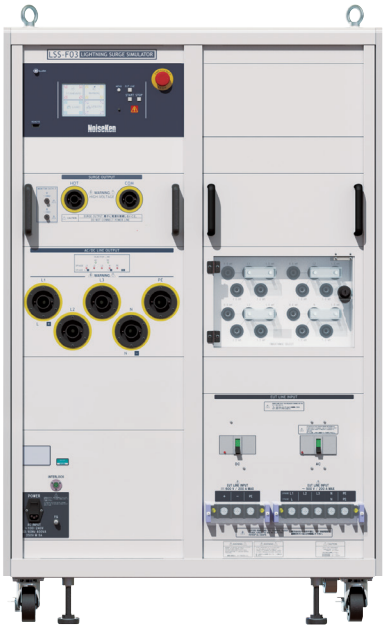
Lightning Surge Simulator(AC500V/200A DC600V/200A)

- Compliant with IEC 61000-4-5 Ed.3 standard：ECE R10 is regulated at Ed.2, possible to switch to Ed.2
- AC500V/200A DC600V/200A built-in coupling decoupling network.
- Built-in EV relay welding protection diode in DC line.
  You can evaluate the lightning surge resistance when charging EV / PHV vehicles, which is required by ECE R10-04 / 05. (EV Fast Charging applicable)
- Maximum output voltage 15kV: In the reliability evaluation test of the lightning surge test, the evaluation including the destructive test can be performed.
- Adopt a large LCD screen operation panel: A large LCD panel screen has been adopted for the operation unit to improve visibility and operability.
- Employs MPU control that simplifies continuous testing: Surge output / waveform switching / polarity switching / sequence operation can be performed automatically.
- Equipped with manual and program modes. Manual mode for standard tests and single condition tests, and Program mode for continuous tests under different conditions. You can easily set test conditions according to your application.
- Excellent safety functions including interlock
- Equipped with waveform check terminal as standard
- You can check the output waveform with your oscilloscope and BNC cable.
- Isolation transformer required to protect the power supply for EUT is available. (option)
- Possible to switch the constant of the decoupling circuit in order to prevent resonance with the power supply.
- Possible to switch to a circuit not including 18uF in the surge output of IEC61000-4-5 (Edition 2.0 2005 version).



* This product is a custom product. Please contact us for details.

Customization up to DC1000V is available.

■ Surge generating unit (1.2/50 μ s-8/20 μ s Combination waveform)

Parameter	Function / performance
Open-circuit voltage	0.5kV ～ 15kV ± 10%
Open circuit voltage	Wave crest length：1.2 μ s ± 30%　Wave tail length：50 μ s ± 20%
Short circuit current	250A ～ 7500A ± 10%
Current waveform	Wave crest length：8 μ s ± 20%　Wave tail length：20 μ s ± 20%
Output polarity	Positive / negative
Output impedance	2 Ω± 10%
Surge generation circuit method	Floating
Minimum charging time	0.0kV -6.0kV：10 s 6.1kV -15.0kV：20 s

■ AC/DC CDN

Parameter	Function / performance
CDN Surge waveform	1.2/50 μ s-8/20 μ s combination waveform
Max CDN surge voltage / current	Up to the max value that can be set
Coupling circuit IEC 61000-4-5 compliant	18 μ F :Line-to-line (10 Ω +9 μ Fselectable) 10 Ω± 9 μ F :Line-PE (18 μ Fselectable)
Apply mode	Line-to-line, Line-PE
EUT power line configuration	Three-phase AC/DC :L1/L2/L3/N/PE（Single / three-phase） +/-/PE
EUT power line configuration	AC500V/200A MAX 50/60Hz、DC600V/200A MAX
Decoupling coil	1.5mH (standard)/ 1.3mH/1.0mH/0.8mH
Phase angle control	0 ～ 360° ± 10°

■ Other

Parameter	Function / performance
Voltage monitor	BNC output、1/2000 ± 10% (when the surge out setting output is open-circuit)
Current monitor	BNC output、1mV/A ± 10%　(when the surge out setting output is short-circuit)
Driving power supply	AC100V ～ AC240V ± 10%　50Hz / 60Hz
External dimensions	W1034 × H1640 × D918 mm