Full-Load Current of 100A at 0.3V!
High Speed-Large Current DC Electronic Load (50A/μs)

While the PLZ-4WL series succeeds to the superior operability of our conventional model of the PLZ4W series, the PLZ4WL series realizes the high speed rise and fall time (slew rate of 50A/μs) in the range of low voltage with large current. The PLZ4WL offers six operation modes, and equips with various features such as sequence operation, switching operation, soft-start function, and time and voltage measurement. The PLZ4WL applies not only for the conventional load test of the CPU power supply, but also it can be applied to even faster current response test. In addition, the PLZ4WL is a space-saving design (about 50% less volume of the conventional model) that can save the facility space of the testing site, and it can be applied for the single cell testing of the large scale rechargeable battery.

Electronic Load
PLZ-4WL series

<table>
<thead>
<tr>
<th>Feature/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible to operate as low as 50mV by the input voltage. Even below the input voltage of 0.3V, this product can be used by reducing the current.</td>
</tr>
<tr>
<td>Accurate low-rate discharge by the Low-range (1/100)</td>
</tr>
<tr>
<td>Each operation mode of the CC, CR, and CP has 3 ranges (H, M, L). The &quot;L&quot; range employs the scale of 1/100 which covers the range from the small to the large scale of the current.</td>
</tr>
<tr>
<td>Fast Slew rate</td>
</tr>
<tr>
<td>Realize the slew rate of 50A/μs at 2.3V of the load input terminal voltage</td>
</tr>
<tr>
<td>Sequence function</td>
</tr>
<tr>
<td>The sequence mode can be set in 2 operation modes (Normal and Fast mode). The Fast mode can be set for the minimum step time of 25μs, and it can be synchronized with the external device by using the trigger input/output feature.</td>
</tr>
<tr>
<td>External analog control</td>
</tr>
<tr>
<td>Not only the external control for the CC, CR, CP, and CV, but also it is capable to superimpose the current by the external input current on the present value of the CC setting. Moreover, it also can turn the LOAD ON/OFF.</td>
</tr>
<tr>
<td>Protection features</td>
</tr>
<tr>
<td>To ensure the safety, it equips the various protection features and activation of the alarm function. The alarm function can be output to the external source as an alarm output. The fuse is used to cut-off the output for the protection feature of the reverse connection.</td>
</tr>
</tbody>
</table>

Applications

- Test for the Low Voltage Power Supply of the CPU
- Discharge test for the large current rechargeable battery
- IV characteristic test of the solar battery
- Impedance test for the various type of rechargeable batteries, power supplies
- Test for the relays, switches
- Absorbing the surge of brushless motor
- Test for the prearcing time-current characteristic

Interface USB, GPIB, and RS-232C are equipped as standard.

Realizing the low voltage operation

Possible to operate as low as 50mV by the input voltage. Even below the input voltage of 0.3V, this product can be used by reducing the current.

Current setting resolution of the PLZ334WL

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>H Range</td>
<td>5mA</td>
</tr>
<tr>
<td>M Range</td>
<td>0.5mA</td>
</tr>
<tr>
<td>L Range</td>
<td>0.05mA</td>
</tr>
</tbody>
</table>

Sequence function

The sequence mode can be set in 2 operation modes (Normal and Fast mode). The Fast mode can be set for the minimum step time of 25μs, and it can be synchronized with the external device by using the trigger input/output feature.

External analog control

Not only the external control for the CC, CR, CP, and CV, but also it is capable to superimpose the current by the external input current on the present value of the CC setting. Moreover, it also can turn the LOAD ON/OFF.

Protection features

To ensure the safety, it equips the various protection features and activation of the alarm function. The alarm function can be output to the external source as an alarm output. The fuse is used to cut-off the output for the protection feature of the reverse connection.

