ECO PRODUCTS

SANUPS E

HYBRID UPS

E11A

SANYO DENKI

English

SANUPS E11A

HYBRID UPS

100V model

Input	Output	Output capacity		
AC100,110,115,120V Single-phase	**AC100,110,115,120V** Single-phase	**1kVA** (0.7kW)	**1.5kVA** (1.05kW)	**2kVA** (1.4kW)

200V model

Input	Output	Output capacity	
AC200,208,220,230,240V Single-phase	**AC200,208,220,230,240V** Single-phase	**1kVA** (0.7kW)	**3kVA** (2.1kW)

UL (E226092), CE, FCC Part15 Subpart B Class A

The advancement of technology has increased the demand for quality power. In a perfect world, commercial power would always be stable and normal, however, we live in a world in which electricity from local utilities typically experiences anomalies such as spikes, surges, electrical noise, load fluctuations, and outages.

To protect your investments in technology equipment from these problems, informed users rely on SANYO DENKI SANUPS E11A products to resolve these power issues and provide continuous, clean power to connected equipment. Not only does the SANYO DENKI SANUPS E11A create continuous and clean power, it is an intelligent device in which power is consumed only when power conditions are unfavorable, making the unit highly efficient.

The SANYO DENKI SANUPS E11A Hybrid UPS provide highly efficient power protection to everything from heavy machinery and manufacturing devices to complex server systems and sensitive communication equipment (Voice and Data). With over 40 years of UPS experience, SANYO DENKI ensures the superior quality of the SANUPS E11A Hybrid UPS and provides the product equipped with extra long life batteries and a 3 year warranty. The SANUPS E11A Hybrid UPS - a product truly in a class of its own.

1 Hybrid UPS-Energy conservation

2 Self battery check feature

3 LAN Management options

Mounted in a 19-inch rack

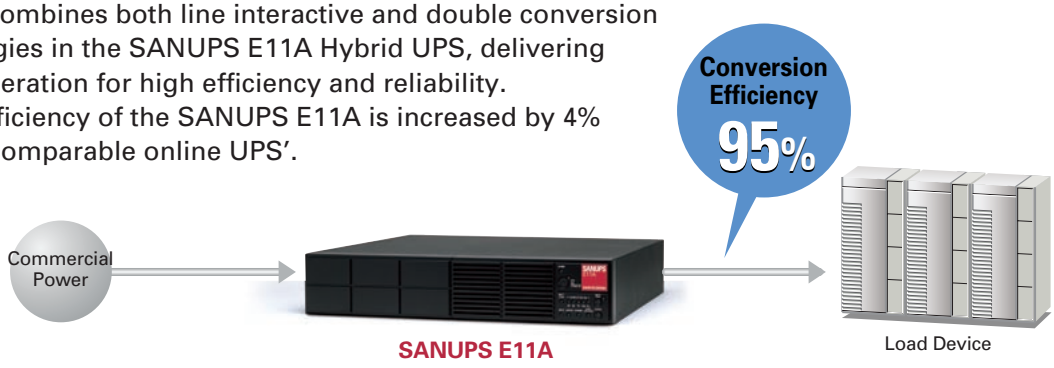
- Includes metal brackets for 19 inch rack installation.
- Rack support rail is optional.

Vertical Installation

- Includes vertical stand for upright support.

