

## Rated Values

### Output

Maximum output power capacities	AC	750VA (When the input is from AC100V to AC180V) 1,000VA (When the input is from AC180V to AC250V)
	DC	750W (When the input is from AC100V to AC180V) 1,000W (When the input is from AC180V to AC250V)
Output modes	Eight modes in total (combination of operation mode and signal source mode) AC-INT (AC-Internal signal source), AC-EXT (AC-External signal source), AC-ADD (AC-Internal and external signal source), AC-SYNC (AC-External synchronization) AC+DC-INT (DC-Internal signal source), AC+DC-EXT (DC-External signal source) AC+DC-ADD (DC-Internal and external signal source), AC+DC-SYNC (DC-External synchronization)	
Output voltages <sup>*1,2</sup>	AC	100V range : 0.0V to 135.0V (resolution : 0.1V) 200V range : 0.0V to 270.0V (resolution : 0.1V)
	DC	100V range : -190.0V to +190.0V (resolution : 0.1V) 200V range : -380.0V to +380.0V (resolution : 0.1V)
Maximum output currents <sup>*3,4</sup>	AC	100V range : 10 A, 200V range : 5 A
	DC	100V range : 10 A, 200V range : 5 A
Maximum output peak currents <sup>*3,4,5,6</sup>	100V range : 40 Apk, 200V range : 20 Apk	
Frequency setting range <sup>*7</sup>	1.0Hz to 550.0Hz (resolution : 0.1Hz) Setting accuracy : ±100ppm	
Phase when output is on <sup>*7</sup>	Setting range : 0.0deg. to 359.9deg. (resolution : 0.1deg.)	
Output voltage waveform <sup>*7</sup>	Sine wave, square wave, arbitrary wave (Up to 16 types can be saved.)	
Output voltage distortion rate	0.5% max. (50Hz/60Hz)	
Load regulation	0.5% max. (at output terminal under no load and rated resistance load)	
Line regulation	0.2% max. (power input voltage : 100V/120V/230V, no load, rated output)	

### Measurement Functions

Output voltage measurements	DC Average value, effective value, and peak value
Output current measurements	DC Average value, effective value, peak value, and peak value hold
Output power measurements	Active power, apparent power, and reactive power
Load power factor measurements	Measurement range : 0.00 to 1.00
Load crest factor measurements	Measurement range : 0.00 to 50.00
Output harmonic current measurements	Measurement range : up to 40th-order (AC internal oscillation mode, fundamental wave : 50/60Hz)
External synchronization frequency measurements	Measurement range : 38.0 to 525.0Hz (external synchronization mode)

### Sequence Functions (The signal source mode is internal only.)

Number of sequences	One sequence per AC/DC mode at both 100V and 200V range.
Number of steps	1 to 255 (within one sequence)
Step time	0.1ms to 999.9999s (resolution : 0.1ms)
Operations within step	Constant, held, or linear sweep
Parameters	DC voltage, AC voltage, frequency, waveform, step synchronization output of 2 bits
Number of jumps	1 to 999 or continuous
Sequence controls	Start, stop, hold and branch

\*The rated values assume the following conditions unless otherwise specified.

- The unit for AC voltage/current is the "effective value" (rms).
- Power input : AC 200V, 50Hz
- Output mode : AC-INT (AC internal signal source) mode
- Output frequency : 50Hz
- Output voltage : 100Vrms (200Vrms for 200V range)
- Output waveform : sine wave
- Load : resistance of 10Ω (40Ω for the 200V range)
- Output terminal : rear panel terminal block

### Other Functions

Limiters	Output peak current limiter, output average current limiter
Setting range limits <sup>*7</sup>	Voltage setting limits (lower limit ≤ upper limit) Frequency setting limits (lower limit ≤ upper limit)
External signal inputs	Gain : 100V range : 0.0 to 200.0 times 200V range : 0.0 to 400.0 times Input voltage : -2.2V to +2.2V Frequency range : DC to 550Hz
External synchronization	External synchronization signal/line, frequency range : 40Hz to 500Hz
Arbitrary waveform memory	Number of memories : 16 (writing via USB interface)
Protection functions	Protection against output, power unit, internal control, and internal temperature abnormalities
Miscellaneous functions	Memory setting (30 patterns), beep, key lock, output setting at power activation, reset function, self diagnosis function, external control I/O

### Power Input

Input voltage range	AC 100V to AC 230V ±10% (250V max.) 50Hz/60Hz ±2Hz (single phase)
Power consumption/power factor	1.4kVA max./0.95min. (AC 100V), 0.9min. (AC 200V)

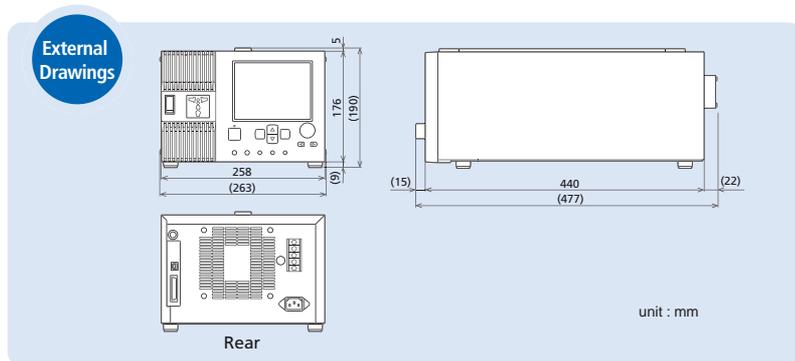
### General Information

Interface	USB interface (USBTMC)
Withstand voltages/insulation resistance	AC 1500V/30MΩ min., DC 500V (between power supply input and output/chassis in block, between power supply input/chassis in block and output)
Operation guarantee temperature /humidity ranges	0 to +40°C, 5 to 85% RH (Absolute humidity must be within 1 to 25g/m <sup>3</sup> , no condensation)
Dimensions	258(W)×176(H)×440(D) (not including protrusions)
Weight	Approx. 9.5kg
Accessories	Operation manual x1, control software x1, power cord set x2

### Control Software

Functions	Remote controls	Sets, saves, reads, and otherwise handles each parameter.
	Logging	Imports and saves measurement values.
	Arbitrary waveform data creation	Generates, edits, transfers, and displays waveforms and handles waveform files.
	Sequence editing	Creates, edits, saves, transfers, and previews sequence data, controls execution, and displays data on the monitor during execution.
Operating environment	CPU	Celeron 300MHz or higher
	Memory	256MB or more
	Hard disk	20GB or more (Free space of at least 10GB is required for installation.)
	OS	Windows 2000/XP
	Disk drive	CD-ROM drive
Interface	USB 1.1 or higher	

- \*1 Signal source modes: internal mode or internal/external mode, within the voltage setting limit.
- \*2 When 100V power supply is used for input, the maximum output range is limited to 130V AC (± 183V for DC) and 260V AC (± 366V for DC) in the 100V range and 200V range, respectively.
- \*3 When the voltage exceeds the rated output voltage (100V, 200V), the maximum output current and the maximum output peak current are limited due to the maximum output power capacities.
- \*4 If the output frequency is less than 40Hz or more than 400Hz, the maximum output current is limited.
- \*5 This is the value for the capacitor input rectifier circuit of which crest factor is less than or equal to 4.
- \*6 The peak value for AC and DC is less than or equal to the maximum output peak current.
- \*7 Only when the signal source mode is internal or internal/external. Only voltage setting limits when the signal source mode is external synchronization.



- The information contained in this catalog is current as of November 1, 2006.
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