SPECIFICATIONS		ASR-2050/ASR-205	OR	ASR-2100/ASR-2100R
HARMONIC VOLTAC		Up to 40th order of the fundament		Up to 40th order of the fundamental wave
EFFECTIVE VALUE (F		175 V / 350 V, 100%		175 V / 350 V, 100%
PERCENT (%)	Resolution	0.1 V, 0.01%		0.1 V, 0.01%
(AC-INT and 50/60 Hz or	nly) Accuracy <sup>®</sup>	Up to $20$ th $\pm$ (0.2 % of reading + 0.		Up to 20th ± (0.2 % of reading + 0.5 V / 1 V);
		20th to 40th $\pm$ (0.3 % of reading +	, ,	20th to 40th $\pm$ (0.3 % of reading + 0.5 V / 1 V)
HARMONIC CURREI	8	Up to 40th order of the fundament	al wave	Up to 40th order of the fundamental wave
EFFECTIVE VALUE (R		5 A / 2.5 A, 100%		10 A / 5 A, 100%
PERCENT (%)	Resolution	0.01 A, 0.01%		0.01 A, 0.01%
(AC-INT and 50/60 Hz or	nly) Accuracy <sup>®</sup>	Up to $20$ th $\pm$ (1 % of reading $\pm$ 0.1 ) 20th to 40th $\pm$ (1.5 % of reading $\pm$ 0		Up to 20th ± (1 % of reading + 0.2 A / 0.1 A); 20th to 40th ± (1.5 % of reading + 0.2 A / 0.1 A)
<ul> <li>*2. AC mode: For an out</li> <li>*3. An output current in</li> <li>*4. An output current in and 23 °C ± 5 °C. The</li> <li>*5. For an output voltage</li> <li>*6. The apparent and rea</li> </ul>	the range of 5 % to 100 % of the ma the range of 5 % to 100 % of the ma e accuracy of the peak value is for a v of 50 V or greater, an output curren active powers are not displayed in th	' to 350 V and 23 °C $\pm$ 5 °C. DC mode: For ar iximum current, and 23 °C $\pm$ 5 °C. iximum peak current in AC mode, an output vaveform of DC or sine wave it in the range of 10 % to 100 % of the maxi	t current in the range of 5 % mum current, DC or an out	to 100 % of the maximum instantaneous current in DC mode, but frequency of 45 Hz to 65 Hz, and 23 °C $\pm$ 5 °C.
OTHERS				
PROTECTIONS		OCP, OTP, OPP, FAN Fail		
DISPLAY		TFT-LCD, 4.3 inch		
MEMORY FUNCTIO		10 sets for Store and Recall setting	S	
ARBITRARY WAVE		16 (nonvolatile)		
	Waveform Length Standard USB	4096 words		
INTERFACE S	Standard USB LAN	Type A: Host, Type B: Slave, Speed:		D Address Justin ment ID Address Subject Most
	EXT Control	External Signal Input; External Con		P Address, Instrument IP Address, Subnet Mask
F	actory Optional GPIB	SCPI-1993, IEEE 488.2 compliant ir		
-	RS-232C	Complies with the EIA-RS-232 spec		
INSULATION RESIST Between input and chassis	ANCE , output and chassis, input and output	500 Vdc, 30 MΩ or more		
WITHSTAND VOLTA Between input and chassis	GE , output and chassis, input and output	1500 Vac, 1 minute		
EMC		EN 61326-1 (Class A)		
		EN 61326-2-1/-2-2 (Class A)		
		EN 61000-3-2 (Class A, Group 1)		
		EN 61000-3-3 (Class A, Group 1)		1)
		EN 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4	ι-δ/-4-ΙΙ (Class A, Grou	p I)
Cafatu		EN 55011 (Class A, Group1) EN 61010-1		
Safety Environment O	Operating Environment	Indoor use, Overvoltage Category I	I	
	Operating Temperature Range	0 °C to 40 °C		
	Storage Temperature Range	-10 °C to 70 °C		
	Operating Humidity Range	20 %rh to 80 % RH (no condensati	ion)	
	Storage Humidity Range	90 % RH or less (no condensation)		
	Altitude	Up to 2000 m		
DIMENSIONS & WE	IGHT	ASR-2000 : 285(W)×124(H)×480(D ASR-2000R : 213(W)×124(H)×480(		
			Spec	fications subject to change without notice. ASR-2000GD1DH
ORDERING INFC	ORMATION		OPTIONAL ACCES	
ASR-2050 500V	A Programmable AC/DC Po	ower Source		B Communication Functions (Factory installed)
	VA Programmable AC/DC F			utput Outlet only for ASR-2000(Factory installed) Universal Power Socket(ASR-2000R only)
		er Source for 3U 1/2 Rack Mount		European Power Socket(ASR-2000R only)
		er Source for 3U 1/2 Rack Mount	GRA-439-E Rack Mo	
ACCESSORIES	0		GRA-439-J Rack Mo	unt Kit (JIS) 25 pins Micro-D connector
	al, Programming manual), Safet	ty Guide, Power Cord,		Cable, approx. 2M ASR-001 Air inlet filter
	Set Perote Sense Terminal Co		FREE DOWNLOAD	

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GTL-246 USB Cable

E-mail: marketing@goodwill.c

Mains Terminal Cover Set, Remote Sense Terminal Cover Set, GTL-123 Test Lead

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USB Driver

TEXIO TECHNOLOGY CORPORATION. 7F Towa Fudosan Shin Yokohama Bldg., 2-18-13 Shin Yokohama, Kohoku-ku, Yokohama, Kanagawa,

222-0033 Japan T +81-45-620-2305 F +81-45-534-7181 Korea Subsidiar

GOOD WILL INSTRUMENT KOREA CO., LTD.

