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Data Sheet

August 12, 2026

YOKOGAWA

Yokogawa LS3300 AC Power Calibrator

The Yokogawa LS3300 is a single-phase AC power calibrator that simultaneously generates precision AC voltage and current (phantom-load power) for calibrating power meters, clamp meters, transducers, panel meters, and RMS multimeters. One unit supports 1P2W; synchronized multi-unit systems support 1P3W, 3P3W, and 3P4W. Features include a 5.7-inch color LCD with phase chart, STABILIZING indication, AUX sensor/clamp calibration output, and USB/Ethernet/GP-IB control. Calibration of 0.15%/0.2% class commercial-frequency power meters; clamp-on power meters and AC clamp testers; power transducers (V/A/W/VAR); panel/analog instruments; phase meters (master/slave sync); power-factor validation (–1.0 to +1.0 lead/lag); on-site single-phase and multi-phase power calibration; large-current sensor work up to 180 A with three paralleled units. Instrument Type: AC Power Calibrator / AC Signal Generator Alias: LS3300; Yokogawa LS3300; AC Power Calibrator Frequency: 40 Hz to 1.2 kHz (40 to 1200 Hz) Headline max capability: 78.5 kW per unit class



MODEL

Yokogawa LS3300

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

LS3300

LISTING

<https://aumictechlabs.com/products/l3300-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Yokogawa LS3300 AC Power Calibrator is a precision instrument that simultaneously outputs AC voltage and current to calibrate power measurement devices across single-phase and three-phase configurations. It delivers voltage from 10 mV to 1250 V at ± 350 ppm accuracy, current from 0.3 mA to 62.5 A at ± 450 ppm accuracy, and phase angle control to $\pm 0.03^\circ$ at 50/60 Hz.

Three synchronized units cascade to deliver up to 187.5 A, supporting 1P2W, 1P3W, 3P3W, and 3P4W system topologies. The calibrator operates across 40 to 1200 Hz with power factor range from -1.0 to +1.0 and outputs 78.5 kW per unit. Long-term stability remains within ± 50 ppm/h for voltage and current, ± 100 ppm/h for power. USB and BNC synchronization enable linked multi-unit setups with interlinked amplitude, phase, and control parameters. An auxiliary output terminal provides 500 mV or 5 V selectable ranges to 6.25 V maximum. The 5.7-inch color LCD display supports intuitive operation in calibration laboratories, manufacturing facilities, and R&D environments.

Technical Specifications

Voltage and Current Output AC Voltage: 10 mV to 1250 V, ± 350 ppm accuracy, ± 50 ppm/h stability AC Current: 0.3 mA to 62.5 A, ± 450 ppm accuracy, ± 50 ppm/h stability AC Power: ± 450 ppm accuracy, ± 100 ppm/h stability Phase Angle: $\pm 0.03^\circ$ accuracy at 50/60 Hz, 0.001° minimum resolution Frequency: 40 to 1200 Hz Power Factor: -1.0 to +1.0 (leading and lagging) Output Voltage Noise: 350 ppm Synchronized Multi-Unit Operation Three units: up to 187.5 A combined output System configurations: 1P2W, 1P3W, 3P3W, 3P4W Synchronization via BNC cables; control via USB Interlinked settings for amplitude, phase, and output control Auxiliary Output Selectable ranges: 500 mV or 5 V Maximum output: 6.25 V Power and Supply Per-unit output: 78.5 kW Supply voltage: 90–132 VAC, 180–264 VAC Supply frequency: 48–63 Hz

Key Features

Dual simultaneous voltage and current sourcing for realistic power simulation Phase angle resolution to 0.001° for demanding meter calibrations Scalable architecture - single unit or synchronized cascade to 187.5 A USB and BNC interfaces for laboratory automation and multi-unit control Traceable to national measurement standards

Typical Applications

Calibration of AC voltage, current, active/reactive power, and power factor Phase meter inspection and phase angle validation Power transducer input/output adjustment Clamp-on power meter and current transformer verification Needle sticking tests on analog meters

Compatibility & Integration

Supports power meters, energy meters, current clamps, panel meters, RMS multimeters, current sensors, and power transducers

Power Meter Calibration

Software included; LabVIEW drivers available National standard traceability certification

