



MAIN FEATURES

- **Frequency (fund.) 40Hz .. 80Hz**
- **Very low distortion (THD)**
- **Very high voltage stability**
- **Output power 3 or 6kVA**
- **Output voltage max. 300V(p-n)**
- **Inrush current capability**
- **Remote control by the DPA 503N via RS232**

ACS 500N Series Programmable AC Source

The ACS 500N series are single phase AC sources, specifically designed for harmonics and flicker testing. They meet the corresponding specifications as per EN/IEC 61000-3-2 and EN/IEC 61000-3-3 as well as JIS 61000-3-2.

ACS 500N provide the perfect sinusoidal and stable voltage signal specified to perform fully compliant harmonics and flicker analysis despite of the mains supply frequency and steadyness of the voltage.

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 500N is guaranteed to be sinusoidal with a very low distortion (THD) of less than 0.5% regardless of the load. Furthermore, the voltage is kept stable within 0.1% independent of the load, even if the load changes.

No matter what the condition of the mains supply might be, the ACS 500N fulfills the high standard for purity and stability of both the sinusoidal voltage signal and the frequency. With its power of 3,000VA or 6,000VA 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 to medium power consumption.

The ACS 500N AC voltage sources are electronically protected against overtemperature, overcurrent, overvoltage and undervoltage.

Used with EM TEST DPA 500 Series harmonics and flicker analyzers, the ACS 500N are fully remote controlled by net.control software via RS232 interface.

Technical Specifications

	ACS 500N3	ACS 500N6
Output Power AC	3 kVA	6 kVA
Output Voltage AC	300 V	
Output Current AC	max. 12.1 A cont. (at 300 V), 21.8 A for 3 s, 80 A repetitive peak	max. 24 A cont. (at 300 V), 47 A for 3 s, 200 A repetitive peak
Frequency range	10 to 80 Hz	
THD @ 50/60Hz, max.	0.5 %	
Voltage Accuracy	better than 0.5% full scale	
Frequency Accuracy	100 ppm	

General Specifications

	ACS 500N3	ACS 500N6
Compensation / Sense	internal / external sense, max. compensation 5%	
Signal Generator	integrated, sine wave	
Protection	Over current, over voltage, over temperature, under voltage	
Output Connectors	4 mm lab plugs	
AC Supply	1 x 230 V (L, N, PE), 25 A	3 x 400 V (3P, N, PE) 32 A (16 A / 27 A neutral)
Supply Frequency	45 Hz – 65 Hz	
Supply Connector	CEE type 16A (1 phase)	CEE type 32A (3 phase)
Dimensions	287 x 449 x 500 mm	
Net Weight	23 kg	40 kg
Operating Environment	5°C - 35°C, 10% - 90% non-condensing, 86 kPa (860 mbar) to 106 kPa (1 060 mbar)	