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No.2707/B&C, 1st Floor UNNATHI Building, E-Block, Sahakara Nagar, Bengaluru-560 092. India T +91-80-6811-0600 F +91-80-6811-0626

# COMPACT PROGRAMMABLE AC/DC POWER SOURCE



The ASR-2000 series, an AC+DC power source aiming for system integration or desktop applications, provides both rated power output for AC output and rated power output for DC output. Nine ASR-2000 output modes are available, including 1) AC power output mode (AC-INT Mode), 2) DC power output mode (DC-INT Mode), 3) AC/DC power output mode (AC+DC-INT Mode), 4) External AC signal source mode (AC-EXT Mode), 5) External AC/DC signal source mode (AC+DC-EXT Mode), 6) External AC signal superposition mode (AC-ADD Mode), 7) External AC/DC signal superposition mode (AC+DC-ADD Mode), 8) External AC signal synchronization mode (AC-SYNC Mode), 9) External AC/DC signal synchronization mode (AC+DC-SYNC Mode).

The ASR-2000 series provides users with waveform output capabilities to meet the test requirements of different electronic component development, automotive electrical devices and home appliance, including 1) Sequence mode generates waveform fallings, surges, sags, changes and other abnormal power line conditions; 2) Arbitrary waveform function allows users to store/upload user-defined waveforms; and 3) Simulate mode simulates power outage, voltage rise, voltage fall, and frequency variations. When the ASR-2000 series power source outputs, it can also measure Vrms, Vavg, Vpeak, Irms, lavg, Ipeak, IpkH, P, S, Q, PF, CF, 40th-order Voltage Harmonic and Current Harmonic. In addition, the Remote sense function ensures accurate voltage output. The Customized Phase Angle for Output On/Off function can set the starting angle and ending angle of the voltage output according to the test requirements. V-Limit, Ipeak-Limit, F-Limit, OVP, OCP, OPP function settings can protect the DUT during the measurement process. In addition to OTP, OCP, and OPP protection, the ASR-2000 series also incorporates the Fan fail alarm function and AC fail alarm function.

The front panel of the ASR-2050/2100 provides a universal socket or a European socket, which allows users to plug and use so as to save wiring time. The ASR-2050R/2100R is 3U height and 1/2 Rack width design, which is compatible with ATS assembly. The ASR-2000 series supports I/O interface and is equipped with USB, LAN, External I/O and optional RS-232C and GPIB.

ASR-2000 Series

Simply Reliable





# **ASR-2000 Series**

### FEATURES

- Output Rating: AC 0 ~ 350 Vrms, DC 0 ~ ± 500 V
- Output Frequency up to 999.9 Hz
- DC Output (100% of Rated Power)
- Output Capacity: 500VA/ 1000VA
- Measurement Items: Vrms, Vavg, Vpeak, Irms, IpkH, Iavg, Ipeak, P, S, Q, PF, CF
- Voltage and Current Harmonic Analysis (THDv, THDi)
- Customized Phase Angle for Output On/Off
- Remote Sensing Capability
- OVP, OCP, OPP, OTP, AC Fail Detection and Fan Fail Alarm
- Interface: USB,LAN(std.);RS-232+GPIB(opt)
- Built-in External Control I/O and **External Signal Input**
- Built-in Output Relay Control
- Memory Function (up to 10 sets)
- Sequence and Simulation Function (up to 10 sets)
- Support Arbitrary Waveform Function
- Built-in Web Server



Front Panel



**Rear Panel** 

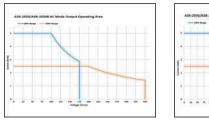
### **APPLICATIONS**

- Electronic Products/Electronic **Component Development Test**
- Automotive Electrical Equipment Simulation Test

Household Appliance Application Test

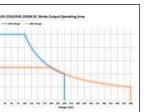


## OPERATING AREA FOR ASR-2000 SERIES



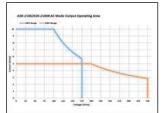
AC Output for

ASR-2050/ASR-2050R



#### DC Output for ASR-2050/ASR-2050R

The ASR-2000 series is an AC+DC power source that provides rated power output not only at the AC output, but also at the DC output. The operation areas are shown in diagrams.



AC Output for ASR-2100/ASR-2100R DC Output for

ASR-2100/ASR-2100R

Model Name	Power Rating	Max. Output Current	Max. Output Voltage
ASR-2050	500 VA	5 / 2.5 A	350 Vrms / 500 Vdc
ASR-2100	1000 VA	10 / 5 A	350 Vrms / 500 Vdc
ASR-2050R	500 VA	5 / 2.5 A	350 Vrms / 500 Vdc
ASR-2100R	1000 VA	10 / 5 A	350 Vrms / 500 Vdc

## B. MEASUREMENT ITEMS FOR ASR-2000 SERIES



 0 % ATTOSIN
 P
 0.0
 W
 Parameter

 avg
 +0.2
 V
 P
 0.0
 W
 Parameter
 Parameter</td



Peak Meas Display

30.2 0.0 18.0 0.0

4.31 Arms 0.00 Arms 1.44 Arms 0.00 Arms 0.86 Arms 0.00 Arms 0.61 Arms 0.00 Arms

**Current Harmonic** 

parameters including Vrms/Irms, Vavg/Iavg and Vmax/Vmin/

Imax/Imin can be switched by users at any time to display the

**RMS Meas Display** 

AVG Meas Display

ON ON ON ON

24th 14th 4th 25th 15th 5th 26th 16th 6th 27th 17th 7th 28th 18th 8th 29th 19th 9th

