

# 2558A

AC Voltage Current Standard

SIMPLE STANDALONE SOLUTION  
FOR CALIBRATING METERS, CLAMPS AND CTs



Easy Operation

**A dial**  
for each function

High Accuracy

**0.04%** AC Voltage  
**0.05%** AC Current

Wide Output Range

**1.00 mV**  
to **1200.0 V**  
**1.00 mA**  
to **60.00 A**

For more information, go to  
[tmi.yokogawa.com](http://tmi.yokogawa.com)  
Test & Measurement Instruments

1-Year Warranty 

2558A doesn't compete with the competitors directory. On the other hand, Fluke would be a reference in this market.

		YOKOGAWA 2558	YOKOGAWA New 2558A	FLUKE 5080A	FLUKE 5520A	LIGHTSTAR KZP-1
AC Voltage	Output range	1 mV to 1200 V	1 mV to 1200 V	1 mV to 1020 V	1 mV to 1020 V	3 V to 720 V
	Accuracy 50/60 Hz	+/- 0.095 %	+/- 0.04 %	+/- 0.106 % (at 30V) +/- 0.158 % (at 100V)	+/- 0.0170 % (at 30V) +/- 0.0197 % (at 300V)	+/- 0.1 %
	Frequency	50 / 60 / 400 Hz	40 to 1,000 Hz	45 to 1000 Hz	10 Hz to 100 kHz	50/60 Hz
	Distortion	0.07%	0.07%	0.5 % + 30 mV (100 V at 10 Hz to 100 kHz)	0.9 % + 10 mV (300 V at 45 Hz to 1 kHz)	0.07%
AC Current	Output range	1 mA to 60 A	1 mA to 60 A	29 uA to 20.5 A	29 uA to 20.5 A	50 mA to 60 A
	Accuracy 50/60 Hz	+/- 0.095 % +/- 0.165 % (at 50 A)	+/- 0.05 %	+/- 0.22 % (at 1 A) +/- 0.575 % (at 20 A)	+/- 0.06 % (at 1 A) +/- 0.145 % (at 20 A)	+/- 0.1 %
	Frequency	50 / 60 / 400 Hz	40 to 1000 Hz	45 to 1000 Hz	10 Hz to 10 kHz	50/60 Hz
	Distortion	0.18%	0.18%	0.35 % + 1.5 mA (1A at 10 Hz to 10 kHz)	0.9 % + 500 uA (1A at 45 Hz to 1 kHz)	0.07%
Power output	Output	By two units (Tokuchu) Need external FG	By two units (Internal phase controller)	By one unit	By one unit	
	Accuracy	--	--	+/- 0.37 %	+/- 0.09 %	--
Frequency	Range	40 to 500 Hz	40 to 1000 Hz	45 to 1000 Hz	10 Hz to 10 kHz	44 to 70Hz
	Accuracy	+/- 1 %	+/- 50 ppm	+/- (50 ppm + 2 mHz)	+/- (2.5 ppm + 5 mHz)	
Phase angle	Range	--	-180.000 to 359.999 deg	+/- 179.99 deg	+/- 179.99 deg	--
	Accuracy	--	--	+/- 0.25 deg (45 to 65 Hz)	+/- 0.10 deg (10-65Hz)	--
Max. output VA		36 VA (60 A · 0.6 V)	36 VA (60 A · 0.6 V)	61.5VA (20.5 A · 3 V)	61.5 VA (20.5 A · 3 V)	50 VA (50 A/1 V)

