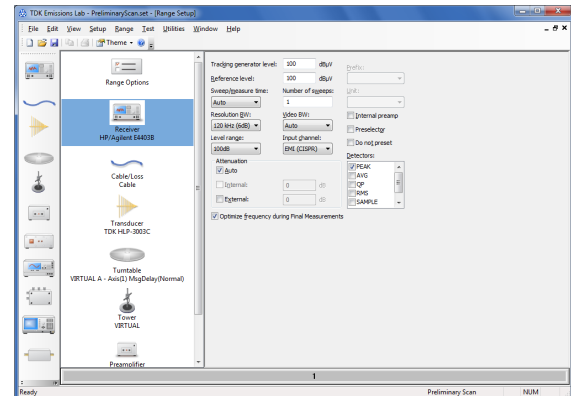
Flexibility Enables you to create simple test files for others to run, or you can interact with the test process every step of the way.

Test Standards

- Automotive (BMW, Chrysler, ECE, European Auto Directive, Ford, GMW, Hyundai, ISO 11451, ISO 11452, JASO, Nissan, Porsche, PSA, Renault, SAE)
- Aviation/Military (MIL-STD-461, RTCA DO-160)
- Commercial (CISPR, ETSI, FCC)
- Telecommunications (GSM, CDMA, WCDMA, UMTS, DECT, Cordless Phones, Bluetooth, Wi-Fi)

Minimum System Requirements

- Windows 10 (64-bit) or Windows 11
- 6th generation Intel Core i5 CPU (i5-6xxx) / AMD Ryzen 7 (or better)
- 4 GB RAM
- Built-in USB 3.0 port



TDK Emissions Lab features a powerful yet easy-to-use set of tools to perform emissions testing in a shielded room, in a chamber, or on an open area test site.

Test Sequences

- **Preliminary Scan** A rapid scan of a range of frequencies is performed. Using the peak search utility, the full set of measurement data is analyzed and a list of peak frequencies is generated.
- **Final Measurements** Detailed measurements are performed at individual frequencies. Antenna height, EUT azimuth, and antenna polarization are varied to find the maximum readings at each frequency. Measurements are taken at the maximized positions using the detectors of your choice.
- **Site Attenuation** Used for qualifying an OATS or a shielded enclosure for making emissions measurements per ANSI specifications.
- **Amplitude Response** Performs gain or loss characterization of cables, preamplifiers, LISNs, filters, etc. and creates a factor file.

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Testing Features

- Peak, quasi-peak, average, and RMS measurements
- Configurable sweep/measurement time
- Real-time data display during tests
- Supports a wide variety of receivers, spectrum analyzers, antenna towers, turntables, LISNs, base station simulators, signal generators, switch modules, and other types of equipment
- Automatic, configurable peak search with options for ambient exclusion and narrowband/broadband discrimination
- Email notification of test completion with the test file optionally attached
- Analysis of measurement uncertainty per UKAS LAB34
- Tests may be paused, resumed, or stopped at any time
- Easy-to-edit factor and limit line files
- Frequency range may be split into sub-ranges to accommodate different equipment or settings in different frequency ranges
- Independent frequency stepping (linear, log, or file-based) in each sub-range
- Pause at the beginning or end of a sub-range and display a user-defined message
- Skip one or more sub-ranges

Graph Features

- Flexible configuration allowing any data parameters to be plotted on any axis (x-axis, left y-axis, right y-axis)
- Linear or logarithmic axes
- Automatic or user-defined scaling of axes
- Configurable measurement units, trace thickness, color, and labels
- Graphs may be copied and pasted into documents in other applications (e.g. Word, etc.)
- Zoom, multiple zooms, nested zooms
- Add/delete color-coded data markers automatically or manually

Data Table Features

- Configurable data display format
- Flexible configuration allowing any data parameters to be displayed in the table
- Export data to a text file
- Data tables may be copied and pasted into documents in other applications (e.g. Word, etc.)
- Add/delete/move columns
- Color coding of data values to indicate markers
- Sort data on any data parameter
- "Find" feature to locate data

Ordering Information

Product: TDK Emissions Lab

Model Number: EMI-LAB

To place an order or to learn more about the TDK products that best meet your needs, contact your TDK sales representative:

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To learn more about TDK's wide range of innovative test products, solutions and services visit www.tdkrfsolutions.tdk.com

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Rev. 2023-04-24