

# EMSCOPE

Innovative EMI receiver for modal measurements  
New Dual FFT-based Modal EMI Receiver

## THE STRAIGHT PATH TO COMPLIANCE



### EMI receiver

- For conducted emissions measurements.
- According to CISPR 16-1.
- Peak, Quasi-Peak, and Average Detectors.
- CISPR and MIL standards resolution bandwidths.



### Modal receiver

- Common and differential mode measurements.
- Real-time.
- Solve EMC issues.
- Reduce testing and manufacturing costs.



### Maximum measurement speed

- Dual channel simultaneous.
- FFT based.
- All detectors at the same time.



### All-in-one

- Everything embedded inside the EMSCOPE:
  - Dual channel receiver.
  - Two transient limiters.
  - 16A dual port LISN (optional).
  - Software.



### Advanced Capabilities

- Waterfall/Spectrogram function.
- Oscilloscope function.
- Reporting.



### Cost Effective

- Compact.
- Double functionality.
- Software included with free updates.



e\izer

Innovate Lab Instruments

[www.emzer.com](http://www.emzer.com) | [info@emzer.com](mailto:info@emzer.com)

## Technical Specifications

<b>Standard for EMI test receiver / LISN</b>	According to CISPR 16-1-1 / 16-1-2 standards
<b>Detectors</b>	Peak, quasi-peak and average
<b>Type of measurements</b>	EMI (line and neutral) and Modal (common and differential mode) conducted emissions
<b>Full spectrum measurement time</b>	Equal to the measurement dwell time, which is totally configurable from 10ms to 15s
<b>Resolution bandwidth filters</b>	200 Hz, 9 kHz, 120 kHz (CISPR); 1 kHz, 10 kHz (MIL)
<b>Integrated circuits</b>	Pre-amplifiers and pulse limiters
<b>Internal LISN</b>	Single Phase 16A, 50 $\Omega$    (50 $\mu$ H + 5 $\Omega$ ) / 250 $\mu$ H
<b>Maximum continuous current/voltage</b>	16 A @230 VAC / 300VAC- 325 VDC (socket dependent)
<b>Power-supply operating frequency</b>	DC to 60 Hz. Universal range
<b>Artificial hand / connector type</b>	510 $\Omega$ + 220 pF / 4 mm banana
<b>Mains socket</b>	IEC C20
<b>EUT Socket (Connector for EUT)</b>	Schuko socket (Type F) *see options

## Models

	<b>Freq. range</b>	<b>Receiver channels</b>	<b>Transient Limiters</b>	<b>Internal 1P LISN</b>	<b>110-MHz Upgrade</b>	<b>Fiber/ETH conver</b>	<b>Software</b>
<b>EMSCOPE</b>	9KHz – 30MHz	2	2	Yes	Available	Included	Included
<b>EMSCOPE RX2</b>	9KHz – 30MHz	2	2	No	Available	Included	Included
<b>EMSCOPE RX4</b>	9KHz – 30MHz	4	4	No	Available	Included	Included
<b>EMSCOPE RX4 LZ2</b>	9KHz – 30MHz	4	4	Yes	Available	Included	Included

## Options

<b>UPGR-110</b>	Enhance frequency range from 9 KHz-30 MHz to 9 KHz-110 MHz
<b>UPGR-OSC</b>	Additional software license for Time Domain Analysis (Oscilloscope mode)
<b>Fiber/USB Converter</b>	Fiber optic converter to plug EMSCOPE directly to USB port
<b>EUT SOCKET</b>	Sockets available: EU, USA, UK, CN-AUS