Features & description

From manufacturer datasheet

Features

- AC voltage accuracy: ± 350 ppm (1 year, 50/60 Hz class headline)
- AC current accuracy: ± 450 ppm (1 year, 50/60 Hz class headline)
- AC power accuracy: ± 450 ppm (1 year, 50/60 Hz class headline)
- Stability: AC voltage/current ± 50 ppm/h; AC power ± 100 ppm/h (from 1 min to 1 h after output ON)
- Phase accuracy: $\pm 0.03^\circ$ at 50/60 Hz between voltage and current outputs (standalone)
- Phase angle setting: -180° to $+359.999^\circ$; resolution 0.001°
- Generation range: AC voltage 10 mV to 1250 V; AC current 0.3 mA to 62.5 A; frequency 40 to 1200 Hz
- Frequency setting resolution: 0.001 Hz; frequency accuracy ± 100 ppm (1 year)
- Max power per unit class: 78.5 kW class (OEM marketing figure for high V×I capability)
- Synchronized multi-unit: up to 3 units for 1P3W/3P3W/3P4W; parallel Hi Current up to 180 A
- AUX output ranges: 500 mV and 5 V (0 to 6.25 V class for Ext. Sensor / clamp calibration)
- Display: 5.7-inch color LCD with wiring, output, and phase-chart views; STABILIZING indicator
- Sweep (needle sticking): times 8/16/32/64 s; ranges 0–100/105/110/120% of level
- Power factor setting: -1.0 to 0 to $+1.0$ lead and lag
- Interfaces: USB (USBTMC-USB488), Ethernet, GP-IB; link interface UNIT2/UNIT3; BNC sync I/O
- Power consumption: approx. 200 VA max; dimensions 426 × 132 × 450 mm (W×H×D); weight approx. 20 kg
- Operating environment: 5 °C to 40 °C; altitude up to 2000 m

LS3300 Characteristics / Specifications

PARAMETER	VALUE
Model	LS3300
Manufacturer	Yokogawa
Instrument Type	AC Power Calibrator / AC Signal Generator
Alias	LS3300; Yokogawa LS3300; AC Power Calibrator Output Ranges (generation)
AC voltage	±350 ppm at 50/60 Hz
AC current	±450 ppm at 50/60 Hz
Frequency	40 Hz to 1.2 kHz; resolution 0.001 Hz
Headline max capability	78.5 kW per unit class
AC power	±450 ppm at 50/60 Hz
Voltage/current stability	±50 ppm/h (1 min to 1 h after output ON)
Power stability	±100 ppm/h (1 min to 1 h after output ON)
Phase accuracy	±0.03° at 50/60 Hz between voltage and current outputs (standalone)
Frequency accuracy	±100 ppm (1 year)
Guaranteed accuracy voltage span examples	10 mV–1250 V generation; 1.00 mV–1200.0 V accuracy band class per bulletin
Guaranteed accuracy current span examples	0.3 mA–62.5 A generation; 1.00 mA–60.0 A accuracy band class per bulletin
Conditions class	23 °C ±3 °C, 20–80% RH; internal oscillator; LO terminal grounding; add temperature coefficient outside 20–26 °C band per OEM Settings / Resolution
Level	0 to 120% of range
Level ratio	0 to 120% of setting; resolution 0.001%
Phase angle	–180° to +359.999°; resolution 0.001°
Current range examples	30 mA, 100 mA, 1 A, 10 A, 50 A, 100 A*, 150 A* (*multi-unit / Hi Current class)
AUX output ranges	500 mV and 5 V (0 to 6.25 V class for Ext. Sensor / clamp calibration)

PARAMETER	VALUE
Wiring	1P2W standalone; multi-unit 1P3W, 3P3W, 3P4W; Hi Current parallel mode
Power factor	–1.0...0...+1.0 lead and lag STABILIZING notification when output settles High-voltage notification / beep for ≥ 150 V settings; HV lamps for 300/1000 V range class
Trip detection	overcurrent/overvoltage, oscillation, fan, temperature LINE synchronization to commercial power frequency
Display	5.7-inch color LCD with wiring, output, and phase-chart views; STABILIZING indicator
USB	USB Rev. 2.0; USBTMC-USB488
Ethernet	provided
Sync	BNC synchronized operation I/O; UNIT2/UNIT3 link interface General
Maximum power consumption	approx. 200 VA
Withstand voltage	1500 VAC for 1 minute between power supply and case
External dimensions	426 (W) × 132 (H) × 450 (D) mm
Weight	approx. 20 kg
Operating temperature	5 °C to 40 °C
Operating altitude	up to 2000 m Notes Numeric specs from Yokogawa Bulletin LS3300-01EN and LS3300 major specifications FAQ. Confirm firmware, options, and multi-unit sync accessories from the unit configuration. Detailed %of-range power/VAR accuracy tables vary by frequency and PF—use the bulletin tables for formal calibration limits.
AC voltage accuracy	± 350 ppm (1 year, 50/60 Hz class headline)
AC current accuracy	± 450 ppm (1 year, 50/60 Hz class headline)
AC power accuracy	± 450 ppm (1 year, 50/60 Hz class headline)
Stability	AC voltage/current ± 50 ppm/h; AC power ± 100 ppm/h (from 1 min to 1 h after output ON)
Phase angle setting	–180° to +359.999°; resolution 0.001°
Generation range	AC voltage 10 mV to 1250 V; AC current 0.3 mA to 62.5 A; frequency 40 to 1200 Hz
Frequency setting resolution	0.001 Hz; frequency accuracy ± 100 ppm (1 year)
Max power per unit class	78.5 kW class (OEM marketing figure for high V×I capability)

