

High-end multi-functional Electronic Load
Load Station Series

NEW!!



New Style Electronic Load!

Advanced [UI] for ease of operation and [Just like a resistor technology] brought you to the ever advancing Electronic Load.

Never overshoot! Multi-functional Electronic Load Load Station Series

- [Revolutionary UI] Oscilloscope like operation
- Realized less 35% weight to previous model.
- [No minimum operation voltage] requirement. Works just like a resistor.
- High speed current control technology. [Like a magic]
- 4 models in 300W, 1000W in 120V and 500V
- Independent Rise time and Fall time setting from 1 μ s (When in the dynamic CC mode)
- Ripple & noise / high accuracy DCV measurement (Option: RC-02A ripple & noise measurement module)
- GPIB communication/PLC/DIDO control. (Option: LX-0P01 GPIB / DIDO interface.)



Front

8 good reasons to choose.

Large 3.5inch color LCD

Memory function to recall settings

Front panel terminals for easier access

Oscilloscope-like keys for direct commanding or used as 10 keys for data entry.

Front panel USB for one touch PC connection.

A rotary knob to up & down the current value.

Tilted key top for better touch.

Self lit load ON/OFF button.

Side Rear



Flat top cover by side mounted grip.

Ripple & noise measurement input. (Optional: RC-02A)

Main power source switch

Adapted to the Worldwide AC voltage. (AC85V~264V)

Load terminals.

GPIB/DIDO interface (Optional).

Booster connection.

Trigger output terminal.

External control input (Analog input).

Remote sensing input.

Remote sensing INT/EXT switch.

Current output monitor / not isolated (Analog out)



Electronic load characteristics

(What is the unique technology?)



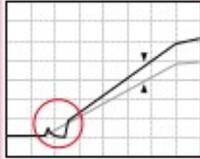
... Ordinary Electronic Load



... KG Load station series

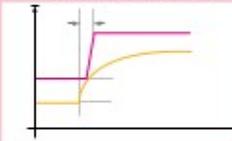
Low Voltage Operation Technology

Minimum operating voltage



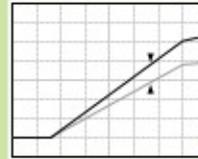
There is no current below the minimum operating voltage.

Soft Start Method



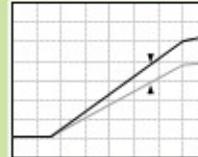
There is a time delay till the voltage reaches to the minimum operating voltage.

Electronic Resistor Operation



The current follows the voltage proportionally from 0V. Just like a Resistor.

Electronic Resistor Operation



As there is no time delay, low voltage devices can be tested properly.

High speed current control technology

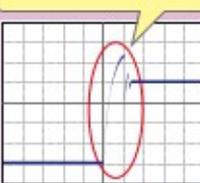
Rush current



Condition-1

Leave the Load switch ON and turn ON the output of the DUT.

Overshoot



Condition-2

Turn the load ON while the output of the DUT has been set ON.

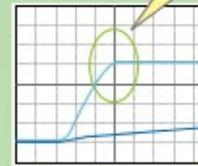
Ringing



Condition-3

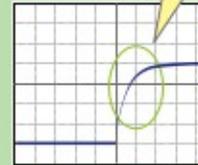
Dynamic load mode

No Rush current



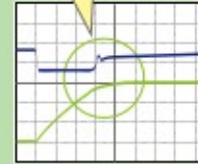
Smooth current transition is obtained.

No overshoot



As it tracks voltage from 0V so there is no overshoot.

No Ringing



Smooth transition even in dynamic mode.

Major functions:

- Fast slew rate (~ 30A/us)
- Variable slew rate
- Booster function (Parallel operation)
- Multi-channel triggering
- 7 operation modes
- (CC/CR/CP/CV/EXT/CV+Climit/Short)
- External control
- Protection & Alarm
- Sequence mode for 1,024 steps
- Communication (USB. GPIB is optional)
- Load terminals on front and back panel

Unique functions and services

- No time delay between current and voltage
- I/V curve display on UI
- OCP & OPP built-in test function
- 16 level dynamic mode
- Minimum 1us rise and fall time for the current
- Free utility software (E-load player)
- Optional ripple & noise/High accuracy current measurement (Optional)
- Compact and light weight
- 10 key for ease of data entry
- Up to 100kHz response