Option

- Low inductance cable
- Rack mount accessories
- Application Software
- Low inductance cable
### Specifications

#### Operating Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>PL234VLH</th>
<th>PL234WLH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Voltage (DC)</strong></td>
<td>0.3V to 20V</td>
<td>0.3V to 20V</td>
</tr>
<tr>
<td><strong>Current</strong></td>
<td>5A</td>
<td>10A</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>16W</td>
<td>33W</td>
</tr>
<tr>
<td><strong>Minimum start voltage</strong></td>
<td>50mV(Vpp)</td>
<td>50mV(Vpp)</td>
</tr>
</tbody>
</table>

#### Slew Rate

- **Operating range H** | 0.4 to 5mA |
- **Setting range H** | 0.25 to 5mA |
- **Resolution H** | 0.025mA |
- **Accuracy of setting H** | ±0.5mA |

#### Wattmeter Display

- **Input/output signal**
  - **Input**
    - **Voltage** | 0V to 31.5V |
    - **Current** | 0A to 52.5A |
  - **Output**
    - **Voltage** | 0.3V to 30V |
    - **Current** | 0A to 105A |

#### Protection function

- **Overpower protection (OPP)**
  - Setting range | 10% to 110% of the rated power |
- **Overvoltage protection (OVP)**
  - Setting range | 115% of the rated voltage |

#### Other functions

- **Elapsed time display**
  - Measures the time from load on to load off. Can be set in the range of 1 to 999.99 min. Allow 0.1 s off.
  - **Output**
    - **Type** | 0V to 3.3V |
    - **Current** | 1mA to 5mA |

#### Auto load off time

- Measures the time from load on to load off. Can be set in the range of 1 to 999.99 min. Allow 0.1 s off.
- **Output**
  - **Type** | 0V to 3.3V |
  - **Current** | 1mA to 5mA |

#### Input/Output signal

- **TRIG OUT**
  - Outputs a pulse during sequence operation and switching operation.
  - **Output**
    - **Type** | 0V to 5V |
    - **Current** | 1mA to 5mA |

#### Communication function

- **GPIB, RS-232C, and USB interfaces are equipped as standard.**

#### Safety

- **Basic Safety**
  - **Input**
    - **Voltage** | 0V to 4.2V |
    - **Current** | 0A to 10mA |
  - **Output**
    - **Voltage** | 0V to 3.3V |
    - **Current** | 0A to 10mA |

#### Dimensions (Max.)

- **Height** | 214.5(8.45”)W×124(155)(4.88”)H×400(455)(15.75”)Dmm
- **Weight** | Approx. 8.5kg |

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**Note**: All products contained in this catalogue are equipment and devices that are primarily used under the supervision of skilled personnel, and are not designed or produced for home-use or use by general consumers. **Safety**: Inspection, design and use are subject to changes without prior notice to improve the quality. **Product names and specifications contained in the catalogue are tested in normal conditions, and the results may differ in other conditions due to the respective manufacturing processes.** **Notice**: Colors, texture and form of photographs shown in this catalogue may differ from actual products due to a limited printing process. **Notice**: Although every effort has been made to provide the information as accurately as possible for this catalogue, some specifications may not be completely accurate due to limitations in space. **Notice**: If you find any misprints or errors in this catalogue, it would be appreciated if you would inform us. **Notice**: Please contact our distributors to confirm the respective conditions. **Phone**: 408-980-9433 | **Fax**: 408-980-9409

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**Specifications**

- **Operating voltage**
  - 0.3V to 20V
  - Minimum operating voltage for the Switching mode (includes the value of voltage drop generated by the inductance component of the wiring) increases approximately 40mV per 1% of the use load setting.

- **Remote sensing**
  - Sensing voltage that can be compensated

- **Slew rate**
  - Sensing voltage

- **Wattmeter Display**
  - Sensing voltage

- **Protection function**
  - Overpower protection
  - Overvoltage protection
  - Undervoltage protection

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**Contact information**

- **Phone**
  - 408-980-9433
  - 408-980-9409

- **Address**
  - KIKUSUI AMERICA INC.1-877-876-2807, 2975 Bowers Avenue, Suite 307, Santa Clara, CA 95051

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**Visit our website**

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