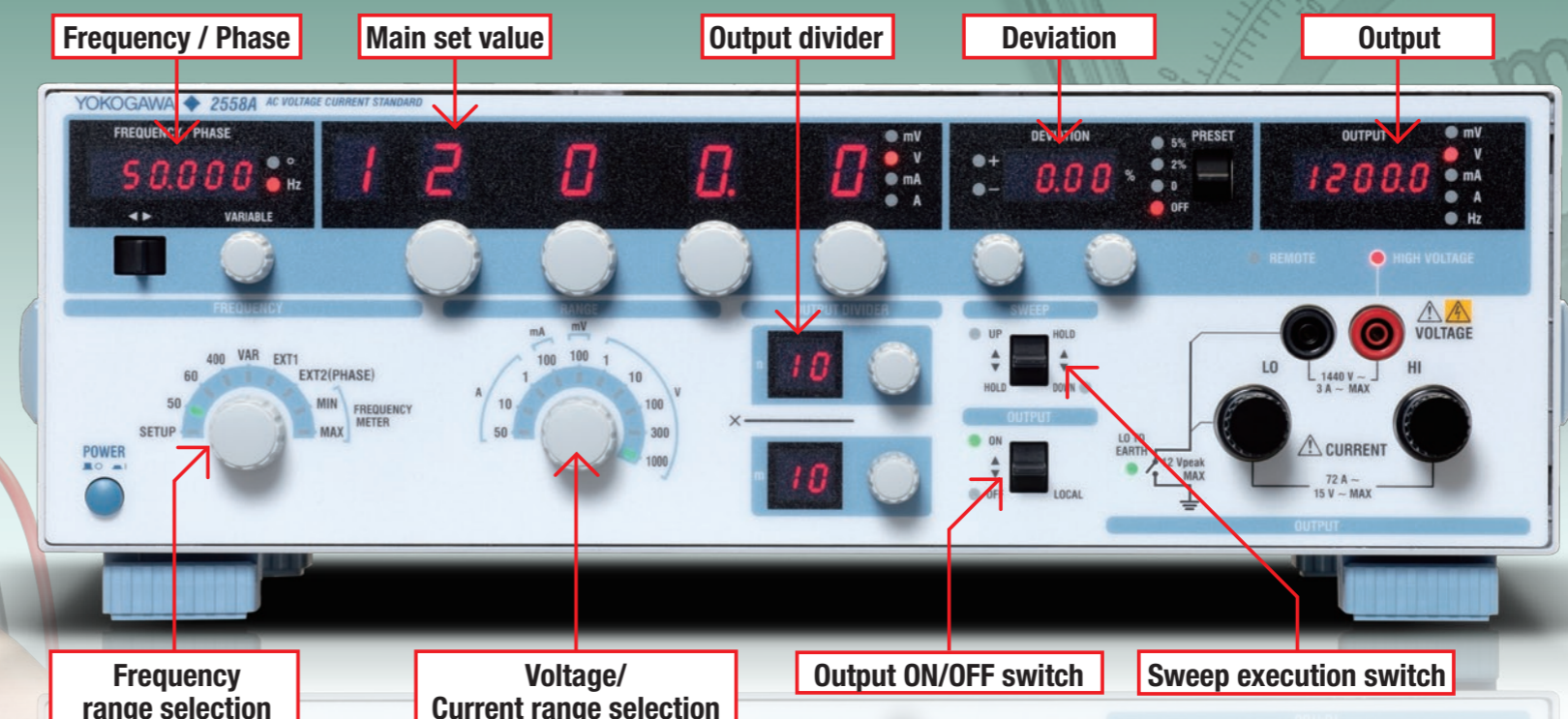
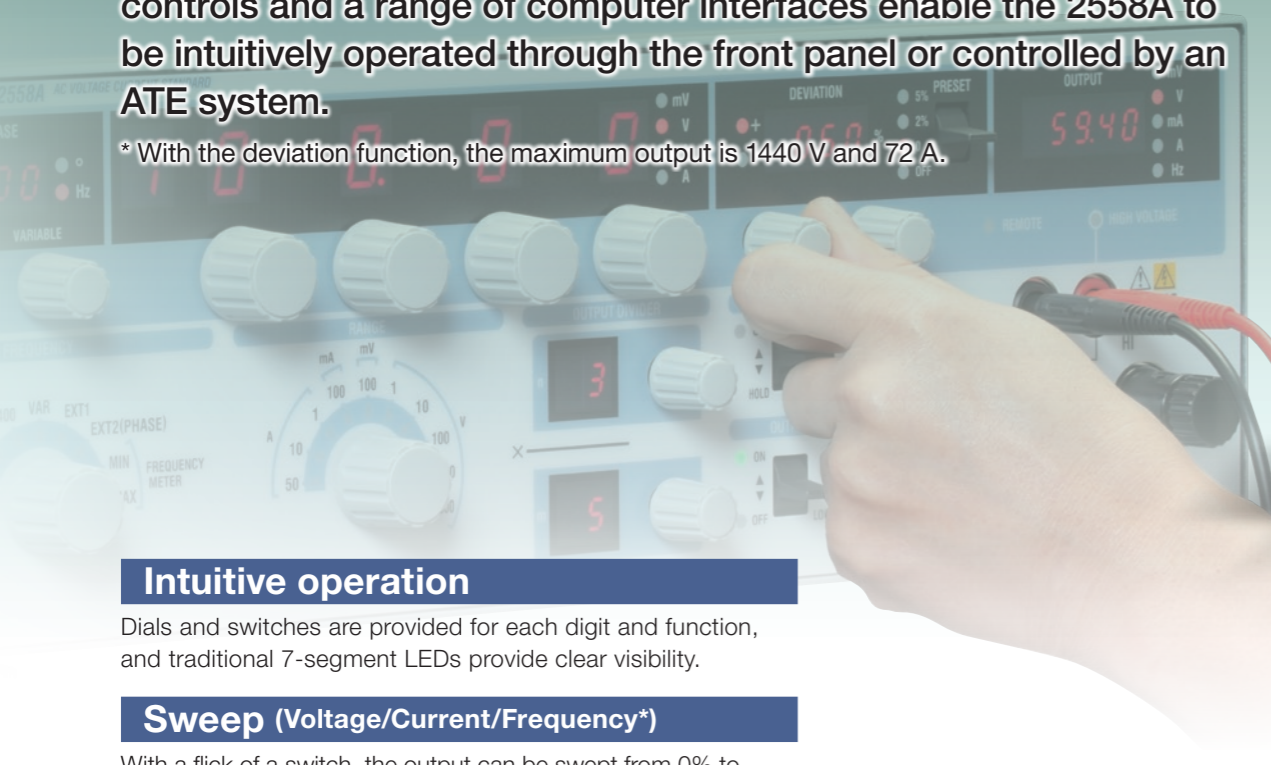
- 5080A promote that it is good for the mete calibration.
- The output range of 5080A is a step by step. It means 1.00 mV to 32.99 mV is one range, and next range start from 33 mV to 329.99 mV, then from 0.33 V at next range, and so on. In meter calibration, the output should generate from 0 at the range because they don't like to change the range in the calibration of meter. In case of Fluke 5080A, When the range changes, the output return to 0 V in short period.
- 5520A is the upper model of 5080A as high accuracy. And of course it is expensive. In this market, basic specification is the most important value.