1 Hybrid UPS-Energy conservation

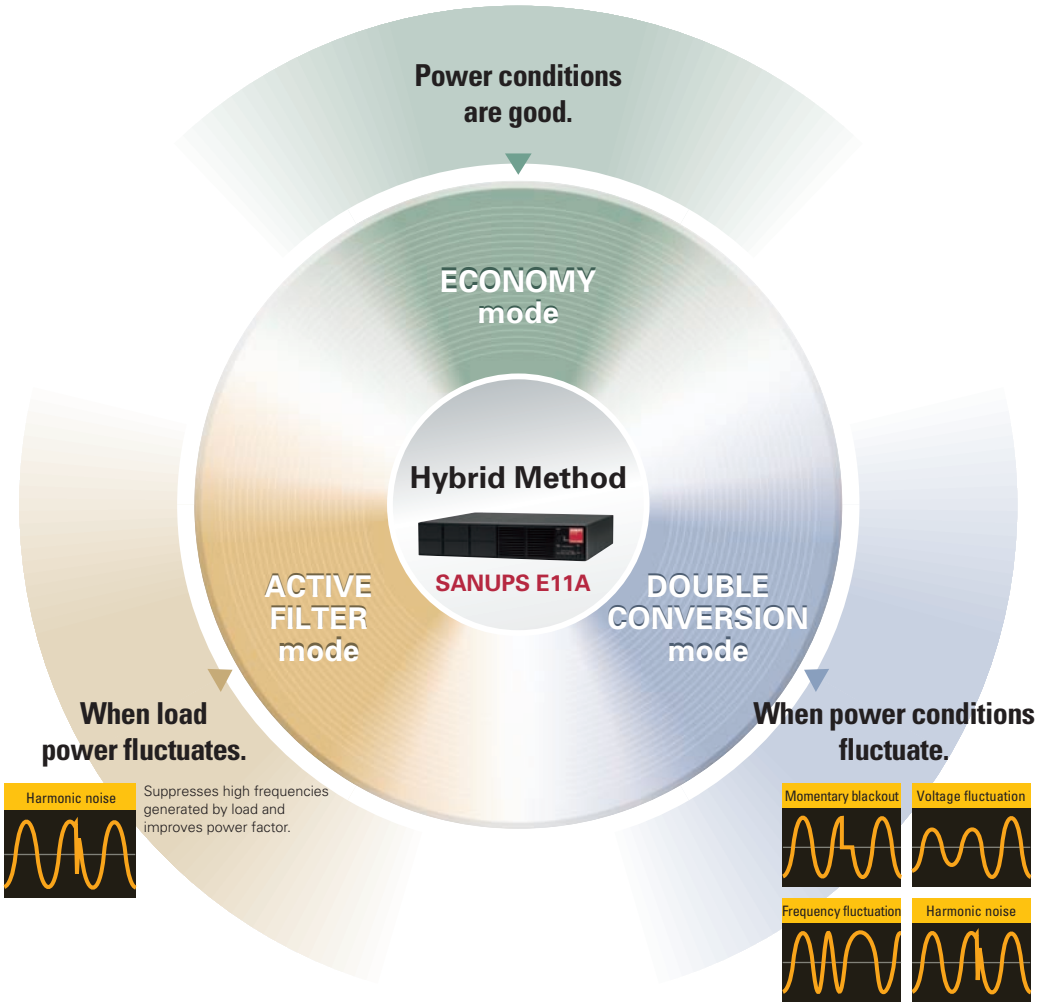
Sanyo Denki combines both line interactive and double conversion UPS technologies in the SANUPS E11A Hybrid UPS, delivering 3 modes of operation for high efficiency and reliability. Conversion efficiency of the SANUPS E11A is increased by 4% compared to comparable online UPS'.



The Hybrid Type SANUPS UPS E11A automatically selects the most efficient mode of operation for any given power condition.

Operating mode can be manually chosen and locked by the end user.

