



ONEAC Product Selection Guide

Making the world safe for electronics

Confidence in reliability

Those who depend upon electronic-based systems to conduct business, demand confidence that problem power will not disrupt the performance of those systems. ONEAC delivers that confidence. With a unique set of tools we've developed to condition the electrical environment. To control it. Adapt it and back it up. And to respond to it automatically when no one's around. Plus we provide our knowledge. Knowledge of the potential problems inherent in the electrical environment... of the impact on productivity, and profitability, those problems can have. And the knowledge of what it takes to solve them.

A complete approach

Computers, medical instrumentation, telecommunications and manufacturing systems, all rely on the performance of semiconductors. And the performance of semiconductors relies on clean power — power free from all electrical interference. To achieve it requires an interface that isolates semiconductors from the electrical world they connect to.

This interface must limit both peak voltage (amplitude) and edge-speed (frequency) of electrical transients. It must control the electrical environment without introducing undesirable side effects. And convert a noisy safety ground to a noise-free signal ground. These principles form the basis of ONEAC's innovative technologies. Technologies that haven proven uniquely effective against all conducted electrical disturbances.

A different kind of product

By any technical measure, ONEAC products set the performance standards for our industry. But the only difference that matters to our customers is how well our products do what we designed them to do — keep electronics operating reliably.

Even in the noisiest, most brutal electrical environments — environments where the limitations of alternative products become painfully apparent. ONEAC delivers a higher level of confidence for the people who choose us.

How to use this selection guide

We've designed this guide to make it simple for you to specify the right product for your application. Below is a listing of the four product groups we manufacture. For each, we've described the type of protection provided.

1. Read the descriptions below to select the proper product group for your application.
2. Turn to the page indicated for detailed instructions that will guide you, step by step, through the process of specifying the ONEAC model and part number best suited for the electronic equipment you wish to protect.

POWER CONDITIONERS **PAGE 4**

ONEAC power conditioners clean up contaminated power by removing power line noise, while protecting against lightning, spikes, and transients. Used to safeguard sensitive microprocessor-based electronic equipment, they extend equipment life and insure trouble-free operation.

CONDITIONED UPS SYSTEMS **PAGE 17**

ONEAC conditioned uninterruptible power supply systems are power conditioners with batteries that provide back-up power to ride through blackouts, brownouts and power line sags. Used to protect mission critical electronic components such as network servers, and telephone system controllers, they prevent data loss, corruption, and protect hardware against damage from all forms of power disturbances.

POWER MANAGEMENT AND DIAGNOSTIC SOFTWARE **PAGE 24**

ONEAC Interface Accessory Kits add intelligent features to ONEAC conditioned UPSs. Specify them to support network communications, automated power fail response, power monitoring and remote management capabilities.

COMMUNICATION LINE PROTECTORS **PAGE 26**

OnLine telephone and data line protectors shield voice and data switching equipment from the devastating effects of overvoltage and overcurrent on telecommunications lines. Incorporating three stages of protection — solid state, PTC's and ONEAC's patented transient filtering — they eliminate damaging high frequency transients that pass through conventional products.

KEY TO CONNECTORS **PAGE 30**

TECHNICAL SUPPORT POLICY **PAGE 31**

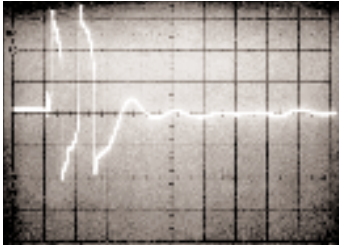
WARRANTY **PAGE 31**

To Place Orders:	TOLL FREE	800-327-8801, Ext. 1	EUROPE	+44-(0)-1235-534721
	U.S.	847-816-6000	EUROPE FAX	+44-(0)-1235-534197
	FAX	847-680-5124		

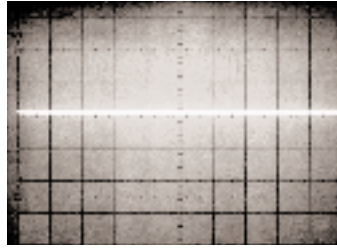
Power Conditioner Selection Guide

ONEAC POWER CONDITIONERS

The greatest threats to the reliability of semiconductor-based electronics equipment are high energy voltage surges and low energy interference. ONEAC's unique low impedance, full output isolation transformer design eliminates both. It minimizes voltage let-through from lightning or other high voltage surges to safe levels, lower than surge suppressors are capable of achieving. More, ONEAC power conditioners completely eliminate the harmful effects of fast edged transients and other electrical noise by limiting their frequency.