# Reliable and Simple Operation

## New AC Voltage Current Standard from "YOKOGAWA"

The wide output ranges of 1.00 mV to 1200.0 V\* AC and 1.00 mA to 60.00 A\* AC mean that the 2558A is the instrument of choice for the cost effective calibration of AC analog meters. Rotary controls and a range of computer interfaces enable the 2558A to be intuitively operated through the front panel or controlled by an ATE system.

\* With the deviation function, the maximum output is 1440 V and 72 A.



### Intuitive operation

Dials and switches are provided for each digit and function, and traditional 7-segment LEDs provide clear visibility.

### Sweep (Voltage/Current/Frequency\*)

With a flick of a switch, the output can be swept from 0% to 120% of the main set value with sweep times of 16, 32 or 64 seconds.

\* The range of frequency sweep can be set.

### Output Divider

Linearity tests can be simply performed by dividing the output into steps. For example, a setting of 4 will generate steps of 25, 50, 75 and 100% of the set output value.

### Direct readout of the deviation

When the deviation dials are adjusted to check the full scale value on the meter, the deviation from the main output setting is displayed as a % of full scale.

### Digital display of output

The actual output value is displayed. It is therefore unnecessary to calculate the output value from the main, divider and deviation settings.

You can confirm that the output is stable and how it corresponds to the target meter's reading.

### Common current output terminals

The same output terminals are used for all current ranges. Test times are therefore reduced by avoiding the need to change the wiring for meters which have different ranges.

### High accuracy

**AC voltage : ±0.04 %**  
**AC current : ±0.05 %**

More than sufficient to calibrate meters with class 0.1% accuracy.

10 to 120 % of range				
	± (% of setting + % of range)			
	50/60 Hz	40 ≤ f ≤ 400 Hz	400 < f ≤ 1 kHz	
AC voltage	0.03 + 0.01	0.05 + 0.01	0.10 + 0.02	
AC current	0.04 + 0.01	0.06 + 0.01	0.12 + 0.02	

1 to 10 % of range				
	± (% of range)			
	50/60 Hz	40 ≤ f ≤ 400 Hz	400 < f ≤ 1 kHz	
AC voltage	0.013	0.015	0.03	
AC current	0.014	0.016	0.032	

### High stability

**AC voltage/current : ±50 ppm/h**  
± (20 ppm of range + 30 ppm of range)/h  
Perform measurements with high repeatability over time

### Wide output range

**AC voltage : 1.00 mV to 1200.0 V**  
**AC current : 1.00 mA to 60.00 A**

**6 voltage ranges (100 m/1/10/100/300/1000 [V])**  
**4 current ranges (100 m/1/10/50 [A])**

The generation range is 0 to 144 % of range

#### Ex. Set for the output

1. Select the range
2. Main setting : Available for 0 to 120 % of the range
3. Output divider : n & m (n/m of main set value)  
m = The number of required calibration points  
if the main set value = 100V, m = 5 and n = 1, the output will be 20 V
4. Deviation : Available for ± 20 % of the main setting

### Max. output current is "72A" at the 50 A range

Main setting : 60 A  
Output divider : n = m  
Deviation : - 20%

### Wide frequency range

**40 to 1000 Hz**  
**(Frequency accuracy : ±50 ppm)**

The 2558A provides fixed frequencies of 50/60 Hz (commercial) and 400 Hz (marine and aviation), as well as variable frequencies from 40 to 1000 Hz.