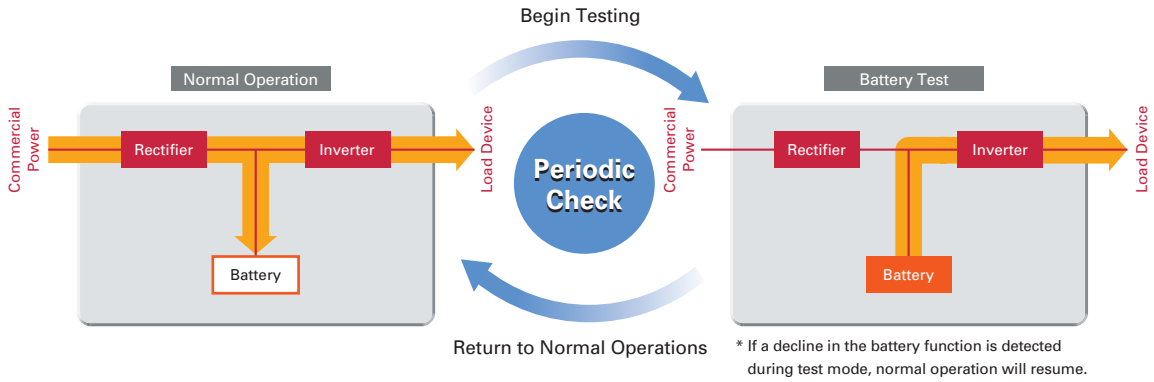
Different modes of operation:



2 Self battery check feature

The SANUPS E11A automatically performs regular battery tests for operation during a power outage, and maintains peak battery conditions for reliable operation during an actual power outage.

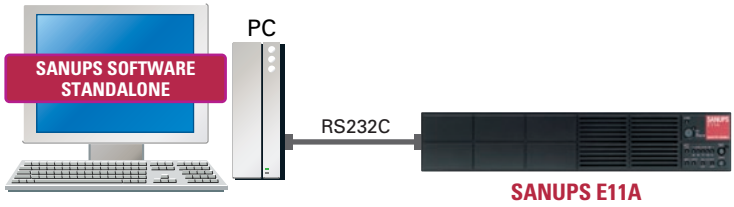
* The frequency of the battery test is open to configuration. (Test frequency choices are 1, 3 and 6 months; the factory setting is 6 months.)
* A LAN interface card (optional) is necessary to transmit the battery test results to the user's PC.

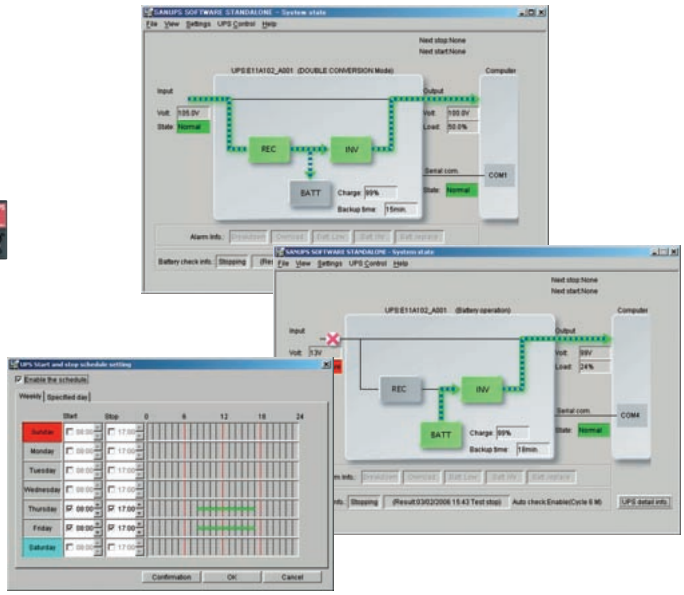


* If a decline in the battery function is detected during test mode, normal operation will resume.

3 LAN Management options

To increase user control over equipment protection, our stand-alone windows compatible UPS Management Software "SANUPS SOFTWARE STANDALONE" is provided as a standard accessory. Use it to improve the utility of the UPS, through useful functions such as monitoring UPS performance over a network connection and configuring shutdown settings.