Typical surge suppressor/RF filter based technology output



ONEAC power conditioned output

STEP 1: DETERMINE YOUR EQUIPMENT'S POWER REQUIREMENTS

Refer to the operator's manual or the nameplate to determine the power requirements of the equipment to be protected:

1. Single phase or 3-phase?
2. 60 or 50/60 Hertz (Hz)?
3. What is the input voltage (from the wall outlet or available distribution panel) and output voltage (voltage required by the equipment)?
4. What is its VA or current rating?

You can specify the proper conditioner based on either the:

- VA rating — in volt-amperes (VA) or kilovolt-amperes (kVA)
- current draw — in amperes (amps)

If the conditioner is to protect more than one piece of equipment, simply add up the individual VA or current ratings.

NOTE: Sizing a power conditioner based on name plate ratings provides a margin of safety. However, as name plate ratings are customarily overstated relative to actual input requirements, it is possible to use a lower-rated power conditioner. To do so, you will need to measure the true RMS steady state current (amps) that your system requires. Contact ONEAC Technical Support at 1-800-327-8801 in the U.S., or +44-(0)-1235-534721 in the U.K. to learn how.

STEP 2: CHOOSE AN ONEAC PRODUCT SERIES

Based upon your equipment's power requirements, select the ONEAC product series from the chart on the facing page.

STEP 3: CHOOSE AN ONEAC MODEL NUMBER

Turn to the page indicated for the ONEAC product series you selected. Match your power requirements to the appropriate ONEAC model number.

STEP 4: BASED ON PLUG & RECEPTACLE TYPES, CHOOSE THE ONEAC PART NUMBER

To determine what type of input connector (plug) you need, check the power receptacle that you will be drawing power from and match it to the corresponding connector drawing on page 30. Similarly, to determine your output connector (receptacle) type, find the drawing that matches the power plug on the piece of equipment you wish to protect (also on page 30). Choose the ONEAC part number that provides the plug and receptacle types you need. (Please note that hardwired units are also available).

ONEAC POWER CONDITIONER SELECTION MATRIX

SINGLE PHASE 60 HERTZ	IN/OUT VOLTAGE	VA OR KVA RATING	MAX. CURRENT RATING	ONEAC PRODUCT SERIES	PAGE
	120/120	75-240 VA	.625-2 A	Series CL	7
	120/120	385-1,000 VA	3.2-8.4 A	Series CP	7
	120/120	240-1,920 VA	2-16 A	Series MD	8
	120 or 240/120 or 240	1.44-1.92 kVA	12-16 A @ 120 V 8 A @ 240 V	Series CB	8
	120,208,240/120 or 240	2.88-5.76 kVA	24-48 A @ 120 V 14-24 A @ 240 V	Series CC	9
	190-240/120 or 240	9.6 kVA	80 A @ 120 V 40 A @ 240 V	Series CSD	9

SINGLE PHASE 50/60 HERTZ	IN/OUT VOLTAGE	VA OR KVA RATING	MAX. CURRENT RATING	ONEAC PRODUCT SERIES	PAGE
	200-250/200-250	125-2,000 VA	.5-8 A	Series CMK	10
	100-240/114-240	1.92 kVA	16 A @ 120 V 8 A @ 240 V	Series CBS	11
	100-240/120 or 240	550-2,160 VA	4.6-18 A @ 120 V 2.3-6 A @ 240 V	Series FMV	11
	100-240/114-240	2.88-4.8 kVA	24 A @ 120 V 12 A @ 240 V	Series CCS	12
	120,240,480/120 or 240	140-1,000 VA	1.2-8.3 A @ 120 V 0.6-4.2 A @ 240 V	Series CX	13
	190-240/120 or 240	9.6 kVA	80 A @ 120 V 40 A @ 240 V	Series CSD	9

THREE PHASE 60 HERTZ	IN/OUT VOLTAGE	VA OR KVA RATING	MAX. CURRENT RATING	ONEAC PRODUCT SERIES	PAGE
	190-480 / 208/120	5.76-19.8 kVA	16-55 A/ø	Series CSD	14

THREE PHASE 50/60 HERTZ	IN/OUT VOLTAGE	VA OR KVA RATING	MAX. CURRENT RATING	ONEAC PRODUCT SERIES	PAGE
	190-480 / 208/120	5.76-19.8 kVA	16-55 A/ø	Series CSD	14
	190-480 / 208/120 or 415/240	54-100 kVA	150-278 A/ø	Series CLD	14
	190-600 / 208/120 or 415/240	21.6-100 kVA	60-278 A/ø	Series CD	15
	190-600/190-600	30-200 Amps	30-200 A/ø	Series FA	16

POWER CONDITIONER GENERAL SPECIFICATIONS

Load Power Factor: 0.3 leading to 0.3 lagging.