The high frequency accuracy of the 2558A ( 50 ppm ) also enables it to be used to calibrate frequency meters.

Multiple 2558As can be synchronized using the internal phase shifter. This means that two 2558As can be used as accurate sources of voltage and current for calibrating power meters.

# 2558A

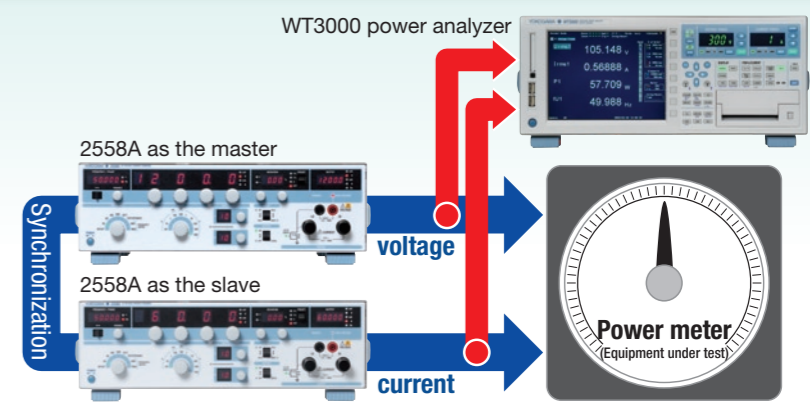
## AC Voltage Current Standard



## Power calibration

A power calibration system can be created by using two 2558As (one each for AC voltage and AC current) together with a Yokogawa WT3000 power analyzer as the reference. One of the 2558As acts as the master unit and provides the synchronizing oscillator signal. The required power factor is set by adjusting the phase shifter on the slave unit and monitoring the result on the WT3000.

A 3 phase power calibrator system can be simply built by adding further 2558As.

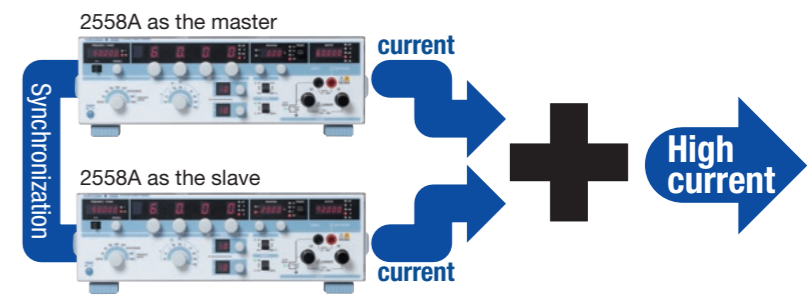


## Higher current output

To generate higher current than 72 A, two 2558As can be connected to double the output to 144 A.

Condition :

- Accuracy, stability, temperature coefficient is the sum of the individual units.
- 50/60 Hz only.

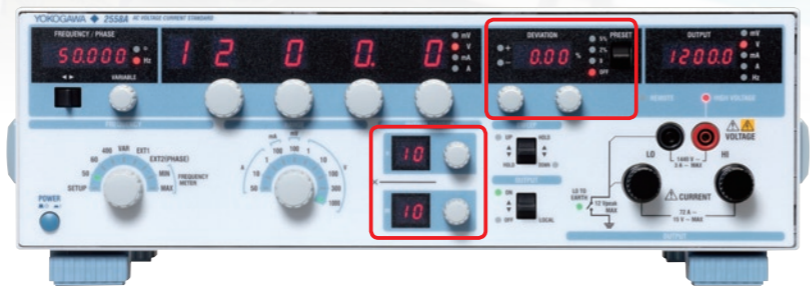


## Calibration and test for meters

The 2558A provides specific functions to enable meters to be calibrated accurately and efficiently.