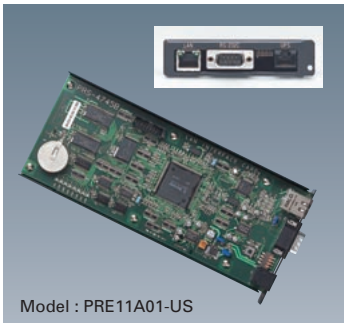


OS
Windows NT4.0
Windows 2000
Windows XP
Windows Server2003

Options

LAN Interface Card

A LAN Interface Card (100Base-TX) can be inserted in the optional card slot on the rear panel of the SANUPS E11A. This allows for continuous monitoring and reporting of power conditions, and quick response during power failures. Power problems can also be reported to the System Manager via e-mail when this Card is installed.



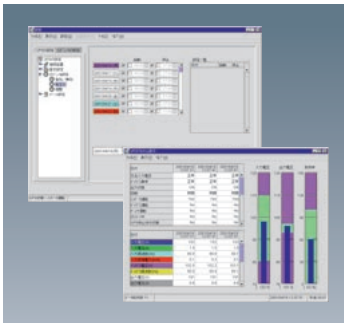
Model : PRE11A01-US

SANUPS SOFTWARE

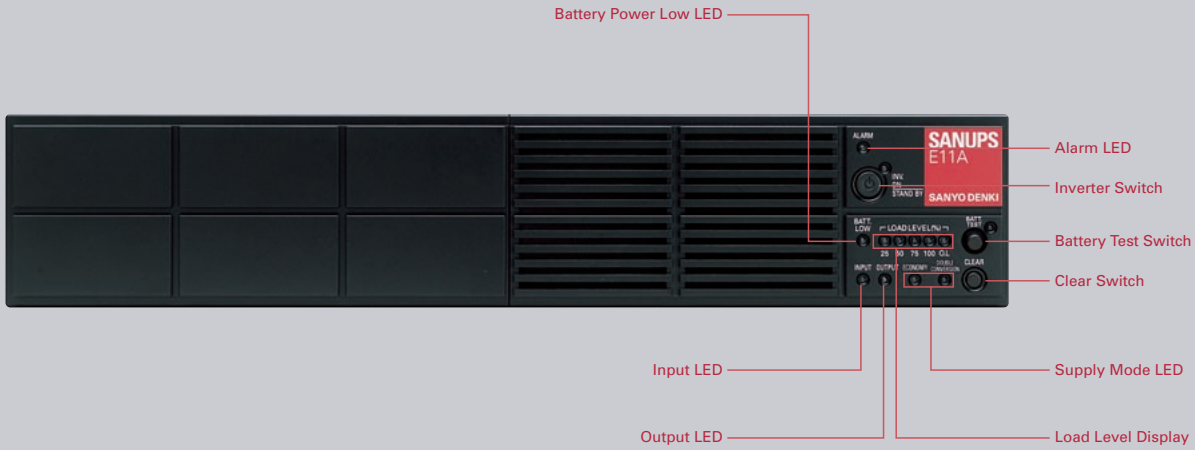
The SANUPS SOFTWARE UPS Power Management Software increases the reliability and manageability of the entire system, including the network and the server. It provides UPS information to the System Manager, and flexible settings for handling power-related problems.

*OPTIONAL LINUX / UNIX SOFTWARE AVAILABLE

OS
Windows (English)
Linux (English)
Unix (English)

