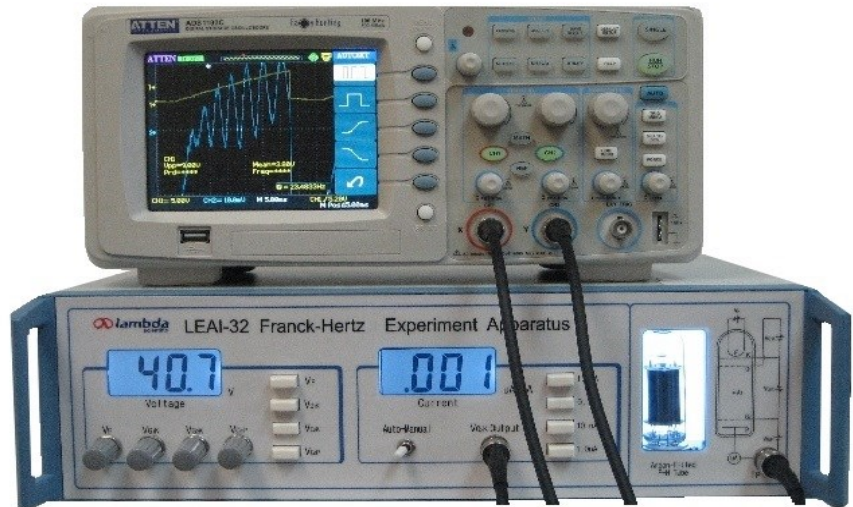


# LEAI-32 Apparatus of Franck-Hertz Experiment - Advanced Model

- No preheating for Argon tube
- Multiple modes: manual data recording, oscilloscope viewing, or software processing
- Visible Argon tube with backlight
- 7 or more coda waves
- Stable and reliable
- Built-in data acquisition card for PC via USB port

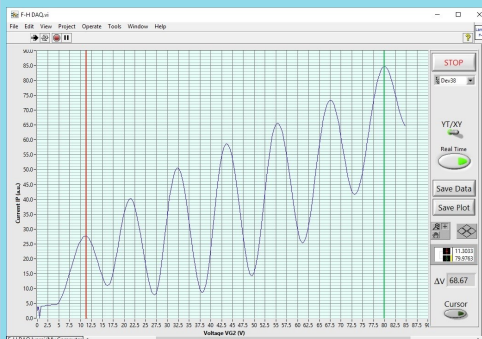


**Note:** oscilloscope not included

The LEAI-32 Franck-Hertz experiment apparatus can demonstrate the existence of Bohr atomic energy levels. Experimental results can be recorded by manual data taking, viewed on an oscilloscope, or acquired using a built-in data acquisition card for PC via USB port. No oscilloscope is necessary when using the built-in data acquisition card with a PC. It is an ideal teaching apparatus for physics laboratories at colleges and universities.

Using this instrument, the following experiments can be conducted:

1. Observe the relationship curve between plate current and accelerating voltage on oscilloscope
2. Understand the processes of electron-atom collision and energy exchange
3. Calculate the 1<sup>st</sup> excitation potential of Argon atom from experimental data
4. Using the acquired 1<sup>st</sup> excitation potential to calculate Planck's constant



Experimental curve acquired by software

## Specifications

Curve peaks	$\geq 7$
Franck-Hertz tube	Argon gas, backlight illuminating, open side window
Filament voltage VF	1.25 ~ 5 V, continuously adjustable 3-1/2 digital display
Control voltage VG1K	0 ~ 6 V, continuously adjustable 3-1/2 digital display
Accelerating voltage VG2K	0 ~ 90 V, continuously adjustable 3-1/2 digital display
Decelerating voltage VG2P	1.25 ~ 5 V, continuously adjustable 3-1/2 digital display
Micro current measurement	1 $\mu$ A, 0.1 $\mu$ A, 10 nA, 1.0 nA, range 0.001 nA ~1.999 $\mu$ A, 3-1/2 display

Lambda Scientific Systems, Inc.  
 16300 SW 137th Ave, Unit 132  
 Miami, FL 33177, USA  
 Phone: 305.252.3838 Fax: 305.517.3739  
 E-mail: sales@lambdasys.com  
 Web: www.lambdasys.com

**Note:** above product information is subject to change without notice.