

How to read this sizing guide:

1. Choose which level of power protection you desire (3-, 5-, 9-series UPS).
2. Choose the load you want to protect from the top horizontal line. To determine how much power your computer or equipment consumes, check its label. Electric power is measured in watt (W) or voltampere (VA). In some instances, just the power usage is measured in ampere (A).
 - If the label states A (Amp), multiply by 230V. The result is the VA power.
 - If it states W (Watt), divide by 0.7. The result is the VA power.

- In case you want to secure future expansion capabilities, it is advisable to make an overestimate of 20-30%.
3. Follow the column down until you find the figure indicating your desired back-up time (in minutes unless otherwise indicated). The leftmost column shows you the correct UPS solution for the task.

Runtimes are typical values and calculated for typical computer loads.

We also recommend you to use the Eaton UPS Selector on www.eaton.com/powerquality

Load	250 VA	500 VA	750 VA	1000 VA	1500 VA	2000 VA	2500 VA	3000 VA
Tower models								
Series 3, stand-by								
3S 550 VA	10	4						
3S 700 VA	14	6	3 ¹					
Series 5, line-interactive								
5110 500 VA	8	3						
5110 700 VA	14	6	3 ¹					
5110 1000 VA	35	15	10					
5115 500 VA	15	5						
5115 750 VA	35	13	6					
5115 1000 VA	38	15	8	5				
5115 1400 VA	55	28	14	8	5 ²			
Series 9, double conversion								
9130 700 VA*	20	8	5 ³					
9130 1000 VA*	30	19	9	6				
9130 1000 VA + 1 battery cabinet*	124	68	43	32				
9130 1000 VA + 2 battery cabinet*	272	111	80	52				
9130 1000 VA + 3 battery cabinet*	368	193	108	82				
9130 1000 VA + 4 battery cabinet*	482	246	158	100				
9130 1500 VA*	-	22	14	9	6			
9130 1500 VA + 1 battery cabinet*	-	85	60	40	25			
9130 1500 VA + 2 battery cabinet*	-	165	112	77	45			
9130 1500 VA + 3 battery cabinet*	-	250	172	117	72			
9130 1500 VA + 4 battery cabinet*	-	280	191	140	90			
9130 2000 VA*	-	55	40	28	17	11		
9130 2000 VA + 1 battery cabinet*	-	199	139	96	60	48		
9130 2000 VA + 2 battery cabinet*	-	336	226	168	112	93		
9130 2000 VA + 3 battery cabinet*	-	490	311	258	164	127		
9130 2000 VA + 4 battery cabinet*	-	608	444	336	203	162		
9130 3000 VA*	-	55	40	28	16	12	8	7
9130 3000 VA + 1 battery cabinet*	-	199	139	96	60	40	30	21
9130 3000 VA + 2 battery cabinet*	-	336	226	168	109	80	60	52
9130 3000 VA + 3 battery cabinet*	-	490	311	258	169	125	98	87
9130 3000 VA + 4 battery cabinet*	-	608	444	336	215	160	125	104

1) 3S 700 VA and 5110 700 VA backup time 3 min with 700 VA load 2) 5115 1400 VA backup time 5 min with 1400 VA load 3) 9130 700 backup time 5 min at 700 VA load
 *) NOTE: 9130 back-up times given with output power factor 0.9

Load	1000 VA	2000 VA	3000 VA	4 kVA	5 kVA	6 kVA
Series 9, double conversion hardwired UPS						
9130 5/6 kVA*	75	27	19	12	9	6*
9130 5/6 kVA + 1 EBM*	280	120	78	56	41	33*
9130 5/6 kVA + 2 EBM*	480	220	148	102	79	64*
9130 5/6 kVA + 3 EBM*	685	320	211	160	117	96*
9130 5/6 kVA + 4 EBM*	870	420	266	205	162	130*

*) NOTE: 9130 back-up times given with output power factor 0.9, 6 kVA runtime only for 9130 6000

Load	3 kVA	4 kVA	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA	15 kVA
9155 8-15 kVA; 9355 8-15 kVA, with internal battery								
9155/9355 + 1 battery cabinet (7Ah battery)	36	26	20	15	10	6		
9155/9355 + 2 battery cabinets (7Ah battery)	86	66	46	38	28	20	15	10
9155/9355 + 1 battery cabinet (9Ah battery)	42	32	24	21	15	10	8	5
9155/9355 + 2 battery cabinets (9Ah battery)	95	74	61	44	33	25	20	15