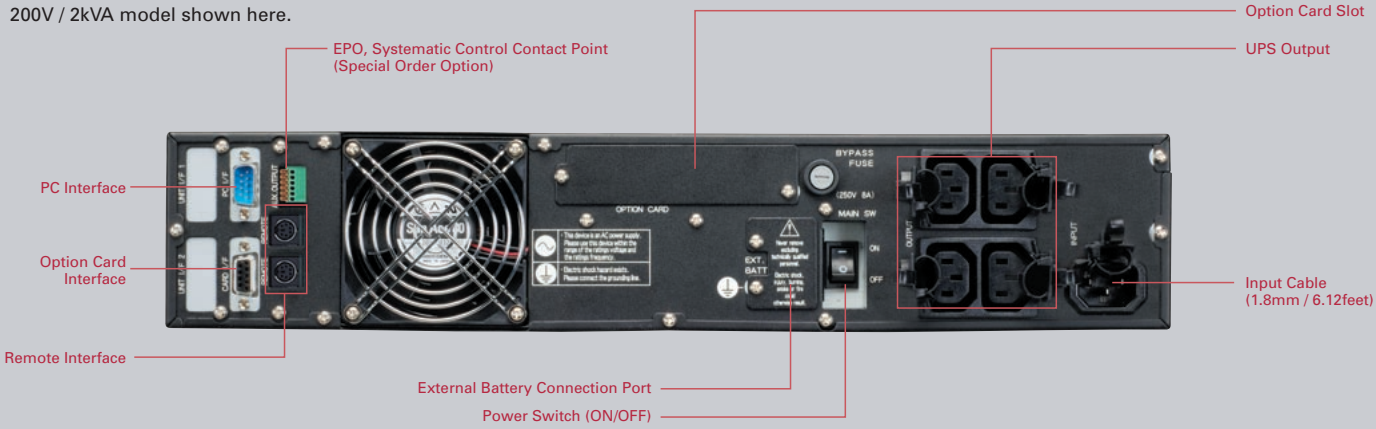


Front



Back

200V / 2kVA model shown here.



Interface & INPUT/OUTPUT Connection Chart

	Output (kVA)	Model*3	PC (RS-232C/UPS Service)	Remote	EPO*1	Systematic Control Contact Point	LAN Interface card (Option)	Contact signal interface card (Option)	INPUT Plug/Connection	OUTPUT Plug/Connection
100V model (100 to 120V)	1	E11A102A001	○	—	—	—	○	—	NEMA 5-15P	NEMA 5-15R×6
		E11A102A011	○	○	○	○	○	○		
	1.5	E11A152A001USJ	○	—	—	—	○	—	NEMA 5-20P	NEMA 5-20R×4
		E11A152A011USJ	○	○	○	○	○	○		
	2	E11A202A001USJ	○	—	—	—	○	—	NEMA L5-30P	NEMA L5-30R×1
		E11A202A011USJ	○	○	○	○	○	○		
200V model (200 to 240V)	1	E11A102A002□□□	○	—	—	—	○	—	IEC60320-C14*2	IEC60320-C13 x4
		E11A102A012□□□	○	○	○	○	○	○		
	3	E11A302A002□□□	○	—	—	—	○	—	IEC60320-C20*2	IEC60320-C19 x3
		E11A302A012□□□	○	○	○	○	○	○		

Special order item. Please contact you local sales representative for details.

*1 EPO=Emergency Power Off

*2 Please choose an input plug from the chart below.

Input Plug		*3
C TYPE		USE
O TYPE		C
NEMA L6-15P		USJ
NEMA L6-20P		USJ

*3 The AC200V's model end number (3 figures at the maximum) changes depending on the chosen input plug.

Input Plug and Output Receptacle Chart:

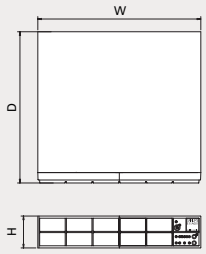
Input Plug	Output Receptacle
5-15P	5-15R
5-20P	5-20R
L5-30P	L5-30R
IEC60320-C14	IEC60320-C13
IEC60320-C20	IEC60320-C19

