

# VSURGE NX8.2

## VOLTAGE SURGE GENERATOR



### FOR TESTS ACCORDING TO ...

- › EN 60255-27
- › IEC 60255-27
- › IEC 61180-1
- › IEC 61180-2
- › IEC 62052-11

### VOLTAGE SURGE SIMULATION

The surge simulator type vsurge NX8.2 generates high voltage transients as required by IEC 62052-11 with a source impedance of 500 Ohm for transient overvoltage tests on Metering equipment. The output voltage ranges up to 8 kV. In contrast to the vsurge NX8.1, the test level 2.5 kV is replaced by 2 kV in vsurge NX8.2. The no-load waveshape corresponds to IEC-61180-1. For this kind of testing the IEC 62052-11 standard requires a fixed energy of 0.5 J at all test levels.

### HIGHLIGHTS

- › **Voltage Surge pulse 1.2/50 us up to 8 kV**
- › **7 different test levels**
- › **Special model with test level 2 kV**
- › **Source impedance 500 Ohm**
- › **Constant Energy of 0.5J at each test level**
- › **Peak voltage/current measurement**
- › **Spark-over detection**
- › **Warning lamp control**

### APPLICATION AREAS

-  COMPONENTS
-  INDUSTRY
-  RESIDENTIAL

## TECHNICAL DETAILS

### MODEL OVERVIEW

#### MODEL VSURGE NX8.2

vsurge NX8.2	1.0 kV, 1.5 kV, 2.0 kV, 4 kV, 5 kV, 6 kV, 8 kV
--------------	--

### TECHNICAL DETAILS

#### VOLTAGE SURGE SIMULATOR, PULSE 1.2/50 US

Voltage (o.c.)	1,000 V - 8,000 V +0 % / -10 %
Pulse front time	1.2 us ± 30 %
Pulse time to half value	50 us ± 20 %
Source impedance	500 Ohm
Energy	0.5 J ± 0.05 J at each test level
Pulse forming	As per IEC 61180-1
Polarity	Positive, negative or alternating
Event counter	1 - 30,000 or endless

#### TRIGGER

Trigger of events	Automatic, manual, external
CRO trigger	5V trigger signal for oscilloscope
Synchronization	0° - 360°, resolution 1°
Repetition rate	1 s - 999 s, depending on the voltage

#### TEST LEVELS

vsurge NX8.2	1.0 kV, 1.5 kV, 2.0 kV, 4 kV, 5 kV, 6 kV, 8 kV
--------------	--

#### OUTPUT

Direct	Via 4 mm safety banana connector; Zi = 500 Ohm To connect external test boxes or devices
--------	--

#### MEASUREMENTS

Peak voltage	8,000 V in display
Peak current	16 A in display

### TECHNICAL DETAILS

#### TEST ROUTINES

Quick Start	Immediate start; easy-to-use and fast
User Test routines	Change Polarity after n pulses Change voltage after n pulses Change phase angle after n pulses
Standard Test routines	As per IEC 60255-27, 1 and 5 kV As per IEC 62052-11, all test levels except 2.5 kV, this is replaced by 2 kV
Service	Service, set-up, self test

#### INTERFACE

Serial interface	USB
Ethernet	LAN / RJ 45

#### SAFETY

Safety circuit	Control input (24 Vdc)
Warning lamp	Floating output contact

#### GENERAL DATA

Dimensions, weight	19"/3HU, 16.1 kg
Supply voltage	115/230 V +10/-15 %
Fuses	2 x 2 AT (230V) or 2 x 4 AT (115V)

#### ENVIRONMENT

Temperature	10 °C to 35 °C
Humidity	30 % to 75 %, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1,060 mbar)

### OPTIONS

#### OPTIONS

iec.control	Remote control and documentation software, including standard test routines and reporting capabilities.
-------------	---

# COMPETENCE WHEREVER YOU ARE



## CONTACT EM TEST DIRECTLY

### Switzerland

AMETEK CTS GmbH › Sternenhofstraße 15 › 4153 Reinach › Switzerland  
 Phone +41 (0)61 204 41 11 › Fax +41 (0)61 204 41 00  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) › E-mail: [sales.conducted.cts@ametek.com](mailto:sales.conducted.cts@ametek.com)

### Germany

AMETEK CTS Europe GmbH › Customer Care Center EMEA › Lünener Straße 211  
 › 59174 Kamen › Germany  
 Phone +49 (0) 2307 26070-0 › Fax +49 (0) 2307 17050  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) › E-mail: [info.cts.de@ametek.com](mailto:info.cts.de@ametek.com)

### Poland

AMETEK CTS Europe GmbH › Biuro w Polsce › ul. Twarda 44 › 00-831 Warsaw › Poland  
 Phone +48 (0) 518 643 12  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) › E-mail: [Infopolska.cts@ametek.com](mailto:Infopolska.cts@ametek.com)

### USA / Canada

AMETEK CTS US › 52 Mayfield Ave › Edison › NJ 08837 › USA  
 Phone +1 732 417 0501  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) › E-mail: [usasales.cts@ametek.com](mailto:usasales.cts@ametek.com)

### P.R. China

AMETEK Commercial Enterprise (Shanghai) Co. Ltd. › Beijing Branch › Western Section, 2nd floor › Jing Dong Fang Building (B10) › Chaoyang District › Beijing, China, 100015  
 Phone +86 10 8526 2111 › Fax +86 (0)10 82 67 62 38  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) › E-mail: [chinasales@ametek.com](mailto:chinasales@ametek.com)

### Republic of Korea

EM TEST Korea Limited › #405 › WooYeon Plaza › #986-8 › YoungDeok-dong › Giheung-gu › Yongin-si › Gyeonggi-do › Korea  
 Phone +82 (31) 216 8616 › Fax +82 (31) 216 8616  
 Internet: [www.emtest.co.kr](http://www.emtest.co.kr) › E-mail: [sales@emtest.co.kr](mailto:sales@emtest.co.kr)

### Singapore

AMETEK Singapore Pte. Ltd › No. 43 Changi South Avenue 2 › 04-01 Singapore 48164  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) › E-mail: [singaporesales.cts@ametek.com](mailto:singaporesales.cts@ametek.com)

### Great Britain

AMETEK GB › 5 Ashville Way › Molly Millars Lane › Wokingham › Berkshire RG41 2 PL › Great Britain  
 Phone +44 845 074 0660  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com)

Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.