



## GENERATOR LAB KIT

### Kit for Scientific Experimentation

Scientific research protocols require extreme accuracy, absolute simplicity of operation, total monitoring capability and highly flexible technology. The **GENERATOR LAB KIT** is an innovative equipment from LEANFA that is specifically designed for experimental laboratory use.

It combines the action of RF (450kHz) and Microwave (2.45GHz) energy to implement a hybrid technology generator able to drive different types of applicators for scientific experimentation: coaxial cables, waveguides, longitudinal probes, resonant cavities, static or continuous-flow reactors. The **GENERATOR LAB KIT** can in no way be used for clinical applications, the product is designed strictly for experimental laboratory application.

Complete **solid-state** design avoids the presence of dangerous high voltages and guarantees high accuracy and repeatability in rigid laboratory experimentation procedures.

The unit comes with an extremely intuitive **touch-screen** user interface governed by a top-reliable microprocessor kernel assisting the researcher with strict monitoring and automatic features. Ad hoc applicators are available on request for experimentation in food processing, in chemical research, in pharmaceutical testing and in experimental research on innovative industrial manufacturing processes.

Our **LeanOn** application, installed on the **GENERATOR LAB KIT**, allows to set and monitor plenty of operational parameters in order to allow a virtually infinite number of experimental configurations, while maintaining extreme ease of use and facilitating the production of accurate technical reports for subsequent scientific validation.

The equipment is designed with LEANFA's solid-state modules for radiofrequency and microwave operation, a milestone in the field of advanced electronics for research application.

## QUICK OVERVIEW

*Enables accurate scientific experimentations based upon a unique combination of RF and Microwave energy*

*Accurate focusing on the target with continuous monitoring of forward and reflected powers*

*Designed to drive experimental applicators of different types and sizes*

*Optionally equipped with pumps for applicators cooling*

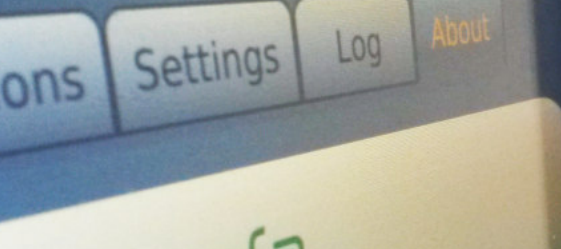
*No dangerous high voltage in the equipment circuitry*

*Extremely friendly touch-screen user interface and ergonomic design*

*Self-diagnostic electronic circuitry for absolutely fail-safe operation*

*"LeanOn" PC Application for remote operation and monitoring*





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### Technical specifications

<b>RF Output</b>	200W @450kHz
<b>Microwave Output</b>	Up to 200W @2450MHz
<b>Output Power Accuracy</b>	±2%
<b>Power Modes</b>	CW and Pulsed
<b>RF Output Connectors</b>	2x socket 4mm type (other on request)
<b>Microwave Output Connector</b>	N-type coaxial (other on request)
<b>Technology</b>	Fully Solid-State
<b>Power Supply</b>	240Vac ±15%
<b>Resistance Measurement</b>	RF mode, real-time, better than 5% full-scale accuracy
<b>Reflected Power Measurement</b>	Microwave mode, real-time, better than 5% full-scale accuracy
<b>Power Consumption</b>	Max 450W
<b>Control&amp;Monitoring</b>	Front-panel touch-screen interface + LeanOn PC software
<b>Cooling</b>	Forced-air
<b>Size</b>	19" 3RU cabinet 400mm deep
<b>Weight</b>	12kg



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