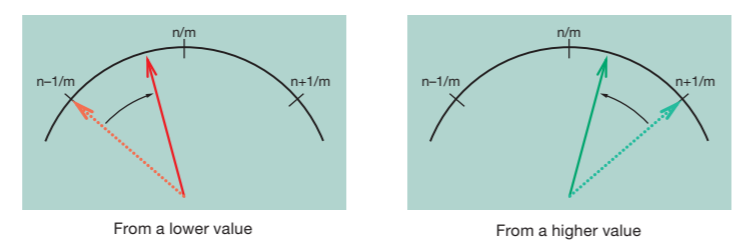
### Using the output divider and deviation

Calibrating two or more points is quick and simple. It is only necessary to preselect the number of required calibration points with the lower divider control and then use the upper control to step the output to the next calibration point. The deviation settings will then enable the output value and error of each calibration point to be displayed directly.



### Using the output divider and deviation preset

The deviation preset control can be used to move the output value in small increments (2 or 5% of the step between calibration points). This means that it is possible to finely approach the target calibration point, either from a lower value or a higher one, without exceeding it. This is particularly useful when the friction (hysteresis) of the moving part needs to be taken into consideration. In this case the point is calibrated twice, once from a lower value and once more from a higher value and the final calibration result is the average of the two.



### Using sweep

Needle sticking tests can be performed with high repeatability. It is possible to stop at any point and sweep around it in fine detail.



## Use existing 2558 programs

The 2558A is backwardly compatible with the previous 2558 model. The new 2558A supports a 2558 command mode, which means that you can switch from the 2558 to the 2558A without modifying your program. It is also possible to mix 2558s and new 2558As in the same system.\*

\* Programs may need to be modified due to the improvement in the response time etc.



## Comparison with the 2558

		2558A	2558
AC Voltage	Output range of the specified accuracy	1.00 mV to 1200.0 V	1.00 mV to 1200.0 V
	Accuracy (50/60 Hz)	± 400 ppm	± 950 ppm
	Frequency of the specified accuracy	40 to 1000 Hz	50 / 60 / 400 Hz
AC Current	Output range of the specified accuracy	1.00 mA to 60.00 A	1.00 mA to 60.00 A
	Accuracy (50/60 Hz)	± 500 ppm	± 950 ppm
	Frequency of the specified accuracy	40 to 1000 Hz	50 / 60 / 400 Hz
Frequency	Output range	40 to 1000 Hz	40 to 500 Hz
	Accuracy	± 50 ppm	± 1%
Max. output		Approx. 36 VA (60 A/0.6 V)	Approx. 36 VA (60 A/0.6 V)
Stability		± (20 ppm of setting + 30 ppm of range)/h	± (0.03% of range)/h
Dimension (mm)		426 (W) × 132 (H) × 400 (D)	439 (W) × 149 (H) × 415 (D)

# Rear Panel



- 1 GP-IB interface (optional, /C1)
- 2 Ethernet
- 3 USB interface (for PC connection)
- 4 Input terminals for synchronized operation
- 5 Output terminals for synchronized operation

# Specification

## Output

Range	Output range	Specified output range	Resolution	Maximum output
100 mV	0 to 144.00 mV	1 to 120.00 mV	10 $\mu$ V	—
1 V	0 to 1.4400 V	0.01 to 1.2000 V	100 $\mu$ V	0.5 A or more
10 V	0 to 14.400 V	0.1 to 12.000 V	1 mV	Approx. 3 A
100 V	0 to 144.00 V	1 to 120.00 V	10 mV	Approx. 0.3 A
300 V	0 to 432.0 V	3 to 360.0 V	100 mV	Approx. 0.1 A
1000 V	0 to 1440.0 V	10 to 1200.0 V	100 mV	Approx. 6 mA
100 mA	0 to 144.00 mA	1 to 120.00 mA	10 $\mu$ A	Approx. 15 V
1 A	0 to 1.4400 A	0.01 to 1.2000 A	100 $\mu$ A	Approx. 15 V
10 A	0 to 14.400 A	0.1 to 12.000 A	1 mA	Approx. 3 V
50 A	0 to 72.00 A	0.5 to 60.00 A	10 mA	Approx. 0.6 V

Condition Frequency : Internal oscillator  
 Temperature/Humidity : 23  $\pm$  3  $^{\circ}$ C/20 to 80 %RH  
 Add the temp. coefficient at 5 to 20 $^{\circ}$ C, 26 to 40 $^{\circ}$ C

