EMSCOPE-RX4-LZ2

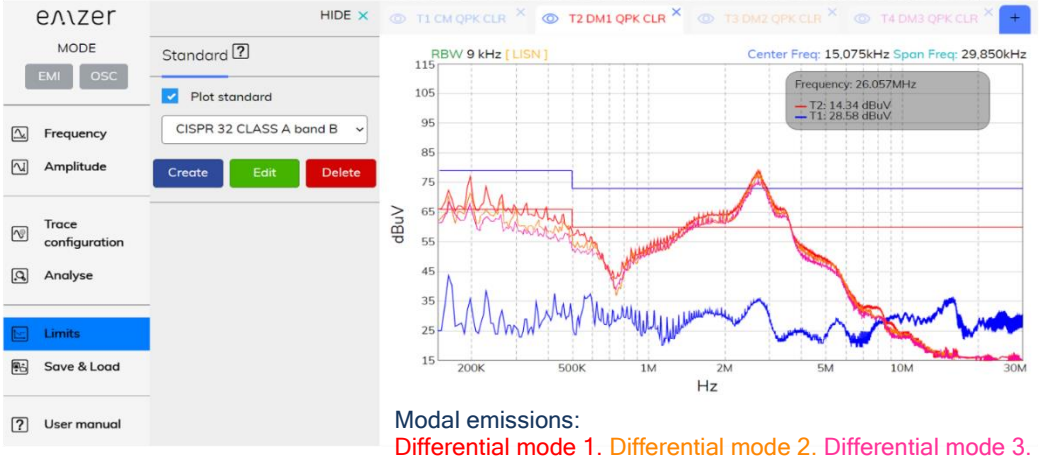
THE STRAIGHT PATH TO COMPLIANCE

The EMSCOPE-RX4-LZ2 is the new **EMI**-Test Receiver with 4 channels to perform measurement of the **common** and differential **modes** present in the 3 phase conducted emission tests according to CISPR 16-1-1.

EMSCOPE-RX4-LZ2 key features and benefits

EMSCOPE- RX4 is the new EMSCOPE's option for fast 3-phase EMI measurements that combines:

- **Four simultaneous acquisitions channels that are analyzed in pairs by two EMI Receivers** furnished with PK, QPK and AVG detectors according to CISPR 16-1-1 running in parallel. This allows fast:
  - **single-phase** and **three-phase** conducted emission measurements for EMC/EMI.
  - **common-mode and differential-modes (modal) emissions** easing EMI troubleshooting.
- Four Transient Limiters (one for line).
- Integrated test software (**no additional installation is required**).
- Integrated 16-A single-phase dual-port V- network Line Impedance Stabilization Network (LISN).
- All channels can be visualized simultaneously, showing an important reduction of the measurement time when compared to any other option.
- Easy EUT emission analysis:
  - EMI measurements
  - Modal emissions measurements (common-mode and differential-modes)
  - Spectrogram/waterfall function and optional Time domain analysis (oscilloscope)



Modal emissions:
Differential mode 1. Differential mode 2. Differential mode 3.
Common mode.

Technical Specifications

Standard for EMI test receiver	4 simultaneous acquisition channels, 2 receivers compliant to CISPR 16-1-1 standard
Detectors	Peak, quasi-peak and average
Type of measurements	• EMI/EMC : Up to 3 lines and neutral • Modal emissions: Up to 4 modes (1 common mode and 3 differential modes)
Frequency Range	150 kHz – 30 MHz
Resolution bandwidth filters	9 kHz, 120 kHz (CISPR); 1 kHz, 10 kHz (MIL)
Integrated circuits	Pre-amplifiers and pulse limiters
Internal LISN	• Compliant to CISPR 16-1-2 standard • Single Phase 16A, 50 Ω || (50 µH + 5 Ω) / 250 µH • Maximum continuous current /voltage: 16 A @230 V_{AC} / 300V_{AC}- 325 V_{DC} (socket dependent) • Main socket: IEC C20 • EUT Socket: standard Schuko socket (Type F) , other options available
Artificial hand / connector type	510 Ω + 220 pF / 4 mm banana
EMSCOPE power supply	DC to 60 Hz. Universal range
Measurement time	• Single phase: equal to dwell time used (from 1 s to 15 s) • 3-phase measurement: equal to twice the dwell time used (from 1s to 15s) • Modal measurements, 4 modes: equal to twice the dwell time used (from 1s to 15s)
Required external device	For modal mode measurements (3phase) : external LISN with 4 measuring ports or 4 single path LISNs.

Options

UPGR-110	Enhance frequency range from 150 KHz-30 MHz to 150 KHz-110 MHz
UPGR-OSC	Additional software license for Time Domain Analysis (Oscilloscope mode)
Fiber/USB Converter	Fiber optic converter to plug EMSCOPE directly to USB port
EUT SOCKET	Standard socket is EU. Specify other: US, UK, …

Example: EMSCOPE RX-LZ2 with 4 ports external LISN

NOTE: Preliminary data sheet. Specifications may change without previous advice.