

# ACS 500N3

## SINGLE PHASE AC VOLTAGE SOURCE 3 KVA



### FOR TESTS ACCORDING TO ...

- › EN 61000-3-2
- › EN 61000-3-3
- › IEC 61000-3-2
- › IEC 61000-3-3
- › JIS C 61000-3-2

### APPLICATION



ACS 500N3 is a single phase AC source, specifically designed for harmonics and flicker testing. It meets the corresponding specifications as per EN/IEC 61000-3-2 and EN/IEC 61000-3-3 as well as JIS C 61000-3-2.

ACS 500N3 provides the perfect sinusoidal and stable voltage signal specified to perform fully compliant harmonics and flicker analysis despite of the mains supply frequency and steadiness of the voltage.

### HIGHLIGHTS

- › Frequency (fund.) 10Hz .. 80Hz
- › Very low distortion (THD)
- › Very high voltage stability
- › Output power 3,000VA
- › Output voltage max. 300V
- › High overcurrent capability
- › Inrush current capability
- › Remote controlled by the DPA 500N via RS232

### APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  BROADCAST
-  RESIDENTIAL

## TECHNICAL DETAILS

### BENEFITS

#### SINUSOIDAL VOLTAGE FOR HARMONICS AND FLICKER MEASUREMENTS

As per standard requirements a pure voltage is needed for measurements of harmonics and flicker. The output voltage of the ACS 500N3 is guaranteed to be sinusoidal with a very low distortion (THD) of less than 0.1% regardless of the load. Furthermore the voltage is kept stable within 0.1% independent of the load, even if the load is variable.

No matter what the condition of the mains supply might be ACS 500N3 fulfills the high standard for purity and stability of both the sinusoidal voltage signal and the frequency. With its power of 3,000VA it can be used for measurements as per EN/IEC 61000-3-2 and EN/IEC 61000-3-3 as well as JIS C 61000-3-2 on DUTs with small power consumption, not exceeding 10A of nominal current for resistive load.

The ACS 500N3 AC voltage source is electronically protected against overtemperature, overcurrent, overvoltage and undervoltage.

Used with EM TEST DPA 500 Series harmonics and flicker analyzers ACS 500N3 is fully remote controlled by dpa.control software via RS232 interface.

### OUTPUT

Voltage range	0V to 300V
Voltage resolution	0.025% (12 bit)
Output frequency	10Hz to 80Hz
Frequency resolution	0.02Hz
Frequency accuracy, stability	100ppm
Output power	3,000VA
Output connector	Safety laboratory connectors
Output current, 50Hz, inductive load	Continuous: 12.1A maximum RMS (max. 3s): 21.8A Repetitive peak: 80A
Output current, 60Hz, inductive load	Continuous: 12.5A maximum RMS (max. 3s): 22A Repetitive peak: 80A

### REGULATION

Voltage Sense	Internal or external, 4 wires
Total harmonic distortion	Less than 0.1%
Output voltage stability	Better than 0.1%
Output voltage accuracy	Better than 0.5%
Max. compensatable drop on wires	5% f.s.
Protection	Overcurrent Overtemperature Overvoltage Undervoltage

### INPUT

Supply voltage	230V (L,N,PE)
Input current	25A
Line frequency	45Hz to 65Hz
Fuse	25A internal
Connector	Sockets

### AMBIENT CONDITIONS

Temperature	0°C to 35°C
Rel. humidity	80%, non condensing

### CONTROL

Interface	RS 232 9-pin SubD
-----------	-------------------

## TECHNICAL DETAILS

### DIMENSIONS

Housing	19", 6HU
Weight	23kg
Size	287mm x 449mm x 500mm

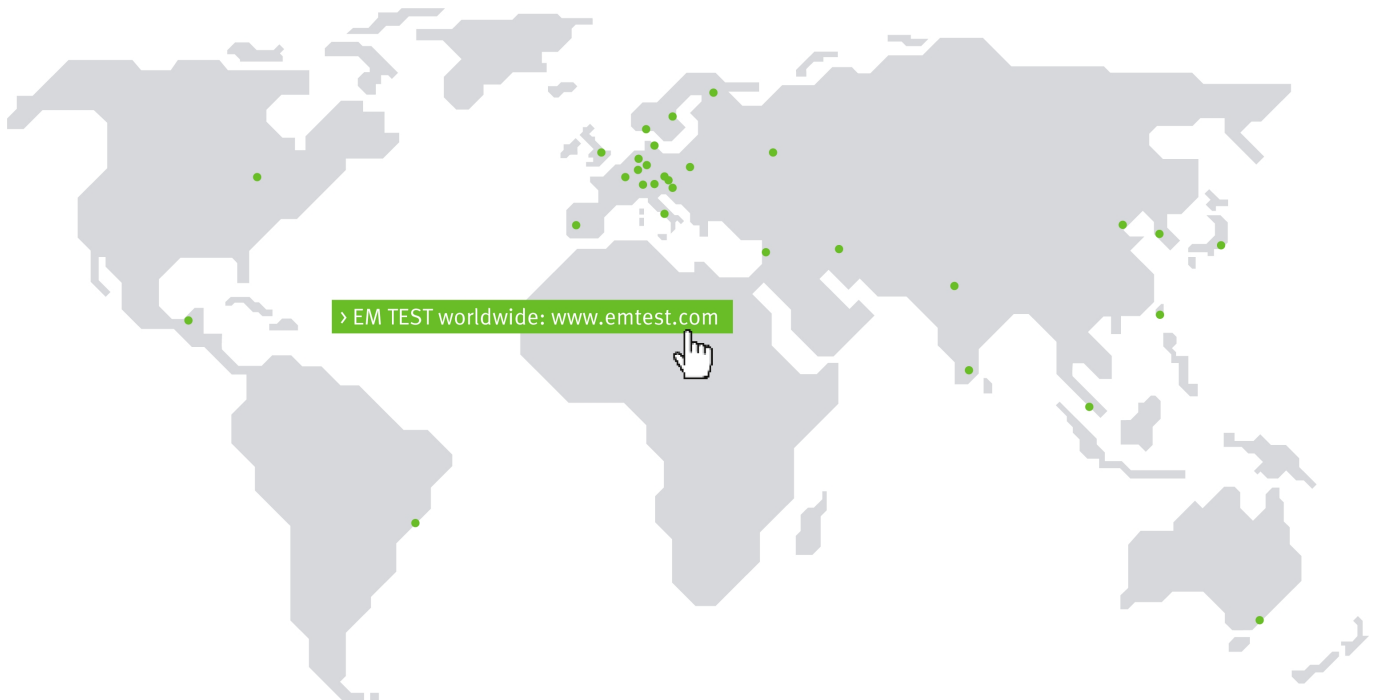
### OPTIONS

DPA 500N	Harmonic and Flicker meter 16A
MRAC 25	25 HU rack with Safety Circuit

### OTHER MODELS

ACS 500N6	AC voltage source, 6kVA
Output power	6,000VA
Input power	3x400V (3L,N,PE), 32A
Output current, 50Hz	Continuous: 24.0A maximum RMS (max. 3s): 47.0A
Output current, 60Hz	Continuous: 24.9A maximum RMS (max. 3s): 47.9A

# 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.