ON	ON	ON	ON 94546	200V SQU	-	)H
Harr	Harr	Harn	Harmonic	Voltage Measure	THDV= 42.2 %	Simple
Bith	21th	11th	1st	179.9 Vrm i	90.7 %	[Harm]
32th	22th	12th	2nd	0.0 Vrms	0.0 %	
33th	23th	13th	3rd	59.8 Vrm:	30.2 %	[THDV]
34th	24th	14th	4th	0.0 Vrms	0.0%	THDI
35th	25th	15th	Sth	35.8 Vrm :	18.0 %	
36th	26th	16th	6th	0.0 Vrms	0.0%	
37th	27th	17th	7th	25.5 Vrm :	12.9 %	
38th	28th	18th	Sth	0.0 Vrms	0.0%	-
39th	29th	19th	9th	19.8 Vrms	10.0%	Page
Anels	SOLL	2041	104	0.03/000	0.04	Down

Voltage Harmonic

The ASR-2000 series provides users with measurement capabilities including Vrms, Vavg, Vpeak, Irms, Iavg, Ipeak, IpkH, P, S, Q, PF, CF, 40th-order Voltage Harmonic and Current Harmonic. During the power output, the measurement

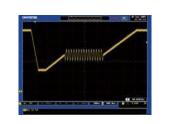
## SEQUENCE MODE AND APPLICATIONS

OHITEL		
		1
		and the second
	 	1 / 1.40 P

Momentary Drop in Supply Voltage

Reset Behavior at Voltage Drop

There are 10 sets of Sequence mode and each set has 0~999 steps. The time setting range of each step is 0.0001 ~ 999.9999 seconds. Users can combine multiple sets of steps to generate



instantaneous calculation reading.

Starting Profile Waveform



ile Waveform Insta

Instantaneous Power Failure

the desired waveforms, including waveform fallings, surges, sags, changes and other abnormal power line conditions to meet the needs of the test application.