Load	1250VA	2500VA	5000VA	7500VA	10 kVA
9SX 8 and 11 kVA					
9SX 8/11kVA	59	18	6	4	2,5*
9SX 8/11kVA + 1 EBM	128	47	20	11	8*
9SX 8/11kVA + 2 EBM	199	81	35	20	13*
9SX 8/11kVA + 3 EBM	279	109	50	27	21*
9SX 8/11kVA + 4 EBM	392	135	65	42	30*
9SX 8/11kVA + 5 EBM	491	163	85	55	38*

*) NOTE: 10 kVA runtime only for 9SX 11000

Load	5 kVA	10 kVA	15 kVA	20 kVA	25 kVA	30 kVA	35 kVA	40 kVA
9155 20-30 kVA; 9355 20-40 kVA, with internal battery								
9155/9355 + 2 battery cabinets (7Ah battery)	60	24	14	10	6			
9155/9355 + 3 battery cabinets (7Ah battery)	103	41	26	17	12	10	7	5
9155/9355 + 4 battery cabinets (7Ah battery)	152	55	40	26	18	15	11	9
9155/9355 + 1 battery cabinet (9Ah battery)	30	12	7	5				
9155/9355 + 2 battery cabinets (9Ah battery)	70	28	18	13	10	7	5	
9155/9355 + 3 battery cabinets (9Ah battery)	115	46	31	22	16	13	10	8
9155/9355 + 4 battery cabinets (9Ah battery)	158	63	42	31	23	20	15	12

Load	250 VA	500 VA	750 VA	1000 VA	1500 VA	2000 VA	2500 VA	3000 VA	4 kVA	5 kVA	6 kVA
Rackmount models											
Series 5, line-interactive											
5115 RM 500 VA	15	5									
5115 RM 750 VA	35	13	6								
5115 RM 1000 VA	38	15	8	5							
5115 RM 1500 VA	55	28	14	8	5						
5130 1250 VA*	40	20	10	6							
5130 1750 VA*	45	20	12	8	5						
5130 2500 VA*	75	34	20	12	8	5	3				
5130 3000 VA*	90	40	25	15	11	7	5	3			

*) NOTE: 5130 RM back-up times given with output power factor 0.9.

Series 9, double conversion											
9130 RM 1000 VA*	30	19	9	6							
9130 RM 1000 VA + 1 EBM*	124	68	43	32							
9130 RM 1000 VA + 2 EBM*	272	113	80	52							
9130 RM 1000 VA + 3 EBM*	368	193	108	82							
9130 RM 1000 VA + 4 EBM*	483	246	158	100							
9130 RM 1500 VA*	-	22	14	9	6						
9130 RM 1500 VA + 1 EBM*	-	85	60	40	25						
9130 RM 1500 VA + 2 EBM*	-	165	112	77	45						
9130 RM 1500 VA + 3 EBM*	-	250	172	117	72						
9130 RM 1500 VA + 4 EBM*	-	280	191	140	90						
9130 RM 2000 VA*	-	40	26	17	9	6					
9130 RM 2000 VA + 1 EBM*	-	155	102	72	47	33					
9130 RM 2000 VA + 2 EBM*	-	277	185	129	83	59					
9130 RM 2000 VA + 3 EBM*	-	398	263	183	130	88					
9130 RM 2000 VA + 4 EBM*	-	509	344	260	161	119					
9130 RM 3000 VA*	-	40	26	17	9	6	4,5	3,5			
9130 RM 3000 VA + 1 EBM*	-	155	102	72	47	33	25	19			
9130 RM 3000 VA + 2 EBM*	-	277	185	129	83	59	45	34			
9130 RM 3000 VA + 3 EBM*	-	398	263	183	122	88	68	53			
9130 RM 3000 VA + 4 EBM*	-	509	344	260	165	119	90	69			

*) NOTE: 9130 back-up times given with output power factor 0.9

Load	1kVA	2kVA	3kVA	4kVA	5kVA	6kVA
9SX 5 and 6 kVA						
9SX 5/6kVA	33	13	9	5	4	3*
9SX 5/6kVA + 1 EBM	125	60	38	25	20	16*
9SX 5/6kVA + 2 EBM	225	110	71	50	38	28*
9SX 5/6kVA + 3 EBM	325	160	104	75	54	47*
9SX 5/6kVA + 4 EBM	450	220	133	95	80	58*
9SX 5/6kVA + 5 EBM	550	270	170	125	101	82*
9SX 5/6kVA + 6 EBM	650	320	206	150	115	100*