## Accuracy

Range	Upper : 180 days Lower : 1 year					
	10% to 120% of range			1% to 10% of range		
	$\pm$ (% of setting + % of range)			$\pm$ (% of range)		
	50/60 Hz	40 Hz $\leq$ f $\leq$ 400 Hz	400 Hz < f $\leq$ 1 kHz	50/60 Hz	40 Hz $\leq$ f $\leq$ 400 Hz	400 Hz < f $\leq$ 1 kHz
100 mV						
1 V						
10 V	0.03 + 0.01	0.05 + 0.01	0.10 + 0.02	0.013	0.015	0.030
100 V	0.04 + 0.01	0.06 + 0.01	0.11 + 0.02	0.014	0.016	0.031
300 V						
1000 V						
100 mA						
1 A	0.04 + 0.01	0.06 + 0.01	0.12 + 0.02	0.014	0.016	0.032
10 A	0.055 + 0.01	0.075 + 0.01	0.135 + 0.02	0.0155	0.0175	0.0335
50 A						

## Stability

$\pm$  (20 ppm of setting + 30 ppm of range)  
 Condition Output : 1 to 120% of range  
 Frequency : Internal oscillator  
 Temperature/Humidity : 23 $\pm$ 3 $^{\circ}$ C / 20 to 80%RH  
 Time : 1 min. to 1 hour after output ON

## Temperature Coefficient (5 to 20 $^{\circ}$ C, 26 to 40 $^{\circ}$ C)

50/60 Hz :  $\pm$ (30 ppm of setting/ $^{\circ}$ C)  
 Other :  $\pm$ (50 ppm of setting/ $^{\circ}$ C)

## Distortion Factor

Voltage output : 0.07% or less  
 Current output : 0.18% or less  
 Condition Output : 40 to 120% of range  
 Load : Resistance only  
 20% of the max. output or less  
 (Current at the voltage output, or voltage at the current output)  
 Frequency : 40 to 1000 Hz

# Specification

# AC Voltage Current Standard 2558A

## Frequency range

Accuracy (internal) :  $\pm$  50 ppm (180 days)  
 $\pm$  100 ppm (1 year)  
 Mode : Internal / External / FREQUENCY METER  
 Internal : 50 / 60 / 400 Hz  
 VAR (40 to 1000 Hz, 0.001 Hz resolution)  
 External : EXT1 / EXT2  
 (Use the terminals for the synchronized operation)  
 FREQUENCY METER : MIN/MAX  
 Range : 20 to 1000 Hz  
 Resolution : 0.001 Hz  
 Sweep, output divider and deviation functions are used for the frequency.

## Sweep

Target : Voltage / Current / Frequency  
 Speed : Approx. 16/32/64 sec. selectable  
 During 0 to 100%, 100 to 0% of setting

## Output divider

Target : Voltage / Current / Frequency  
 Denominator : m 4 to 15  
 Numerator : n 0 to 15 (n  $\leq$  m)

## Deviation

Target : Voltage / Current / Frequency  
 Variable range :  $\pm$ 20.00%  
 Operation : Two dials  
 Resolution of the first dial : 0.2% of the main setting  
 Resolution of the second dial : 0.01% of the main setting  
 Deviation preset : OFF / 0 / 2% / 5%

## Output terminal

Type Voltage : Plug-in terminal (safety terminal)  
 Current : Large binding post  
 Selectable LO terminal to earth or floating.  
 Max. floating voltage to earth : 12 Vpk

## Display

Main setting : 5 digits LED  
 Output Divider : 2 digits LED (m and n)  
 Deviation : 4 digits LED  
 Output : 5 digits LED  
 Frequency/Phase : 6 digits LED

## SETUP

Setting : Communication, Beep sound, Sweep speed, Earth/Floating  
 Status : Self test, Error log, Product Information

## External I/O

Sync. Terminals (two input terminals and two output terminals)  
 I/O voltage : 3 $\pm$ 0.1 Vrms, 2 phase sine wave  
 Frequency : 40 to 1000 Hz  
 Input resistance : Approx. 1 M $\Omega$   
 Output resistance : Approx. 50  $\Omega$

## USB PC interface (for PC connection)

Connector : Type B connector (receptacle)  
 Electrical and mechanical specifications : Complies with USB Rev. 2.0  
 Supported transfer modes : High Speed, Full Speed

## Ethernet interface

Connector : RJ-45 connector  
 Electrical and mechanical specifications : Confirms to the IEEE 802.3  
 Transmission methods : 100 BASE-TX / 10 BASE-T

## GP-IB interface (/C1 optional)

Electrical and mechanical specifications : Complies with IEEE St'd 488-1978  
 Functional specifications : SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT1, C0  
 Address : 0 to 30