INDUT PATING (AC)		ASR-2050/ASR-2050R	ASR-2100/ASR-2100R
INPUT RATING (AC)		100 Vac to 240 Vac	100 V/ac to 240 V/ac
NORMINAL INPUT VOLTAGE		100 Vac to 240 Vac 90 Vac to 264 Vac	100 Vac to 240 Vac 90 Vac to 264 Vac
INPUT VOLTAGE RANGE PHASE		90 Vac to 264 Vac Single phase, Two-wire	90 Vac to 264 Vac Single phase, Two-wire
INPUT FREQUENCY RANGE		47 Hz to 63 Hz	47 Hz to 63 Hz
MAX. POWER CONSUMPTIO	N	800 VA or less	1500 VA or less
POWER FACTOR <sup>*1</sup>	100Vac	0.95 (typ.)	0.95 (typ.)
. CHERTACIÓN	200Vac	0.90 (typ.)	0.90 (typ.)
MAX. INPUT CURRENT	100Vac	8 A	15 A
	200Vac	4 A	7.5 A
*1. For an output voltage of 100 V/2	200 V (100V/200V range)	, maximum current, and a load power factor of 1.	•
AC MODE OUTPUT RATINGS	(AC rms)		
VOLTAGE	Setting Range <sup>*1</sup>	0.0 V to 175.0 V / 0.0 V to 350.0 V	
	Setting Resolution	0.1 V	
	Accuracy <sup>*2</sup>	$\pm (0.5 \% \text{ of set} + 0.6 \text{ V} / 1.2 \text{ V})$	
OUTPUT PHASE		Single phase, Two-wire	Т
MAXIMUM CURRENT <sup>3</sup>	100 V	5 A	10 A
	200 V	2.5 A	5 A
MAXIMUM PEAK CURRENT*4	100 V	20 A	40 A
	200 V	10 A	20 A
POWER CAPACITY		500 VA	1000 VA
FREQUENCY	Setting Range	AC Mode: 40.00 Hz to 999.9 Hz, AC+DC Mode: 1.00 Hz to	999.9 Hz
	Setting Resolution	0.01 Hz (1.00 to 99.99 Hz), 0.1 Hz (100.0 to 999.9 Hz)	
	Accuracy	For 45 Hz to 65 Hz: 0.01% of set, For 40 Hz to 999.9 Hz: 0	J.U2% of set
	Stability <sup>*5</sup>	± 0.005%	
OUTPUT ON PHASE		0.0° to 359.9° variable (setting resolution 0.1°)	
DC OFFSET* <sup>6</sup>		Within ± 20 mV (TYP)	
*1. 100 V / 200 V range *2. For an output voltage of 17.5 V t	to 175 V / 35 V to 350 V /	sine wave, an output frequency of 45 Hz to 65 Hz, no load, DC voltage s	setting $0V$ (AC+DC mode) and $23^{\circ}C + 5^{\circ}C$
		ed by the power capacity when the output voltage is 100 V to 175 V / 2	
*4. With respect to the capacitor-in	put rectifying load. Limite	d by the maximum current.	
*5. For 45 Hz to 65 Hz, the rated of	utput voltage, no load and	the resistance load for the maximum current, and the operating temp	erature.
*6. In the case of the AC mode and		0 V.	
OUTPUT RATING FOR DC MC	ODE		
VOLTAGE	Setting Range <sup>*1</sup>	-250 V to +250 V / -500 V to +500 V	
	Setting Resolution	0.1 V	
	Accuracy <sup>*2</sup>	±( 0.5 % of set  + 0.6 V / 1.2 V)	
MAXIMUM CURRENT <sup>*3</sup>	100 V	5 A	10 A
	200 V	2.5 A	5 A
MAXIMUM PEAK CURRENT**	100 V	20 A	40 A
	200 V	10 A	20 A
		F00.)V/	
POWER CAPACITY		500 W	1000 W
*1. 100 V / 200 V range	- 25 V - 25 V - 250 V		1
*1. 100 V / 200 V range *2. For an output voltage of -250 V f		/ / -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E	DC mode) and 23°C ± 5°C
*1. 100 V / 200 V range *2. For an output voltage of -250 V f	o 100 V / 2.8 V to 200 V, L		DC mode) and 23°C ± 5℃
*1. 100 V / 200 V range *2. For an output voltage of -250 V *3. For an output voltage of 1.4 V to	o 100 V / 2.8 V to 200 V, L aximum current.	/ / -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E	DC mode) and 23°C ± 5℃
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V to</li> <li>*4. Within 5 ms, Limited by the ma</li> </ul> OUTPUT VOLTAGE STABILITY	o 100 V / 2.8 V to 200 V, L aximum current.	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V	DC mode) and 23°C ± 5℃
*1. 100 V / 200 V range *2. For an output voltage of -250 V *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup>	o 100 V / 2.8 V to 200 V, L aximum current.	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less	DC mode) and 23°C ± 5°C / / 200 V to 500 V.
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V to</li> <li>*4. Within 5 ms, Limited by the ma</li> </ul> OUTPUT VOLTAGE STABILITY	o 100 V / 2.8 V to 200 V, L aximum current.	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to	DC mode) and 23°C ± 5°C / / 200 V to 500 V.
*1.100 V / 200 V range *2. For an output voltage of -250 V *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup>	o 100 V / 2.8 V to 200 V, L Iximum current. /	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V <u>±0.2% or less</u> 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP)	DC mode) and 23°C ± 5°C / / 200 V to 500 V.
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V tc *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10	o 100 V / 2.8 V to 200 V, L xximum current. /	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) pad, rated output.	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V tc *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10	2 100 V / 2.8 V to 200 V, L Iximum current. 7 200 V, 120 V, or 230 V, no k 175V/150V to 350V, a load	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) pad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE RECULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components	o 100 V / 2.8 V to 200 V, L xximum current. 7 00 V, 120 V, or 230 V, no k 175V/150V to 350V, a load 5 in DC mode using the o	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) pad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFOR	2 100 V / 2.8 V to 200 V, L Eximum current. 7 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the o RM DISTORTION RAT	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) pad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM	2 100 V / 2.8 V to 200 V, L uximum current. 000 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the o RM DISTORTION RATIO"	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFOR	2 100 V / 2.8 V to 200 V, L uximum current. 000 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the o RM DISTORTION RATIO"	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>10, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP)	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup>	o 100 V / 2.8 V to 200 V, L uximum current. 7 00 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the o 7 7 M DISTORTION RATIO <sup>*1</sup> 5 E TIME <sup>*2</sup>	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more	DC mode) and 23°C ± 5°C // 200 V to 500 V. 9 100%, via output terminal)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1	2010 V / 2.8 V to 200 V, L iximum current. 7 000 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the o 7 <b>M DISTORTION RATIO</b> <b>10 ISTORTION RATIO</b> <b>10 ISTORTION RATIO</b> <b>10 ISTORTION RATIO</b> <b>10 ISTORTION RATIO</b> <b>10 ISTORTION V</b> <b>10 ISTORTION RATIO</b> <b>10 ISTORTION RATIO</b>	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>10, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5% or less 100 us (TYP) 70% or more bad power factor of 1, and in AC and AC+DC mode.	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V tc *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V /	2010 V / 2.8 V to 200 V, L xximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load in DC mode using the o 2010 DISTORTION RATIO' 2010 STORTION RATIO' 2010 V to 350 V, a lo 200 V, a load power fact	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+L imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rea