Specifications

Item			E11A			Remarks
			Economy mode	Active filter mode	Double Conversion mode	
Output power			1kVA(0.7kW)/ 1.5kVA(1.05kW)/ 2kVA(1.4kW)/ 3kVA(2.1kW)			
System	Topology		Hybrid			
	Cooling		Forced Air			
AC Input	Number of phase / wire		Single-phase / 2 wire			
	Nominal voltage	100V model	AC100,110,115,120V : 1kVA/1.5kVA/2kVA			
		200V model	AC200,208,220,230,240V : 1kVA/3kVA			
	Voltage range		-15%,+20% Max.			
	Frequency		50/60Hz Auto-sensing			
	Frequency range		±1/3/5% Max.		±10%Max.	User selectable
	Power factor		0.7(lag)	0.9Min.	0.95Min.	<1% Input voltage distortion
AC Output	Number of phase / wire		Single-phase / 2 wire			
	Power factor		0.7(lag)			
	Nominal voltage	100V model	AC100,110,115,120V : 1kVA/1.5kVA/2kVA			
		200V model	AC200,208,220,230,240V : 1kVA/3kVA			
	Voltage regulation		±10%Max.	±5%Max.	±2%Max.	
	Frequency		Same as Input frequency			Same as input frequency
	Frequency range	On Normal Operation	±1/3/5% Max.		±1% Max.	User selectable
		On Battery Operation	±0.5% Max.			
	Voltage distortion	Linear load	-		3%Max.	During rated operations
		Non-linear load	-		7%Max.	During rated operations / 100% rectifier load
	Transient voltage regulation	Input Voltage step	±5%Max.			Power failure: feedback or supply fluctuation
		100% step load	-		±5%Max.	0% : at the time of 100% sudden fluctuation
	Overcurrent capacity		Greater than 200% (30 second interval)		105%(200ms)	Rated load power factor / at rated input
			Greater than 800% (2 cycle)		-	
Overcurrent protection			Fuse Protection (1kVA), Breaker Protection (1.5, 2, 3kVA)		Bypass Non-Hit Change (Auto Return)	
Battery	Type		Maintenance Free Sealed Lead-Acid Battery (small)			
	Backup time		5 minutes			Ambient Temp. of 25℃, under rated load
Acoustic noise			40dB Max. (1kVA,1.5kVA,2kVA), 45dB MAX.(3kVA)			At 1m (40in) from the front of unit
Nominal heat dissipation			40W/55W/75W/110W	65W/90W/125W/185W	125W/185W/250W/370W	1kVA/1.5kVA/2kVA/3kVA
Environment	Operating temperature		0 to 40℃			
	Relative humidity		20 to 90%			Non-condensing
Standard of safety			UL(E226092), CE, FCC Part15 Subpart B Class A			

A momentary power interruption lasting less than 3 ms occurs when switching from Economy Mode or Active Filter Mode to battery power.
The unit can also be fixed to the Double Conversion Mode for applications that require zero transfer time from utility power to battery power.
Please contact your local sales representative for additional input and ouput voltage options.

External dimensions



PaintColor: Black (Munsell N1.5)

Output power (kVA)	Dimensions			Mass (Weight)
	Width (W)	Depth (D)	Height (H)	
1kVA	440mm (17.32in)	408mm (16.06in)	86mm (3.39in)	17kg (37.5lbs)
1.5kVA		500mm (19.66in)		22kg (48.5lbs)
2kVA		565mm (22.24in)		29kg (63.9lbs)
3kVA		750mm (29.53in)		37kg (81.6lbs)

Run-time chart

Item		E11A102A	E11A152A	E11A202A	E11A302A
Maximum Output (VA)		1000	1500	2000	3000
Maximum Output (W)		700	1050	1400	2100
VA	W	Run-time (Min)			
100	70	87	134	150	240
200	140	48	71	87	150
300	210	30	48	61	87
400	280	20	34	48	71
500	350	15	24	37	69
600	420	12	20	30	48
700	490	9	17	25	40
800	560	7	14	20	34
900	630	6	12	18	31
1000	700	5	10	15	28
1200	840		7	12	20
1400	980		6	9	17
1500	1050		5	8	16
1600	1120			7	14
1800	1260			6	12
2000	1400			5	10
2200	1540				9
2400	1680				8
2600	1820				7
2800	1960				6
3000	2100				5

The above run-time value assumes a load power factor = 0.7.