## General specifications

Warm-up time : Approx. 30 minutes  
 Operating environment : Temperature : 5 to 40 $^{\circ}$ C  
 Humidity : 20 to 80%RH (no condensation)  
 Attitude 2000 m or less  
 Installation locations : Indoors  
 Storage environment : Temperature -15 to 60 $^{\circ}$ C  
 Humidity 20 to 80%RH (no condensation)  
 Rated power supply voltage : 100 to 120 VAC / 200 to 240 VAC  
 Allowable power supply voltage fluctuation range : 90 to 132 VAC / 180 to 264 VAC  
 Rated power supply frequency : 50/60 Hz  
 Allowable power supply frequency fluctuation range : 48 to 63 Hz  
 Max. power consumption : 200 VA  
 Weight : Approx. 10 kg  
 Dimensions : 426(W) x 132(H) x 400(D) mm

# Accessories



**758933**  
Measurement lead set

2 pieces (red and black) in 1 set, length: 1.00 m Used in combination with the 701959, 758921, 758922, or 758929. Rating: 1000 V CAT III/19 A



**B8506WA**  
Measurement lead set

2 pieces (red and black) in 1 set, length: 1.5 m, Rating: 80 A



**758917**  
Measurement lead set

2 pieces (red and black) in 1 set, length: 0.75 m Used in combination with the 701959, 758921, 758922, or 758929. Rating: 1000 V CAT II/32 A



**758922**  
Small Alligator clip adapter set

Safety terminal (banana female)-to-alligator clip adapter 2 pieces (red and black) in 1 set Rating: 300 V CAT II Connected to the 758933, 758917, or 701901.



**758929**  
Large Alligator clip adapter set

Safety terminal (banana female)-to-alligator clip adapter 2 pieces (red and black) in 1 set Rating: 1000 V CAT II Connected to the 758933, 758917, or 701901.



**758921**  
Fork terminal adapter set

Two adapters (red and black) to a set. Used when attaching banana plug to binding post.



**701902 / 701903**  
Safety BNC-BNC cable

701902: Length 1 m, 1000 V CAT II  
 701903: Length 2 m, 1000 V CAT II



**758923**  
Safety terminal adapter set

Spring-hold type (banana male) 2 pieces in 1 set. Easy attachment/detachment of the cable.



**758931**  
Safety terminal adapter set

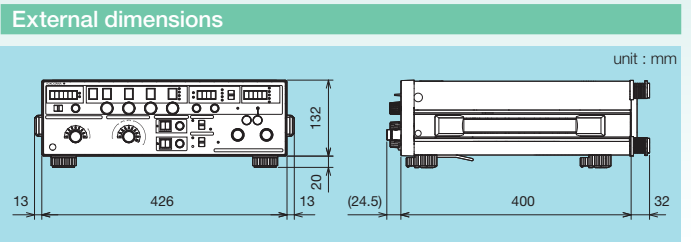
Screw-fastened type (banana male) 2 pieces in 1 set. Comes with a B9317WD 1.5 mm hexagonal wrench for fixing the cable in place.

\* Wire diameter of cables that can connect to the adapter  
 758923 Core wire diameter: 2.5 mm or less, insulation diameter: 5.0 mm or less  
 758931 Core wire diameter: 1.8 mm or less, insulation diameter: 3.9 mm or less

Due to the nature of the product, it is possible for the user to come in contact with metal parts and receive electric shock. Exercise caution when using the product.

# AC Voltage Current Standard 2558A

Model and Suffix Codes		
Model	Suffix code	Description
2558A		AC Voltage Current Standard
Power code	-D	UL/CSA standard, PSE
	-F	VDE standard
	-R	AS standard
	-Q	BS standard
	-H	GB standard
	-N	NBR standard
Option	/C1	GP-IB interface



## Related Product



## WT3000 Precision Power Analyzer

### High Accuracy

**Basic Power Accuracy**  
 $\pm(0.02\% \text{ of reading} + 0.04\% \text{ of range})$

### Low Power Factor Error

**Power factor influence when  $\cos\phi=0$**   
 0.03% of S  
 S is reading value of apparent power  
 $\phi$  is phase angle between voltage and current

### Current Range

**Direct Input**  
 0.5/1/2/5/10/20/30 [A] \*  
 or  
 5m/10m/20m/50m/100m/200m/500m/1/2 [A] \*

**External Input**  
 50m/100m/200m/500m/1/2/5/10 [V] \*

### Voltage Range

15/30/60/100/150/300/600/1000 [V] \*

\* Voltage range and current range are for crest factor 3

Model	Description
760301	WT3000 1 input element model
760302	WT3000 2 input elements model
760303	WT3000 3 input elements model
760304	WT3000 4 input elements model