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V te</li> <li>*4. Within 5 ms, Limited by the ma</li> <li>OUTPUT VOLTAGE STABILITY</li> <li>LINE REGULATION<sup>*1</sup></li> <li>LOAD REGULATION<sup>*2</sup></li> <li>RIPPLE NOISE<sup>*3</sup></li> <li>*1. Power source input voltage is 10</li> <li>*2. For an output voltage of 75 V to 1</li> <li>*3. For 5 Hz to 1 MHz components</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE RESPONSE</li> <li>EFFICIENCY<sup>*3</sup></li> <li>*1. At an output voltage of 50 V to 1</li> <li>*2. For an output voltage of 100 V /</li> <li>*3. For AC mode, at an output voltage</li> </ul>	2010 V / 2.8 V to 200 V, L xximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load in DC mode using the o 2010 DISTORTION RATIO' 2010 STORTION RATIO' 2010 V to 350 V, a lo 200 V, a load power fact	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTACE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V te</li> <li>*4. Within 5 ms, Limited by the ma</li> <li>OUTPUT VOLTAGE STABILITY</li> <li>LINE REGULATION<sup>*1</sup></li> <li>LOAD REGULATION<sup>*2</sup></li> <li>RIPPLE NOISE<sup>*3</sup></li> <li>*1. Power source input voltage is 10</li> <li>*2. For an output voltage of 75 V to 1</li> <li>*3. For 5 Hz to 1 MHz components</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE RESPONSE</li> <li>EFFICIENCY<sup>*3</sup></li> <li>*1. At an output voltage of 50 V to 1</li> <li>*2. For an output voltage of 100 V /</li> <li>*3. For AC mode, at an output voltage</li> </ul>	2010 V / 2.8 V to 200 V, L xximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load in DC mode using the o 2010 DISTORTION RATIO <sup>*1</sup> 2015 SE TIME <sup>*2</sup> 175 V / 100 V to 350 V, a lo 200 V, a load power fact age of 100 V / 200 V, maxi	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) oad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi- utput terminal on the rear panel. <b>TO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only.	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V te</li> <li>*4. Within 5 ms, Limited by the ma</li> <li>OUTPUT VOLTAGE STABILITY</li> <li>LINE REGULATION<sup>*1</sup></li> <li>LOAD REGULATION<sup>*2</sup></li> <li>RIPPLE NOISE<sup>*3</sup></li> <li>*1. Power source input voltage is 10</li> <li>*2. For an output voltage of 75 V to 1</li> <li>*3. For 5 Hz to 1 MHz components</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE RESPONSE</li> <li>EFFICIENCY<sup>*3</sup></li> <li>*1. At an output voltage of 50 V to 1</li> <li>*2. For an output voltage of 100 V /</li> <li>*3. For AC mode, at an output voltage</li> </ul>	2010 V / 2.8 V to 200 V, L aximum current. 200 V, 120 V, or 230 V, no k 175V/150V to 350V, a load is in DC mode using the or 2010 DISTORTION RATIO <sup>47</sup> 2010 V, a load power fact: 200 V, a load power fact:	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) pad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V	DC mode) and 23°C ± 5°C / / 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% – 90% of output vo
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V to</li> <li>*4. Within 5 ms, Limited by the ma</li> <li>OUTPUT VOLTAGE STABILITY</li> <li>LINE REGULATION<sup>*1</sup></li> <li>LOAD REGULATION<sup>*2</sup></li> <li>RIPPLE NOISE<sup>*3</sup></li> <li>*1. Power source input voltage is 10</li> <li>*2. For an output voltage of 75 V to 1</li> <li>*3. For 5 Hz to 1 MHz components</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE RESPONS</li> <li>EFFICIENCY<sup>*3</sup></li> <li>*1. At an output voltage of 50 V to 1</li> <li>*2. For an output voltage of 50 V to 1</li> <li>*3. For AC mode, at an output voltage of 100 V /</li> <li>*3. For AC mode, at an output voltage and</li> <li>WOLTAGE RMS, AVG Value<sup>*1</sup></li> </ul>	2010 V / 2.8 V to 200 V, L iximum current. 7 00 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load is in DC mode using the or <b>RM DISTORTION RATIO</b> 10ISTORTION RATIO 1250 V, 100 V to 350 V, a l 1200 V, a load power facts age of 100 V / 200 V, maxi <b>Resolution</b> Accuracy <sup>*2</sup>	<ul> <li>/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E mitted by the power capacity when the output voltage is 100 V to 250 V</li> <li>±0.2% or less</li> <li>0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP)</li> <li>pad, rated output.</li> <li>power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel.</li> <li><b>10.01111 VOLTAGE RESPONSE TIME, EFFICIENCY</b></li> <li>0.5% or less</li> <li>100 us (TYP)</li> <li>70% or more</li> <li>oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only.</li> <li>0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6</li> </ul>	DC mode) and 23°C ± 5°C / / 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% – 90% of output vo
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V te</li> <li>*4. Within 5 ms, Limited by the ma</li> <li>OUTPUT VOLTAGE STABILITY</li> <li>LINE REGULATION<sup>*1</sup></li> <li>LOAD REGULATION<sup>*2</sup></li> <li>RIPPLE NOISE<sup>*3</sup></li> <li>*1. Power source input voltage is 10</li> <li>*2. For an output voltage of 75 V to 1</li> <li>*3. For 5 Hz to 1 MHz components</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE RESPONSE</li> <li>EFFICIENCY<sup>*3</sup></li> <li>*1. At an output voltage of 50 V to 1</li> <li>*2. For an output voltage of 100 V /</li> <li>*3. For AC mode, at an output voltage</li> </ul>	2010 V / 2.8 V to 200 V, L iximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the or 2015TORTION RATIO <sup>11</sup> 20175 V / 100 V to 350 V, a lo 200 V, a load power fact 120 V, 200 V, maxi Resolution Accuracy <sup>12</sup> Resolution	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) ad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V	DC mode) and 23°C ± 5°C / 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% ~ 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 50 V to 1 *3. For AC mode, at an output voltage MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value	2010 V / 2.8 V to 200 V, L aximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load is in DC mode using the or 2015TORTION RATIO <sup>11</sup> 2015TORTION RATIO <sup>12</sup> 20175 V / 100 V to 350 V, a l 200 V, a load power fact age of 100 V / 200 V, maxi 200 V, a load power fact age of 100 V / 200 V, maxi Resolution Accuracy <sup>12</sup> Resolution Accuracy	<ul> <li>/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E mitted by the power capacity when the output voltage is 100 V to 250 V</li> <li>±0.2% or less</li> <li>0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP)</li> <li>ad, rated output.</li> <li>power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel.</li> <li><b>100 UTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b></li> <li>0.5% or less</li> <li>100 us (TYP)</li> <li>70% or more</li> <li>oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only.</li> <li>0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±(0.5% of reading + 0.3 V/0.6 0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±( 2% of reading  + 1 V / 2 V)</li> </ul>	DC mode) and 23°C ± 5°C / 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% ~ 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 )