*) NOTE: *6 kVA runtime only for 9SX 6000

Load	1250VA	2500VA	5000VA	7500VA	10kVA
9SX 8 and 11 kVA					
9SX 8/11kVA	59	18	6	4	2,5*
9SX 8/11kVA + 1 EBM	128	47	20	11	8*
9SX 8/11kVA + 2 EBM	199	81	35	20	13*
9SX 8/11kVA + 3 EBM	279	109	50	27	21*
9SX 8/11kVA + 4 EBM	392	135	65	42	30*
9SX 8/11kVA + 5 EBM	491	163	85	55	38*

*) NOTE: 10 kVA runtime only for 9SX 11000

Load	# 42U Rack	4 KW	8 KW	12 KW	24 KW	36 KW	48 KW	60 KW
BladeUPS								
1 x BladeUPS (12 KW Internal battery)	6	6	1	23	8,7	4,7		
+ 1 External Battery Module	9	9	1	41	17,6	9,5		
+ 2 External Battery Module	12	12	1	65	28	17		
+ 3 External Battery Module	15	15	1	93	43	27		
+ 4 External Battery Module	18	18	1	119	55	34		
2 x BladeUPS (12 KW N+1 Internal battery)	12	18	1	44	23	13,6		
+ 1 External Battery Module	18	24	1	85	41	27		
+ 2 External Battery Module	24	30	1	137	65	41		
+ 3 External Battery Module	30	36	1	198	93	59		
+ 4 External Battery Module	36	42	2	257	119	76		
3 x BladeUPS (24 KW N+1 Internal battery)	18	24	1		34	23	8,7	
+ 1 External Battery Module	27	33	1		34	41	17,6	
+ 2 External Battery Module	36	42	2		102	65	28	
+ 3 External Battery Module	45	51	2		147	93	43	
+ 4 External Battery Module	54	60	2		190	119	55	
4 x BladeUPS (36 KW N+1 Internal battery)	24	30	1		30	13,6	7,3	
+ 1 External Battery Module	36	42	2		56	27	14,7	
+ 2 External Battery Module	48	54	2		89	41	24	
+ 3 External Battery Module	60	66	2		128	59	37	
+ 4 External Battery Module	72	78	2		165	76	47	
5 x BladeUPS (48 KW N+1 Internal battery)	30	36	1			19	10	6,6
+ 1 External Battery Module	45	51	2			34	21	13,3
+ 2 External Battery Module	60	66	2			54	31	23
+ 3 External Battery Module	75	81	2			77	48	35
+ 4 External Battery Module	90	96	3			98	61	44
6 x BladeUPS (60 KW N+1 Internal battery)	36	42	2			23	13,5	8,7
+ 1 External Battery Module	54	60	2			41	27	17,6
+ 2 External Battery Module	72	78	2			65	41	28
+ 3 External Battery Module	90	96	3			93	59	43
+ 4 External Battery Module	108	114	3			119	76	55

*) NOTE: each UPS requires the same number of external batteries

Time in minutes

More back-up times and technical specifications can be found on: www.eaton.com/powerquality

In the interests of continual product improvement all specifications are subject to change without notice.