Load Regulation Response Time: < 2 msec for a 50% change in load.

Interruption Response Time: Output voltage will track input voltage in less than 2 msec at power-off and power-on for a single-cycle asynchronous notch.

Distortion: < 1% THD added into a resistive load.

Protection: Circuit breaker for all series except Series CL and CMK 2201: Thermal, automatic resetting. Series CX & FA: Fuse.

Cooling: Convection.

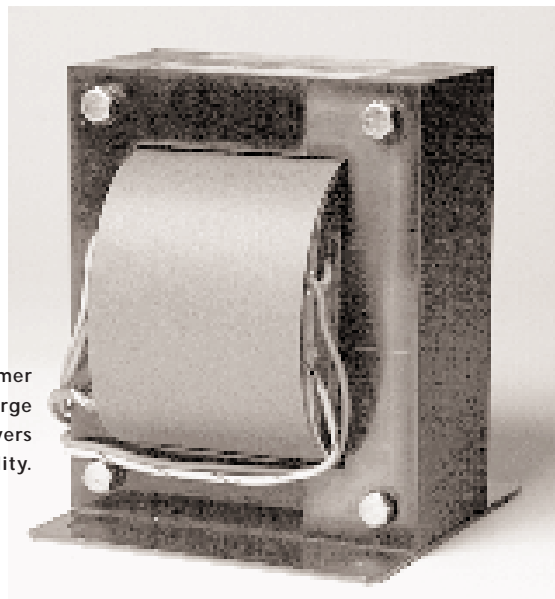
Surge Voltage Withstand Capability: Withstands ANSI/IEEE C62.41 Category A & B.

Noise Rejection-Isolation: With unit under power, and ANSI/IEEE C62.41 Category A pulse applied either normal or common mode at the input, the noise output voltage will be less than 10 V normal mode and less than 0.5 V common mode in all four quadrants using a Keytek 711A/J (or equivalent) surge generator and a low-voltage, high sensitivity probe. (FA series: less than 20 V common and normal modes.)

RF 50 Ω Insertion Loss (line to load and load to line):

CL Series:	10 kHz to 5 MHz - 30 dB typical 20 kHz to 3 MHz - 40 dB typical 40 kHz to 2 MHz - 50 dB typical
CP Series:	30 kHz to 30 MHz - 35 dB typical 100 kHz to 10 MHz - 40 dB typical 400 kHz to 4 MHz - 50 dB typical
FA Series:	30 kHz to 30 MHz - 35 dB typical 100 kHz to 10 MHz - 35 dB typical 400 kHz to 4 MHz - 45 dB typical
CMK 2201:	20 kHz to 5 MHz - 30 dB typical 30 kHz to 2 MHz - 40 dB typical 50 kHz to 1 MHz - 50 dB typical
All Other Series:	30 kHz to 30 MHz - 30 dB typical 100 kHz to 10 MHz - 40 dB typical 400 kHz to 4 MHz - 50 dB typical

ONEAC's low impedance, isolation transformer provides a level of protection superior to surge suppressor and filter based systems — delivers greater assurance of system reliability.





SERIES CL

Single Phase, 60 Hz
Voltage In: 120 V
Voltage Out: 120 V
Rating: 75-240 VA
 0.625-2 A