Figures should be used for reference only. Actual backup times depend on charging conditions, ambient temperature, years in use, etc.

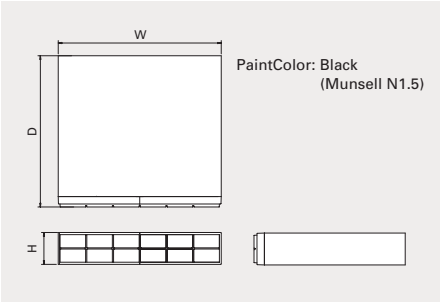
Option

Item	Model	
Rack support rail	**RM014R**	Used for mounting the UPS onto a 19 inch rack. Supports depth of 555mm-913mm.
Remote switch	**RSW006R**	Used for remotely turning on or off outlets 1,2 of the UPS.
Contact signal interface card	**PRASE02R**	Transmits contact signals containing information on the operation status of the UPS. Use to interface with UPS surveilance systems or customer equipment.

■External battery

Output Power (kVA)	Run-time (Min)			
	20	30	40	60
1	**BCE11A102A01**	**BCE11A102A02**	**BCE11A102A01** (x2)	**BCE11A102A02** (x2)
1.5	**BCE11A152A01**	**BCE11A152A02**	**BCE11A152A01** (x2)	**BCE11A152A02** (x2)
2	**BCE11A202A01**	**BCE11A202A02**	**BCE11A202A01** (x2)	**BCE11A202A02** (x2)
3	**BCE11A302A01**	—	**BCE11A302A01** (x2)	—

External demensions



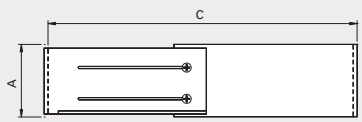
Model	Dimensions			Mass (Weight)
	Width	Depth	Height	
BCE11A102A01	440 (17.32in)	408(16.06in)	86 (3.39in)	20(9.07lbs)
BCE11A102A02		508(20in)		29(13.15lbs)
BCE11A152A01		500(19.66in)		26(11.79lbs)
BCE11A152A02		600(23.62in)		38(17.24lbs)
BCE11A202A01		565(22.24in)		34(15.42lbs)
BCE11A202A02		630(24.80in)		47(21.32lbs)
BCE11A302A01		750(29.53in)		50(22.68lbs)

■Support rail

External demensions

○Effective Dimensions (when fully retracted)

○Effective Dimensions (when fully extended)



A	B	C
86.6mm (3.41in)	555mm (21.58in)	913mm (35.94in)

■ ECO PRODUCTS

ECO PRODUCTS

ECO PRODUCTS are designed with the goal of lessening environmental impact, from product development to disposal.

SANUPS

SANYO DENKI UNIVERSAL POWER SYSTEM

Notes when investigating use of this product in your applications

●Before starting installation, assembling and use, read the "Operation Manual" carefully and use the product correctly in your applications.
●When you are going to use this product in the following application, the special considerations are required for operation, running, maintenance and control. Be sure to consult with our company as a part of your investigations.
(a) Medical equipment and other equipment that are related directly to human life.
(b) Train or elevator that can give injury to human body.
(c) Socially and publicly important computer systems
(d) And other equipment that are related to safety of human life and that can affect severe effects on maintenance of public functions.
●For the applications that undergo vibration such as vehicles, ships and transportation facilities, please consult with our company.
●Never modify this product or give additional processing to this product.
●For the installation and maintenance work, please consult with our company or with specialized company.

※For any inquiry or consultation, please contact our sales representative.

Our company has acquired ISO9001 assessments.

Products shown by this catalog are manufactured by the plants that are controlled by the severe quality control system conforming to the ISO9001 assessments.

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*Remarks : Specifications Are Subject To Change Without Notice.

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