<ul> <li>*1. 100 V / 200 V range</li> <li>*2. For an output voltage of -250 V i</li> <li>*3. For an output voltage of 1.4 V to</li> <li>*4. Within 5 ms, Limited by the ma</li> <li>OUTPUT VOLTAGE STABILITY</li> <li>LINE REGULATION<sup>*1</sup></li> <li>LOAD REGULATION<sup>*2</sup></li> <li>RIPPLE NOISE<sup>*3</sup></li> <li>*1. Power source input voltage is 10</li> <li>*2. For an output voltage of 75 V to 1</li> <li>*3. For 5 Hz to 1 MHz components</li> <li>OUTPUT VOLTAGE WAVEFORM</li> <li>OUTPUT VOLTAGE RESPONS</li> <li>EFFICIENCY<sup>*3</sup></li> <li>*1. At an output voltage of 50 V to 1</li> <li>*2. For an output voltage of 50 V to 1</li> <li>*3. For AC mode, at an output voltage of 100 V /</li> <li>*3. For AC mode, at an output voltage and</li> <li>WOLTAGE RMS, AVG Value<sup>*1</sup></li> </ul>	2010 V / 2.8 V to 200 V, L aximum current. 7 000 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load 5 in DC mode using the or <b>RM DISTORTION RATIO</b> 105TORTION RATIO 1200 V, a load power fact age of 100 V / 200 V, maxi <b>Resolution</b> Accuracy <b>Resolution</b> Accuracy <b>Resolution</b> Accuracy <b>Resolution</b>	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>10, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more boad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(12 % of reading   + 1 V / 2 V) 0.01 A	DC mode) and 23°C ± 5°C / 200 V to 500 V. 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% – 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 50 V to 1 *3. For AC mode, at an output voltage MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value	2010 V / 2.8 V to 200 V, L aximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load is in DC mode using the or 2015TORTION RATIO <sup>11</sup> 2015TORTION RATIO <sup>12</sup> 20175 V / 100 V to 350 V, a l 200 V, a load power fact age of 100 V / 200 V, maxi 200 V, a load power fact age of 100 V / 200 V, maxi Resolution Accuracy <sup>12</sup> Resolution Accuracy	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) oad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(12 % of reading  + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5 % of reading  + 0.2 A/0.02 A);	DC mode) and 23°C ± 5°C / 200 V to 500 V. 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% ~ 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V te *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value CURRENT RMS, AVG Value	2010 V / 2.8 V to 200 V, L aximum current. 200 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load in DC mode using the o 2010 DISTORTION RATIO 2010 V, a load power fact. 2010 V, a load power fact. 200	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) oad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO OUTPUT VOLTACE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only.           0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V           For 45 Hz to 65 Hz and DC: ±(12 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5 % of reading+0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A)	DC mode) and 23°C ± 5°C // 200 V to 500 V. 100%, via output terminal) imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% ~ 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 50 V to 1 *3. For AC mode, at an output voltage MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value	2010 V / 2.8 V to 200 V, L aximum current. 200 V, 120 V, or 230 V, no k 175V/150V to 350V, a load in DC mode using the o 200 V, 120 V, or 230 V, no k 175 V / 100 V to 350 V, a l 200 V, a load power fact. 200 V, a load power fact.	<ul> <li>/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E mitted by the power capacity when the output voltage is 100 V to 250 V</li> <li>±0.2% or less</li> <li>0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP)</li> <li>Dad, rated output.</li> <li>power factor of 1, stepwise change from an output current of 0 A to maximup terminal on the rear panel.</li> <li><b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b></li> <li>0.5 % or less</li> <li>100 us (TYP)</li> <li>70 % or more</li> <li>Doad power factor of 1, and in AC and AC+DC mode.</li> <li>or of 1, with respect to stepwise change from an output current of 0 A to maximum current, and load power factor of 1 and sine wave only.</li> <li>0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±(12 % of reading  + 1 V / 2 V)</li> <li>0.01 A</li> <li>For 45 Hz to 65 Hz and DC: ±(0.5 % of reading+0.02 A/0.02 A);</li> <li>For 45 Hz to 65 Hz and DC: ±(0.7 % of reading+0.02 A/0.02 A);</li> <li>For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A)</li> <li>0.1 A</li> </ul>	DC mode) and 23°C ± 5°C / 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the read imum current (or its reverse); 10% ~ 90% of output vc 0 the maximum current (or its reverse); 10% ~ 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A
*1. 100 V / 200 V range *2. For an output voltage of -250 V *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABULITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value PEAK Value	2010 V / 2.8 V to 200 V, L aximum current. 200 V, 120 V, or 230 V, no k 175V/150V to 350V, a load in DC mode using the o 200 V, 120 V, or 230 V, no k 2015TORTION RATIO 2015TORTION RATIO 200 V, a load power factoriate 200 V, a load power factoria	<ul> <li>/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V</li> <li>±0.2% or less</li> <li>0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP)</li> <li>pad, rated output.</li> <li>power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel.</li> <li><b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b></li> <li>0.5 % or less</li> <li>100 us (TYP)</li> <li>70 % or more</li> <li>oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only.</li> <li>0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V</li> <li>For 45 Hz to 65 Hz and DC: ±(12 % of reading  + 1 V / 2 V)</li> <li>0.01 A</li> <li>For 45 Hz to 65 Hz and DC:±(0.5 % of reading + 0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A)</li> <li>0.1 A</li> <li>For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A)</li> </ul>	DC mode) and 23°C ± 5°C / 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the real imum current(or its reverse), using the output terminal on the real o the maximum current (or its reverse); 10% – 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading+0.24 A/0 For 45 Hz to 65 Hz and DC:±(12 % of reading+0.24 A/0
