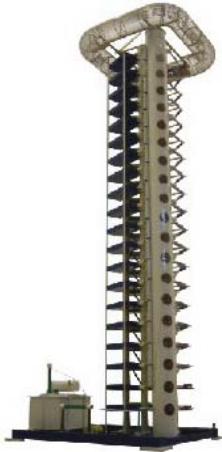


# CDY series

## Impulse Voltage Generator



The **CDY series** impulse voltage generator we produce is widely used in electric power equip. making, electric power testing and other occasions.

**CDY series** voltage range: 100kV ~ 7200kV

stage energies range: 2.5kJ ~ 720kJ;

Structural types: mainly has three types **E, V, and H**. It can produce standard lightning wave, chopping lightning wave, standard & special switching wave, it can also produce oscillating wave and steeping wave if properly added. It can meet the needs of different impulse tests for electric power transformers, high voltage switches, cables, bushings, insulation terminals, etc. Thanks to the prominent technical performance, the products reach the international advanced level.

- ◆ Adopt SCR constant current charging voltage regulating device
- ◆ Impulse construction styles, differ from voltage level, it has E style, V style, and H style.
- ◆ Impulse voltage divider uses low damping capacitance voltage divider
- ◆ Chopped device: Multiple chopping gaps device; Single chopping gaps device

- ◆ Control system: the most advanced PLC system, a combination of computer controlling technique and fiber/photoelectric insulation technique, which greatly increases the reliability and stability.
- ◆ Directly using computer measuring and analyzing software to test impulse waveform, besides, print out the result and waveform analyzing parameter.

### Feature

- ◆ All the synchronization discharging spheres are set in a sealed insulating barrel; every level of sphere gaps is armed with windows for observing. Filtered clean air is constantly supplied while the equipment is running. The ball is not easily affected by the changing of the environment, and discharging is stable. The whole set forms a sealed ignition discharging system.
- ◆ Every level of loop is equipped with parallel discharging gaps with interstage coupling capacitance, all which hugely extends the range of synchronous discharging
- ◆ Automatic grounding device and: security grounding system (**V series & H series**): the security grounding system should be started when experiment man climbs the generator to replace the wave resistance or do some repairing work. All the capacitances should be short and grounded to assure the personal safety.
- ◆ Staircase is set inside the generator (**V series & H series**), every three level has an insulated plate (turnover type) which is for resistance replacing or repairing.
- ◆ You can choose air cushion transportation system for your CDY series impulse voltage generator. It can be moved smoothly and conveniently if needed.

## Main Technical Parameter

Impulse Voltage Wave Parameter:	Standard lightning wave: $1.2 \pm 30\% / 50 \pm 20\% \mu\text{S}$ at peak value oscillating less than 5% Standard switching wave: $250 \pm 20\% / 2500 \pm 60\% \mu\text{S}$
Lowest Voltage Output:	$\leq 10\% U_n$
Charging Voltage Instability Percentage :	$< \pm 0.5\%$
Synchronization Range:	$\geq 20\%$
Synchronization Discharging Fault Percentage:	$< 2\%$
Ignition Range:	10% ~ 100%
Employing duration:	$> 70\%$ Un intermittent working $< 70\%$ continuous working
Generator Efficiency:	lightening wave (no load) $\geq 90\%$ Switching wave (with the load of 3000pF) $\geq 70\%$
Chopping Time:	$2 \sim 6 \mu\text{S}$
Chopping Time Standard Deviation:	$< \pm 0.1 \mu\text{S}$

## Technology Specification

### E series Construction

Type	Rated Voltage (kV)	Stage Capacity(0.5~1.5 $\mu\text{F}$ )		Stage Voltage (kV)	Stage (n)	Height (m)
		Total Energy (kJ)	Main Capacitance ( $\mu\text{F}$ )			
CDYE100/2.5~7.5	100	2.5 ~ 7.5	0.5 ~ 1.5	100	1	1.1
CDYE200/5~15	200	5 ~ 15	0.25 ~ 0.75	100	2	1.5
CDYE300/7.5~22.5	300	7.5 ~ 22.5	0.167 ~ 0.5	100	3	1.8
CDYE400/10~30	400	10 ~ 30	0.125 ~ 0.375	100	4	2.3
CDYE500/12.5~ 37.5	500	12.5 ~ 37.5	0.1 ~ 0.3	100	5	2.8
CDYE600/15~45	600	15 ~ 45	0.083 ~ 0.25	100	6	3.2
CDYE800/20~60	800	20 ~ 60	0.063 ~ 0.188	100	8	4.0
CDYE900/33.75~101.3	900	33.75 ~ 101.3	0.083 ~ 0.25	150	6	3.8
CDYE1000/25~75	1000	25 ~ 75	0.05 ~ 0.15	100	10	4.7
CDYE1200/45~135	1200	45 ~ 135	0.063~0.188	150	8	5.0
CDYE1350/50.63~151.9	1350	50.62 ~ 151.9	0.056 ~ 0.167	150	9	5.5
CDYE1500/56.25~168.8	1500	56.25 ~ 168.8	0.05 ~ 0.15	150	10	6.0