PARAMETER	VALUE
Synchronized multi-unit	up to 3 units for 1P3W/3P3W/3P4W; parallel Hi Current up to 180 A
Sweep (needle sticking)	times 8/16/32/64 s; ranges 0–100/105/110/120% of level
Power factor setting	–1.0 to 0 to +1.0 lead and lag
Interfaces	USB (USBTMC-USB488), Ethernet, GP-IB; link interface UNIT2/UNIT3; BNC sync I/O
Power consumption	approx. 200 VA max; dimensions 426 × 132 × 450 mm (W×H×D); weight approx. 20 kg
Operating environment	5 °C to 40 °C; altitude up to 2000 m

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	5 °C to 40 °C
Operating Temperature	5 °C to 40 °C
Operating altitude	up to 2000 m Notes Numeric specs from Yokogawa Bulletin LS3300-01EN and LS3300 major specifications FAQ. Confirm firmware, options, and multi-unit sync accessories from the unit configuration. Detailed %of-range power/VAR accuracy tables vary by frequency and PF–use the bulletin tables for formal calibration limits.

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	
Specifications	
PARAMETER	VALUE
Model	LS3300
Manufacturer	Yokogawa
Instrument Type	AC Power Calibrator / AC Signal Generator
Alias	LS3300; Yokogawa LS3300; AC Power Calibrator
Output Ranges (generation)	
Specifications	
PARAMETER	VALUE
AC voltage	10 mV to 1250 V
AC current	0.3 mA to 62.5 A
Frequency	40 Hz to 1.2 kHz (40 to 1200 Hz)
Headline max capability	78.5 kW per unit class
Three-unit parallel Hi Current: up to 180 A	
Accuracy / Stability (headline, 1 year unless noted)	
Specifications	
PARAMETER	VALUE
AC voltage	±350 ppm at 50/60 Hz
AC current	±450 ppm at 50/60 Hz
AC power	±450 ppm at 50/60 Hz
Voltage/current stability	±50 ppm/h (1 min to 1 h after output ON)
Power stability	±100 ppm/h (1 min to 1 h after output ON)
Phase accuracy	±0.03° at 50/60 Hz (V-I when used alone)
Frequency accuracy	±100 ppm (1 year)
Guaranteed accuracy voltage span examples	10 mV-1250 V generation; 1.00 mV-1200.0 V accuracy band class per bulletin
Guaranteed accuracy current span examples	0.3 mA-62.5 A generation; 1.00 mA-60.0 A accuracy band class per bulletin

PARAMETER	VALUE
Conditions class	23 °C ±3 °C, 20-80% RH; internal oscillator; LO terminal grounding; add temperature coefficient outside 20-26 °C band per OEM

Settings / Resolution

Specifications

PARAMETER	VALUE
Level	0 to 120% of range
Level ratio	0 to 120% of setting; resolution 0.001%
Phase angle	-180° to +359.999°; resolution 0.001°
Frequency	40 Hz to 1.2 kHz; resolution 0.001 Hz
Current range examples	30 mA, 100 mA, 1 A, 10 A, 50 A, 100 A*, 150 A* (*multi-unit / Hi Current class)
AUX output ranges	500 mV, 5 V

Functions

Specifications

PARAMETER	VALUE
Wiring	1P2W standalone; multi-unit 1P3W, 3P3W, 3P4W; Hi Current parallel mode
Power factor	-1.0...0...+1.0 lead and lag
STABILIZING notification when output settles	High-voltage notification / beep for ≥150 V settings; HV lamps for 300/1000 V range class
Trip detection	overcurrent/overvoltage, oscillation, fan, temperature

LINE synchronization to commercial power frequency
Sweep for needle-sticking tests: 8/16/32/64 s; 0-100/105/110/120%

Interfaces / Display

Specifications

PARAMETER	VALUE
Display	5.7-inch color LCD
USB	USB Rev. 2.0; USBTMC-USB488
Ethernet	provided

GP-IB: provided
Sync: BNC synchronized operation I/O; UNIT2/UNIT3 link interface

General

Specifications

PARAMETER	VALUE
Maximum power consumption	approx. 200 VA
Withstand voltage	1500 VAC for 1 minute between power supply and case
External dimensions	426 (W) × 132 (H) × 450 (D) mm
Weight	approx. 20 kg
Operating temperature	5 °C to 40 °C
Operating altitude	up to 2000 m

Notes

Numeric specs from Yokogawa Bulletin LS3300-01EN and LS3300 major specifications FAQ. Confirm firmware, options, and multi-unit sync accessories from the unit configuration. Detailed %of-range power/VAR accuracy tables vary by frequency and PF-use the bulletin tables for formal calibration limits.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.