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V te *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value CURRENT RMS, AVG Value	2 100 V / 2.8 V to 200 V, L aximum current. 7 000 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load is in DC mode using the or <b>RM DISTORTION RATIO</b> 1 DISTORTION RATIO 1 DISTORTION RATIO 1 200 V, a load power fact age of 100 V / 200 V, maxi Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>10, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more boad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to maxi uncurrent, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A) 0.1 A	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% – 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading+0.08 A / 0.04 0.1 A ; For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A, 0.1 / 1 W
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V te *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value PEAK Value POWER Active (W)	2 100 V / 2.8 V to 200 V, L tximum current. 7 200 V, 120 V, or 230 V, no la 175V/150V to 350V, a load in DC mode using the o 200 DISTORTION RATIO <sup>*1</sup> 200 V, a load power factures 200 V, a load power factures	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V $\pm 0.2\%$ or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more bad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. <b>0.1</b> V For 45 Hz to 65 Hz and DC: $\pm$ (0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: $\pm$ (2% of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: $\pm$ (0.5 % of reading + 0.2 A/0.02 A); For 40 Hz to 999.9 Hz: $\pm$ (0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC: $\pm$ ([2 % of reading]+0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC: $\pm$ ([2 % of reading]+0.2 A/0.1 A) 0.1 / 1 W $\pm$ (2 % of reading + 0.5 W)	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% – 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 45 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A ; For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A 0.1 / 1 W ±(2 % of reading + 1 W)
*1. 100 V / 200 V range *2. For an output voltage of -250 V *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABULITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value PEAK Value	2 100 V / 2.8 V to 200 V, L aximum current. 7 100 V, 120 V, or 230 V, no lo 175V/150V to 350V, a load in DC mode using the o 200 DISTORTION RATIO 175 V / 100 V to 350 V, a l 200 V, a load power fact 120 JSTORTION RATIO 1200 V, a load power fact age of 100 V / 200 V, maxi Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution Accuracy Resolution	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) oad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(12 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A/0.1 A) 0.1 / 1 W ±(2% of reading + 0.5 W) 0.1 / 1 VA	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% ~ 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A ; For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A, 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VA
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V tc *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABULITY LINE REGULATION* LINE REGULATION* LINE REGULATION* ILOAD REGULATION*	to 100 V / 2.8 V to 200 V, L     tximum current.      00 V, 120 V, or 230 V, no la     175V/150V to 350V, a load     in DC mode using the o     210 DISTORTION RATI     DISTORTION RATIO'     SE TIME'2      175 V / 100 V to 350 V, a l     200 V, a load power fact     age of 100 V / 200 V, maxi      Resolution     Accuracy' <sup>2</sup> Resolution     Accuracy' <sup>3</sup> Resolution     Accuracy' <sup>4</sup> Resolution     Accuracy' <sup>5</sup> Resolution     Accuracy' <sup>5</sup>	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) or ad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxing the terminal on the rear panel. <b>IOUTPUT VOLTACE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A) 0.1 A For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/0.1 A) 0.1 1 VA ±(2 % of reading + 0.5 W) 0.1 / 1 VA ±(2 % of reading + 0.5 VA)	DC mode) and 23°C ± 5°C // 200 V to 500 V. 100%, via output terminal) imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% ~ 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading+0.04 A/0 For 45 Hz to 65 Hz and DC:±(12 % of reading+0.04 A/0 0.1 A ; For 45 Hz to 65 Hz and DC:±(12 % of reading+0.2 A, 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VA ±(2 % of reading + 1 VA)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V te *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value PEAK Value POWER Active (W)	to 10 V / 2.8 V to 200 V, L     tximum current.      00 V, 120 V, or 230 V, no k     175V/150V to 350V, a load     in DC mode using the o <b>RM DISTORTION RATIO DISTORTION RATIO DISTORTION RATIO DISTORTION RATIO DISTORTION RATIO SE TIME TIME Resolution Accuracy Se Resolution Resolution Resolution Resolution Resolution Resolution Resolution Resolution Resolution Resoluti</b>	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) or d, rated output. power factor of 1, stepwise change from an output current of 0 A to maxing utput terminal on the rear panel. <b>IO OUTPUT VOLTACE RESPONSE TIME, EFFICIENCY</b> 0.5% or less 100 us (TYP) 70% or more oad power factor of 1, and in AC and AC+DC mode. or 1, with respect to stepwise change from an output current of 0 A to maxing under the reading of the reading in the rear of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5% of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(12% of reading  + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5% of reading + 0.2 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7% of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC: ±(12% of reading +0.2 A/0.1 A) 0.1 1 W ±(2% of reading + 0.5 W) 0.1 1 VA ±(2% of reading + 0.5 VA) 0.1 / 1 VAR	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the read imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% – 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A, 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VA ±(2 % of reading + 1 VA) 0.1 / 1 VA