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PRODUCT	PART NUMBER	RATING	DIMENSIONS WxDxH (mm)	INPUT CONNECTION						
	EATON 3S	3S550FR 3S550DIN 3S550IEC 3S700FR 3S700DIN 3S700IEC	550FR 550DIN 550IEC 700FR 700DIN 700IEC	140x335x86 140x335x86 140x335x86 170x335x86 170x335x86 170x335x86	Attached cable Attached cable IEC320/10A Attached cable Attached cable IEC320/10A					
		EATON 5110	103004261-5591 103004262-5591 103004263-5591	500 VA 700 VA 1000 VA	87x260x270 87x260x270 87x384x270	IEC320/10A IEC320/10A IEC320/10A				
			EATON 5115	05146549-5591 05146555-5591 05146561-5591 05146567-5591	500 VA 750 VA 1000 VA 1400 VA	150x268x185 150x333x185 150x333x185 150x388x185	IEC320/10A IEC320/10A IEC320/10A IEC320/10A			
				EATON 5115 RM	103003267-6591 103003270-6591 103003273-6591 103003276-6591	500 VA 750 VA 1000 VA 1500 VA	440x580x45 440x580x45 440x580x45 440x580x45	IEC320/10A IEC320/10A IEC320/10A IEC320/10A		
				EATON 5130	103006590-6591 103006591-6591 103006592-6591 103006593-6591 103006594-6591	1250 VA 1750 VA 2500 VA 3000 VA 3000 VA	440x509x86 440x509x86 440x634x86 440x634x86 440x484x131	IEC320/10A IEC320/10A IEC320/16A IEC320/16A IEC320/16A		
					EATON 9130	103006433-6591 103006434-6591 103006435-6501 103006436-6591 103006437-6591 103007841-6591 103007842-6591	700 VA 1000 VA 1500 VA 2000 VA 3000 VA 5000 VA 6000 VA	160x350x230 160x380x230 160x430x230 214x410x325 214x410x325 244x542x574 244x542x574	IEC320/10A IEC320/10A IEC320/10A IEC320/10A IEC320/16A Hardwired Hardwired	
		EATON 9130 RM			103006455-6591 103006456-6591 103006457-6591 103006463-6591	1000 VA 1500 VA 2000 VA 3000 VA	438x450x87 438x450x87 438x600x87 438x600x87	IEC320/10A IEC320/10A IEC320/10A IEC320/16A		
			EATON 9SX		9SX5KiRT 9SX6KiRT 9SX8Ki 9SX8KiRT 9SX11Ki 9SX11KiRT	5000VA 6000VA 8000VA 8000VA 11000VA 11000VA	440x685x130 440x685x130 440x700x260 440x700x260 440x700x260 440x700x260	Hardwired Hardwired Hardwired Hardwired Hardwired Hardwired		
					EATON 9155	9155-8I-S, 9155-8I-N* 9155-10I-S, 9155-10I-N* 9155-12I-N* 9155-15I-N* 9155-20-N* 9155-30-N*	8 kVA 10 kVA 12 kVA 15 kVA 20 kVA 30 kVA	305x702x817, 305x702x1214* 305x702x817, 305x702x1214* 305x702x817, 305x702x1214* 305x702x817, 305x702x1214* 494x762x1684, 494x758x1684* 494x762x1684, 494x758x1684*	1-ph (8/10 kVA), 3-ph (8-15 kVA) input hardwired, Bypass input (redundancy) hardwired	
					EATON 9355	9355-8-N* 9355-10-N* 9355-12-N* 9355-15-N* 9355-20-N* 9355-30-N* 9355-40-N*	8 kVA 10 kVA 12 kVA 15 kVA 20 kVA 30 kVA 40 kVA	305x702x817, 305x702x1214* 305x702x817, 305x702x1214* 305x702x817, 305x702x1214* 305x702x817, 305x702x1214* 494x762x1684 494x762x1684 494x762x1684		3-ph input hardwired, Bypass input (redundancy) hardwired
					<i>* part description</i>	<i>* with extra runtime</i>				
					EATON BladeUPS	ZC122440110000 ZC122P06010000	12 kVA 12 kVA	442x660x261 (6U) 442x660x261 (6U)		

