

**Aumictech**

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Data Sheet

August 14, 2026

AMETEK OCS

Ametek OCS 500N6.1

Ametek OCS EMI / EMC Test Receivers. Voltage: 250 V to 2, Current: Max. 500 A @ 12 Ω , Voltage: Up to 6 kV.



MODEL

**Ametek OCS
500N6.1**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

500N6.1

LISTING

<https://aumictechlabs.com/products/500n6-1-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Ametek OCS 500N6.1 is an EMC test instrument that generates damped oscillatory waves and ring waves to evaluate the electromagnetic compatibility of electronic equipment. It simulates transient disturbances on power, control, and signal lines, assessing device robustness under electrical stress conditions. The instrument supports testing per IEC 61000-4-18, IEC 61000-4-12, ANSI/IEEE C62.41, and IEC 61000-4-10 standards, making it essential for laboratory, industrial, and research environments requiring rigorous EMC validation.

Technical Specifications

Damped Oscillatory Waves (DOW)

Frequencies: 100 kHz and 1 MHz

Open Circuit Voltage (HV output): 250 V to 3,000 V $\pm 10\%$

Line Output Voltage: 250 V to 2,500 V $\pm 10\%$

Rise Time: 75 ns $\pm 20\%$

Source Impedance: 200 Ω $\pm 20\%$ (also 12 Ω or 30 Ω $\pm 20\%$)

Peak Short Circuit Current: Max. 500 A @ 12 Ω ; Max. 200 A @ 30 Ω

Repetition Rate: Max. 50/s @ 100 kHz; Max. 500/s @ 1 MHz

Burst Duration: At least 2 s

Polarity: Positive, Negative

Decay Ratios: Peak 2 to Peak 1 (0.4–1.1); Peak 3 to Peak 2 (0.4–0.8); Peak 4 to Peak 3 (0.4–0.8); Peak 5 > 50% of Peak 1; Peak 10 < 50% of Peak 1

Ring Wave (RWG)

Open Circuit Voltage: Up to 6 kV

Rise Time: 0.5 μ s $\pm 30\%$

Oscillation Frequency: 100

kHz $\pm 10\%$ Peak Current (Short Circuit): 200–500 A Coupling and Decoupling Network (CDN)
Built-in CDN; 1-phase configuration Current Rating: 16 A per line Supply: 250 V / 16 A AC/DC
Coupling: Line to line, Line(s) to ground (PE) Key Features Trigger modes: Automatic, Manual,
External Synchronization: 0° to 360° (1° resolution) CRO Trigger output: 5 V signal Control
interfaces: USB, GPIB (IEEE 488) Magnetic field testing: External coil compatible (IEC 61000-4-
10) General Specifications Dimensions: 19" / 6 HU Weight: Approx. 28 kg Operating Temperature:
10° C to 35° C Relative Humidity: Max. 85%, non-condensing Atmospheric Pressure: 86 kPa to
106 kPa Typical Applications EMC compliance testing for power electronics, telecommunications
equipment, industrial controls, and signal integrity validation in transient-prone environments.

500N61 Characteristics / Specifications

PARAMETER	VALUE
Oscillation Frequencies	100 kHz and 1 MHz plus or minus 10 percent
Hv Output Voltage	250 to 3000 V plus or minus 10 percent open circuit
Line Output Voltage	250 to 2500 V plus or minus 10 percent open circuit
Rise Time	75 ns plus or minus 20 percent
Decaying Peak	greater than 50 percent of peak 1
Source Impedance	200 ohm plus or minus 20 percent
Polarity	positive and negative
Repetition Rate 100 kHz	max 50 persRepetition Rate 1 MHz: max 500 persBurst Duration: at least 2 s
Dut Supply Ac	250 V / 16 A 50/60 Hz
Dut Supply Dc	250 V / 16 A
Coupling Mode	line to line and line(s) to ground PE
Cro Trigger	5 V oscilloscope trigger
Synchronization	0 to 360 deg 1 deg resolution
Serial Interface	USB
Parallel Interface	IEEE 488 addresses 1 to 30
Pulse Release	automatic manual external
Dimensions	19 inch 6 HU
Mass	approx 28 kg 1 phase
Supply Voltage	115/230 V plus 10 / minus 15 percent
Fuses 230 V	2 x T2AT
Fuses 115 V	2 x T4AT
Operating Temperature	10 C to 35 C
Humidity	max 85 percent non condensing
Atmospheric Pressure	86 kPa to 106 kPa

PARAMETER	VALUE
Standard	IEC/EN 61000-4-18 slow damped oscillatory

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	10 C to 35 C
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Humidity	max 85 percent non condensing
Atmospheric Pressure	86 kPa to 106 kPa
Standard	IEC/EN 61000-4-18 slow damped oscillatory Notes From AMETEK CTS / EM Test OCS 500N6 series datasheet (OCS 500N6.1 damped oscillatory only, no ringwave). Models .5 through .8 add ringwave and higher CDN current.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.