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABULITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value POWER Active (W) Apparent (VA) Reactive (VAR)	to 100 V / 2.8 V to 200 V, L     tximum current.      00 V, 120 V, or 230 V, no la     175V/150V to 350V, a load     in DC mode using the o     210 DISTORTION RATI     DISTORTION RATIO'     SE TIME'2      175 V / 100 V to 350 V, a l     200 V, a load power fact     age of 100 V / 200 V, maxi      Resolution     Accuracy' <sup>2</sup> Resolution     Accuracy' <sup>3</sup> Resolution     Accuracy' <sup>4</sup> Resolution     Accuracy' <sup>5</sup> Resolution     Accuracy' <sup>5</sup>	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) bad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxin utput terminal on the rear panel. IO, OUTPUT VOLTACE RESPONSE TIME, EFFICIENCY 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to maxin mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(12 % of reading  + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(12 % of reading+0.02 A/0.02 A); For 45 Hz to 65 Hz and DC: ±(12 % of reading+0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC: ±(12 % of reading+0.2 A/0.1 A) 0.1 / 1 W ±(2 % of reading + 0.5 VA) 0.1 / 1 VA ±(2 % of reading + 0.5 VAR)	DC mode) and 23°C ± 5°C // 200 V to 500 V. 0 100%, via output terminal) imum current(or its reverse), using the output terminal on the read imum current(or its reverse), using the output terminal on the read o the maximum current (or its reverse); 10% ~ 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A ) For 45 Hz to 65 Hz and DC:±([2 % of reading]+0.2 A 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VA ±(2 % of reading + 1 VA) 0.1 / 1 VA ±(2 % of reading + 1 VA) 0.1 / 1 VA ±(2 % of reading + 1 VA)
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V tc *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABULITY LINE REGULATION* LINE REGULATION* LINE REGULATION* ILOAD REGULATION*	2010 V / 2.8 V to 200 V, L aximum current. 2000 V, 120 V, or 230 V, no k 175V/150V to 350V, a load in DC mode using the o 200 V, a load power factory 200 V	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) ord, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>10. OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more ord power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A/0.1 A) 0.1 1 W ±(2 % of reading + 0.5 W) 0.1 / 1 VA ±(2 % of reading + 0.5 VA) 0.000 to 1.000	DC mode) and 23°C ± 5°C // 200 V to 500 V. imum current(or its reverse), using the output terminal on the rear imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% – 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading+0.08 A / 0.04 0.1 A ) For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VA ±(2 % of reading + 1 VA) 0.1 / 1 VAR ±(2 % of reading + 1 VAR) 0.000 to 1.000
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V te *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABILITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RAVEFORM OUTPUT VOLTAGE of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value PEAK Value POWER Active (W) Apparent (VA) Reactive (VAR) LOAD POWER FACTOR	2 100 V / 2.8 V to 200 V, L tximum current. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V $\pm 0.2\%$ or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) oad, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>IO, OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more oad power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. <b>0.1</b> V For 45 Hz to 65 Hz and DC: $\pm$ (0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: $\pm$ (0.5 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: $\pm$ (0.5 % of reading + 0.2 A/0.02 A); For 40 Hz to 999.9 Hz: $\pm$ (0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC: $\pm$ ([2 % of reading]+0.2 A/0.1 A) 0.1 / 1 W $\pm$ (2 % of reading + 0.5 VA) 0.1 / 1 VA $\pm$ (2 % of reading + 0.5 VA) 0.1 / 1 VA $\pm$ (2 % of reading + 0.5 VA) 0.1 / 1 VA $\pm$ (2 % of reading + 0.5 VAR) 0.000 to 1.000 0.001	DC mode) and 23°C ± 5°C // 200 V to 500 V. D0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% ~ 90% of output vo 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A ; For 45 Hz to 65 Hz and DC:±(12 % of reading +0.2 A/ 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VAR ±(2 % of reading + 1 VAR) 0.000 to 1.000 0.001
*1. 100 V / 200 V range *2. For an output voltage of -250 V i *3. For an output voltage of 1.4 V to *4. Within 5 ms, Limited by the ma OUTPUT VOLTAGE STABULITY LINE REGULATION <sup>*1</sup> LOAD REGULATION <sup>*2</sup> RIPPLE NOISE <sup>*3</sup> *1. Power source input voltage is 10 *2. For an output voltage of 75 V to 1 *3. For 5 Hz to 1 MHz components OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE WAVEFORM OUTPUT VOLTAGE RESPONS EFFICIENCY <sup>*3</sup> *1. At an output voltage of 50 V to 1 *2. For an output voltage of 100 V / *3. For AC mode, at an output volta MEASURED VALUE DISPLAY VOLTAGE RMS, AVG Value <sup>*1</sup> PEAK Value POWER Active (W) Apparent (VA) Reactive (VAR)	2010 V / 2.8 V to 200 V, L aximum current. 2000 V, 120 V, or 230 V, no k 175V/150V to 350V, a load in DC mode using the o 200 V, a load power factory 200 V	/ -500 V to -50 V, +50 V to +500 V, no load, AC volatge setting 0V (AC+E imited by the power capacity when the output voltage is 100 V to 250 V ±0.2% or less 0.15% @45 - 65Hz; 0.5% @DC, all other frequencies (0 to 0.7 Vrms / 1.4 Vrms (TYP) ord, rated output. power factor of 1, stepwise change from an output current of 0 A to maxi utput terminal on the rear panel. <b>10. OUTPUT VOLTAGE RESPONSE TIME, EFFICIENCY</b> 0.5 % or less 100 us (TYP) 70 % or more ord power factor of 1, and in AC and AC+DC mode. or of 1, with respect to stepwise change from an output current of 0 A to mum current, and load power factor of 1 and sine wave only. 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.3 V/0.6 0.1 V For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 1 V / 2 V) 0.01 A For 45 Hz to 65 Hz and DC: ±(0.5 % of reading + 0.02 A/0.02 A); For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.04 A / 0.04 A) 0.1 A For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A/0.1 A) 0.1 / 1 W ±(2 % of reading + 0.5 W) 0.1 / 1 VA ±(2 % of reading + 0.5 VA) 0.000 to 1.000	DC mode) and 23°C ± 5°C // 200 V to 500 V. D0 100%, via output terminal) imum current(or its reverse), using the output terminal on the rear o the maximum current (or its reverse); 10% – 90% of output vc 5 V)For 40 Hz to 999.9 Hz: ±(0.7 % of reading + 0.9 V/1 0.01 A ; For 45 Hz to 65 Hz and DC:±(0.5 % of reading+0.04 A/0 For 40 Hz to 999.9 Hz:±(0.7 % of reading + 0.08 A / 0.04 0.1 A ) For 45 Hz to 65 Hz and DC:±( 2 % of reading +0.2 A/ 0.1 / 1 W ±(2 % of reading + 1 W) 0.1 / 1 VA ±(2 % of reading + 1 VA) 0.1 / 1 VA ±(2 % of reading + 1 VAR) 0.000 to 1.000

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