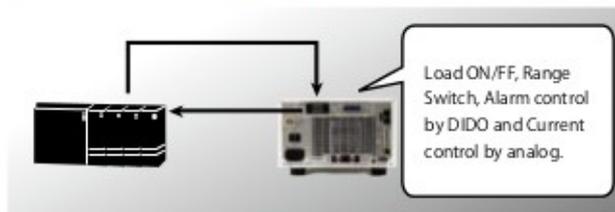
Specification

| Model | LN-300A-G6 | LN-300C-G6 | LN-1000A-G6 | LN-1000C-G6 |
|---------------------------------------|--|--------------------------------|---------------------------------|---------------------------------|
| Max rate | 120V, 60A, 300W | 500V, 12A, 300W | 120V, 180A, 1kW | 500V, 36A, 1kW |
| Min operating voltage | 1V @60A 0.5V@30A 0.2V@12A | 3V@12A 1.5V@6A 0.7V@2.8A | 1V@180A 0.5V@90A 0.2V@36A | 3V@36A 1.5V@18A 0.7V@8.4A |
| Loading mode | CC, CR, CV, CP, EXT, Dynamic, Short | | | |
| Slew rate | 20A/us | 1A/us | 30A/us | 3A/us |
| Min response time | 500ns minimum | | | |
| Parallel operation | 1 master unit can control multiple slave units(Max 10 units) Those loads to be in same voltage rating. (When the master is LN-300A, then the slaves are either LN-300A or LN-1000A) | | | |
| Measurement mode | DCV, DCA, Power(Calculated), Ripple voltage(OPTION: RC-02A) | | | |
| Interface | USB & EXT analog input: Standard. GPIB & DIDO: Optional | | | |
| Trigger output | 0 to 5V (Photo-coupler output) | | | |
| Current monitor output | DC 0 to 5V (Not isolated) | | | |
| Ripple & noise measurement (Optional) | Range: 300mV/3000mV, Resolution: 0.1mV/1mV (Factory option only) | | | |
| Protection & Alarm | OCP, OPP, OV-alarm, Over Temp Protector and Reverse connection alarm | | | |
| Power requirement | AC85 to 264V, 50/60Hz | | | |
| Dimensions: W x H x D mm | 215 x 129 x 420 | | 430 x 129 x 450 | |
| Weight | Approx: 6.5kg | | Approx. 13kg | |

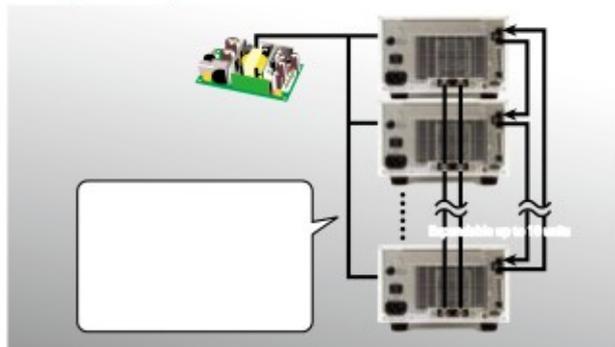
Note: The specifications are subject to change without prior notice.

Application

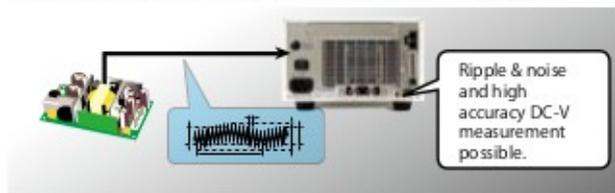
Remote control by PLC (Option: LX-OP01)



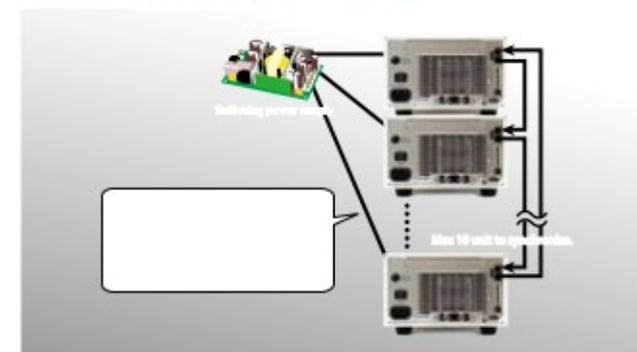
Expansion by booster connection



Built-in ripple & noise measurement (Option: RC-02A)

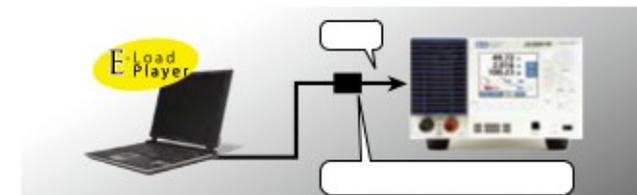


Multi-channel Synchronous operation



Easy measurement by free software E-Load Player

With E-Load Player, such as I/V characteristics can be measured easily.



*GPIB I/F: GPIB-USB-HS, PCI-GPIB (National Instruments)
*It will be adapted to LabVIEW driver soon.

E-Load Player screen



Top screen



Dynamic setting



I/V characteristics screen

Ordering information

| Ordering No. (Model) | Detail |
|----------------------|---------------------------------|
| LN-300A-G6 | Electronic load 120V, 60A, 300W |
| LN-300C-G6 | Electronic load 500V, 12A, 300W |
| LN-1000A-G6 | Electronic load 120V, 180A, 1kW |
| LN-1000C-G6 | Electronic load 500V, 36A, 1kW |

| Ordering No. (Model) | Detail |
|----------------------------|--|
| LN-xxx ^(*) /REC | Test data of the electronic load |
| RC-02A | Ripple & noise measurement option ^(*) |
| RC-02A/REC | RC-02A test data |
| LX-OP01 | GPIB / DIDO option |

(*1) xxx: Name of the electronic load (*2) Factory option only

Keisoku Giken Co., Ltd.



2-12-2, Chigasaki-minami, Tsuzuki-ku, Yokohama
224-0037 Japan
TEL : +81-45-948-0211 / FAX : +81-45-948-0221
E-mail : PWsales@hq.keisoku.co.jp
URL : <http://www.keisoku.co.jp/en/>

SONTRONIC

Systeme-Vertriebs GmbH

Zur Deutschen Einheit 3b
D-81929 München
Tel: +49(0)89/99301160 Fax: +49(0)89/937343
E-Mail: info@sontronic-gmbh.de
Web: <http://www.sontronic-gmbh.de>