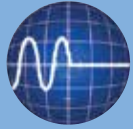
OUTPUT CONNECTION	ACCESSORIES	OPTIONS
3xFrench+3xFrench surge only 3xSchuko+3xSchuko surge only 4xIEC320/10A+4 IEC320/10A surge only 3xFrench+3xFrench surge only 3xSchuko+3xSchuko surge only 4xIEC320/10A+4 IEC320/10A surge only	USB cable 2 x IEC-IEC load cables (IEC models only)	
4xIEC320/10A+4 IEC320/10A surge only 4xIEC320/10A+4 IEC320/10A surge only 4xIEC320/10A+4 IEC320/10A surge only	2 x IEC-IEC load cables Software & USB cable RJ 11 cable, Software Suite CD	
4xIEC320/10A 4xIEC320/10A 6xIEC320/10A 6xIEC320/10A	2 x IEC-IEC load cables USB cable RS cable Software Suite CD	External Web/SNMP adapter
4xIEC320/10A 4xIEC320/10A 4xIEC320/10A 4xIEC320/10A	2 x IEC-IEC load cables USB cable, RS cable Software Suite CD Rack slides	ConnectUPS-X Web/SNMP card, Relay/AS400 card,
8xIEC320/10A 8xIEC320/10A 8xIEC320/10A; 1xIEC320/16A 8xIEC320/10A; 1xIEC320/16A 8xIEC320/10A; 1xIEC320/16A	2 x IEC-IEC load cables, USB cable, RS cable, Rack rail kit, Tower mounting kit, Software Suite CD; Schuko IEC input cable (2.5 & 3kVA models)	External battery cabinet, External Service Bypass switch, ConnectUPS-MS Network Management Card, Relay/Serial Management Card -MS
6xIEC320/10A 6xIEC320/10A 6xIEC320/10A 8xIEC320/10A; 1xIEC320/16A 8xIEC320/10A; 1xIEC320/16A Hardwired Hardwired	Schuko-IEC input cable; 2 x IEC-IEC load cables, IEC-3-schuko strip output cable, USB cable, RS cable, Software Suite CD USB cable, RS cable, Software Suite CD USB cable, RS cable, Software Suite CD	External battery cabinet, External Service Bypass switch, ConnectUPS-MS Web/SNMP card, Relay/AS400 card
6xIEC320/10A 6xIEC320/10A 8xIEC320/10A; 1xIEC320/16A 8xIEC320/10A; 1xIEC320/16A	Schuko-IEC input cable; 2 x IEC-IEC load cables, IEC-3-schuko strip output cable, USB cable, RS cable, Rack rail kit, Software Suite CD	External battery cabinet, External Service Bypass switch, ConnectUPS-MS Web/SNMP card, Relay/AS400 card
Hardwired; 8xIEC320/10A; 2xIEC320/16A Hardwired; 8xIEC320/10A; 2xIEC320/16A Hardwired Hardwired Hardwired Hardwired	USB cable, RS cable, Software Suite CD, Rack Rail kit (on RT models), 2 x IEC-IEC load cables (on 5 & 6kVA models)	External battery cabinet, Network Management Card, Relay/Serial Management Card, ModBus Card, Maintenance Bypass
1-ph, output hardwired 1-ph, output hardwired 1-ph, output hardwired 1-ph, output hardwired 1-ph, output hardwired 1-ph, output hardwired	RS cable Software Suite CD	External battery cabinets, ConnectUPS-X Web/SNMP card, Relay/AS400 card, Isolation Transformer
3-ph, output hardwired 3-ph, output hardwired 3-ph, output hardwired 3-ph, output hardwired 3-ph, output hardwired 3-ph, output hardwired 3-ph, output hardwired	RS cable Software Suite CD	External battery cabinets, ConnectUPS-X Web/SNMP card, AS400 card, Isolation Transformer
IEC 309/32A and Connector for RPM Parallel cord for BladeBar in/out	Rail & Accessory Kit Web SNMP (with single unit) RS cable Software Suite CD	External battery cabinets, ConnectUPS-X Web/SNMP card, Relay/AS400 card, Blade Bar kit, Blade UPS Rack, RPM (Rack Power Module)

QUICK GUIDE

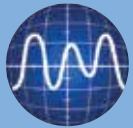
Choosing the right UPS

Powerware Series

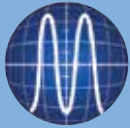
Categorization of UPS products into three different series makes it easy to choose a UPS solution. The products are divided according to how many types of power failure the individual UPS protects against.



1. POWER FAILURE



2. POWER SAG

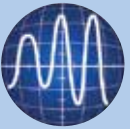


3. POWER SURGE

Series 3: Off Line



4. UNDERVOLTAGE

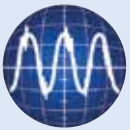


5. OVERVOLTAGE

Series 5: Line Interactive



6. SWITCHING TRANSIENT



7. LINE NOISE



9. HARMONIC DISTORTION



8. FREQUENCY VARIATION

Series 9: Double Conversion

Determine the level of power protection

Series 3 Single Conversion ("Off-Line")

Basic solutions to protect non-critical hardware and data against three of the nine power problems.

Typical applications: Standalone PCs, telefax, home equipment, etc.

Series 5 Line Interactive

Higher protection level against 5 types of power problems

Intermediate solutions for office environment and servers featuring good communication options. These UPSs provide protection against the five most common power problems.

Typical applications: PC/small servers, network equipment, small storage equipment, etc.

Series 9 Double Conversion, ("On-Line")

Full power protection against all 9 types of power problems

These double-conversion UPSs with excellent connectivity and communication features provide full protection against all nine types of power problems.

Typical applications: Critical 24/7 servers, other critical IT applications, etc.

Complement your UPS system with Eaton ePDU

Eaton ePDUs complement your UPS systems, distributing power anywhere conditioned power must be supplied to multiple pieces of equipment.

Basic ePDU (BA) features rugged construction and flexible mounting options.

Metered ePDU (ME) offers the EasyRead Digital LED Ammeter for easy start-up and provisioning of servers.

Monitored ePDU (MI) offers customers a choice of remotely monitoring the current draw of individual outlets via Ethernet. It also includes the EasyRead Digital LED Ammeter for easy start-up and provisioning of servers.

Managed ePDU (MA) features advanced LED display, remote monitoring and management of individual outlets. User-definable sequencing of outlets and time delays permit controlled remote boot-up of servers. Virtual grouping of outlets allows single-click reboot of multicorded servers.

for more information on ePDUs – see www.ePDU.com