### V & H series Construction

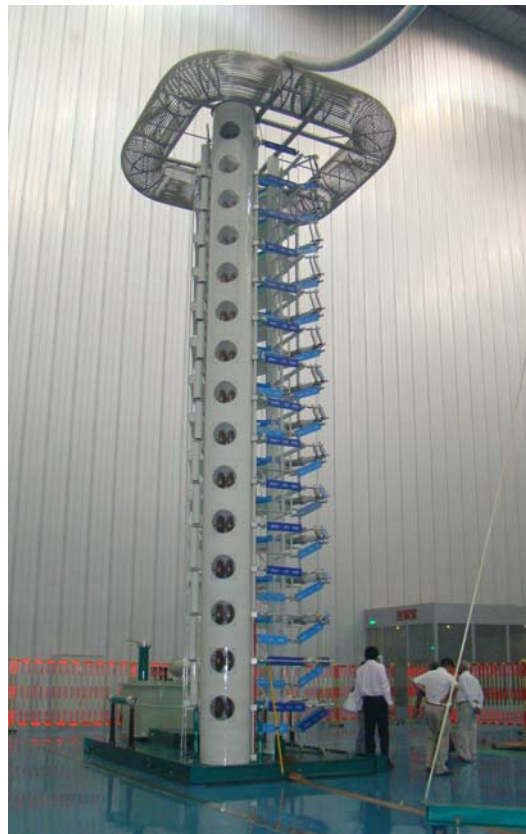
Type	Rated Voltage (kV)	Stage Capacity(0.5~1.5μF)		Stage Voltage (kV)	Stage (n)	Height (m)
		Total Energy (kJ)	Main Capacitance (μF)			
CDYV1600/ 80 ~ 240	1600	80 ~ 240	0.063 ~ 0.188	200	8	6.6
CDYV1800/ 90 ~ 270	1800	90 ~ 270	0.056 ~ 0.167	200	9	7.2
CDYV2000/ 100 ~ 300	2000	100 ~ 300	0.05 ~ 0.15	200	10	7.8
CDYV2400/120 ~ 360 CDYH2400/120 ~ 360	2400	120 ~ 360	0.042 ~ 0.125	200 / ± 100	12	9.3
CDYV2800/140 ~ 420 CDYH2800/140 ~ 420	2800	140 ~ 420	0.036 ~ 0.107	200 / ± 100	14	10.8
CDYV3000/150 ~ 450 CDYH3000/150 ~ 450	3000	150 ~ 450	0.033 ~ 0.1	200 / ± 100	15	11.4
CDYV3200/160 ~ 480 CDYH3200/160 ~ 480	3200	160 ~ 480	0.031 ~ 0.094	200 / ± 100	16	12.0
CDYV3600/180 ~ 540 CDYH3600/180 ~ 540	3600	180 ~ 540	0.028 ~ 0.083	200 / ± 100	18	13.4
CDYH4000/200 ~ 600	4000	200 ~ 600	0.025 ~ 0.075	± 100	20	14.8
CDYH4400/220 ~ 660	4400	220 ~ 660	0.023 ~ 0.068	± 100	22	16.0
CDYH4800/240 ~ 720	4800	240 ~ 720	0.021 ~ 0.063	± 100	24	17.3
CDYH6000/450~1350 CDYH6000/300~900	6000	450~1350 300~900	0.025~0.075 0.016~0.05	±150 / ±100	20 30	21.3
CDYH7200/240 ~ 720	7200	540~1620	0.021~0.063	± 150	24	25.4

### Products Overview:



**2400kV 480kJ**

**“H” Type I.V Generator on GIS Spot**



**3000kV 300kJ (Nanjing,China)**



**1800kV 180kJ**



**1200kV 60kJ**



**800kV 40kJ (Australia)**

**For Further Information Please Contact:**

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