LEAI-31 Apparatus of Franck-Hertz Experiment  
- Complete Model

- No preheating for Argon gas tube
- Multiple modes: manual recording, oscilloscope viewing or data acquisition with software
- Compact, stable and reliable
- Built-in data acquisition card for PC via USB port

This LEAI-31 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. Acquire relationship curve between plate current & accelerating voltage
2. Understand process of electron-atom collision & energy exchange
3. Calculate 1st excitation potential of Argon atom
4. Using 1st excitation potential to calculate Planck’s constant

### Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tr>
<td>Curve peaks</td>
<td>≥ 5</td>
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<tr>
<td>Franck-Hertz tube</td>
<td>Argon gas</td>
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<tr>
<td>Filament voltage VF</td>
<td>1 ~ 5 VDC, continuously adjustable 3-1/2 digital display</td>
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<tr>
<td>Accelerating voltage VG2K</td>
<td>0 ~ 90 VDC, continuously adjustable 3-1/2 digital display</td>
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<tr>
<td>Micro current measurement</td>
<td>range: 0.1 nA ~10 μA</td>
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Note: above product information is subject to change without notice.