## Standard Accessories

Part name	Quantity
Power code	1
Measurement lead set (758933)	1 set (red and black)
Measurement lead set (B8506WA)	1 set (red and black)
Large alligator clip adapter set (758929)	1 set (red and black)
Rubber leg cap	1 set (2)
User's manual	1 set

## Rack Mount Kits

Model	Suffix code	Description
751535-E3	Rack mount kit	For EIA
751535-J3	Rack mount kit	For JIS

## Optional Accessories

Model	Part name	Description
758933	Measurement lead set	1 m, 2 leads in a set
B8506WA	Measurement lead set	1.5 m, 2 leads in a set
758917	Measurement lead set	75 cm, 2 leads in a set
758922	Alligator clip adapter set	Rating 300 V, 2 adapters in a set
758929	Alligator clip adapter set	Rating 1000 V, 2 adapters in a set
758921	Fork terminal adapter set	Banana-fork adapter, 2 adapters in a set
701902	Safety BNC-BNC cable	1.0 m
701903	Safety BNC-BNC cable	2.0 m
758923	Safety terminal adapter set	Spring-hold type, 2 adapters in a set
758931	Safety terminal adapter set	Screw-fastened type, 2 adapters in a set

## Yokogawa's Approach to Preserving the Global Environment

- Yokogawa's electrical products are developed and produced in facilities that have received ISO14001 approval.
- In order to protect the global environment, Yokogawa's electrical products are designed in accordance with Yokogawa's Environmentally Friendly Product Design Guidelines and Product Design Assessment Criteria.

# YOKOGAWA

Yokogawa Meters & Instruments Corporation

**YOKOGAWA METERS & INSTRUMENTS CORPORATION**  
 Global Sales Dept.

Tachihi Bld. No.2, 6-1-3 Sakaecho, Tachikawa-shi, Tokyo, 190-8586 Japan  
 Phone: +81-42-534-1413 Facsimile: +81-42-534-1426

**YOKOGAWA CORPORATION OF AMERICA**  
 2 Dart Road, Newnan, GA. 30265-1094 U.S.A.  
 Phone: +1-770-253-7000 Facsimile: +1-770-254-0928

**YOKOGAWA EUROPE B. V.**  
 Euroweg 2 3825 HD Amersfoort, THE NETHERLANDS  
 Phone: +31-88-4641000 Facsimile: +31-88-4641111

**YOKOGAWA ENGINEERING ASIA PTE. LTD.**  
 5 Bedok South Road, Singapore 469270 SINGAPORE  
 Phone: +65-6241-9933 Facsimile: +65-6241-2606

**YOKOGAWA AMERICA DO SUL LTDA.**  
 Praca Acapulco, 31-Santo Amaro, Sao Paulo/SP, BRAZIL CEP-04675-190  
 Phone: +55-11-5681-2400  
 Facsimile: +55-11-5681-4434

**YOKOGAWA ELECTRIC KOREA CO., LTD.**  
 C&M Sales Seoul Office  
 1301-1305, 13rd floor, Kolon digital tower, 106-1,  
 Yangpyeongdong-5Ga, Yeongdeungpo-Gu, Seoul, 150-105,  
 Korea  
 Phone: +82-2-2628-3810 Facsimile: +82-2-2628-3899

**YOKOGAWA AUSTRALIA PTY. LTD.**  
 Tower A/112-118 Talavera Road Macquarie Park, NSW 2113  
 Australia  
 Phone: +61-2-8870-1100 Facsimile: +61-2-8870-1111

**YOKOGAWA INDIA LTD.**  
 Plot No. 96, Electronic City Complex, Hosur Road, Bangalore 560100, INDIA  
 Phone: +91-80-4158-6000 Facsimile: +91-80-2852-1442

**YOKOGAWA SHANGHAI TRADING CO., LTD.**  
 4F Tower D, Cartelo Crocodile Building, No.568 West Tianshan  
 Road, Shanghai, CHINA  
 Phone: +86-21-6239-6363 Facsimile: +86-21-6880-4987

**YOKOGAWA MIDDLE EAST B. S. C. (C)**  
 P.O. BOX 10070, Manama, Building 577, Road 2516,  
 Busaitteen 225, Muharraq, BAHRAIN  
 Phone: +973-17-358100 Facsimile: +973-17-336100

**YOKOGAWA ELECTRIC CIS LTD.**  
 Grokholskiy per. 13, Build. 2, 4th Floor, 129090, Moscow  
 RUSSIAN FEDERATION  
 Phone: +7-495-737-7868 Facsimile: +7-495-737-7869

Represented by:



NOTE

"Before operating the product, read the user's manual thoroughly for proper and safe operation."