MODEL	CL11007	CL1101	CL1101.5	CL1102
Output Rating (VA)	75	120	180	240
Load Current Rating (Amps)	0.625	1	1.5	2
Input Voltage (VAC)	120	120	120	120
Output Voltage (VAC)	120	120	120	120
Load Regulation (RMS)	± 5%	± 5%	± 5%	± 5%
Inrush - 1/2 Cycle (Amps)	12.5	20	30	40
Surge Current (Amps) 1 sec. typical	5	8	12	15
Surge Current (Amps) 5 sec. typical	1.5	2.5	3.5	5
1kHz Forward Transfer Impedance (Ohms)	< 50	< 30	< 22	< 15
Efficiency (%)	> 85	> 85	> 85	> 85
C-UL	UL 1012	CSA C22.2 No. 107.1		
Line Cord (Feet)	6	6	6	6
Width (Inches)	4.6	4.6	4.6	5.0
Width w/Wall Mount (Inches)	5.9	5.9	5.9	6.4
Height (Inches)	3.4	3.4	3.4	4.2
Depth (Inches)	6.4	6.4	6.4	7.5
Shipping Weight (Lbs.)	5	7	7	11

CONNECTORS				
MODEL	INPUT	OUTPUT (#)	WALL MOUNT	PART NO.
CL11007	5-15P	5-15R (1)	NO	006-080
	5-15P	5-15R (1)	YES	006-081
	5-15P	5-15R (2)	NO	006-083
	5-15P HG	5-15R HG (2)	NO	006-084
CL1101	5-15P	5-15R (1)	NO	006-100
	5-15P	5-15R (1)	YES	006-101
	5-15P	5-15R (2)	NO	006-104
	5-15P	5-15R (2)	YES	006-105
	5-15P HG	5-15R HG (2)	NO	006-112
	5-15P HG	5-15R HG (2)	YES	006-113
CL1101.5	5-15P	5-15R (1)	NO	006-120
	5-15P	5-15R (2)	NO	006-124
	5-15P	5-15R (2)	YES	006-125
	5-15P HG	5-15R HG (2)	NO	006-129
	5-15P HG	5-15R HG (2)	YES	006-130
	L5-15P	L5-15R (2)	NO	006-126
CL1102	5-15P	5-15R (2)	NO	006-144
	5-15P	5-15R (2)	YES	006-145
	5-15P	5-15R (4)	NO	006-154
	5-15P	5-15R (4)	YES	006-090
	5-15P	L5-15R(2)	NO	006-156
	5-15P	L5-15R(4)	NO	006-157
	5-15P HG	5-15R HG (2)	NO	006-151
	5-15P HG	5-15R HG (2)	YES	006-152
	L5-15P	L5-15R (2)	NO	006-146
	L5-15P	L5-15R (2)	YES	006-147
	L5-15P	L5-15R (4)	NO	006-158

HG – Hospital Grade (See page 8 for Series MD UL544.)



SERIES CP

Single Phase, 60 Hz
Voltage In: 120 V
Voltage Out: 120 V
Rating: 385 VA-1 kVA
 3.2-8.4 A

MODEL	CP1103	CP1105	CP1107	CP1110
Output Rating (VA)	385	550	750	1000
Load Current Rating (Amps)	3.2	4.6	6.3	8.4
Input Voltage	120	120	120	120
Output Voltage	120	120	120	120
Load Regulation (RMS)	± 3%	± 3%	± 3%	± 3%
Inrush - 1/2 Cycle (Amps)	70	100	140	180
Surge Current (Amps) 1 sec. typical	22	32	45	58
Surge Current (Amps) 5 sec. typical	8	11.5	16	20
1kHz Forward Transfer Impedance (Ohms)	< 7.3	< 6.4	< 4.5	< 3.5
Efficiency (%)	> 90	> 90	> 90	> 90
C-UL	UL 1012	CSA C22.2 No. 66		
Line Cord (Feet)	6	6	6	6
Width (Inches)	6.4	6.4	6.4	6.4
Width w/Wall Mount (Inches)	8	8	8	8
Height (Inches)	5.3	5.3	5.3	5.3
Height w/Wall Mount (Inches)	5.4	5.4	5.4	5.4
Depth (Inches)	10.3	10.3	10.3	10.3
Shipping Weight (Lbs.)	18	21	24	27

CONNECTORS				
MODEL	INPUT	OUTPUT (#)	WALL MOUNT	PART NO.
CP1103	5-15P	5-15R (4)	NO	006-170
	5-15P	5-15R (4)	YES	006-172
	5-15P HG	5-15R HG (4)	NO	006-174
CP1105	5-15P	5-15R (4)	NO	006-190
	5-15P	5-15R (4)	YES	006-193
	5-15P HG	5-15R HG (4)	NO	006-196
	L5-15P	5-15R (2) & L5-15R (2)	YES	006-198
CP1107	5-15P	5-15R (4)	NO	006-210
	5-15P	5-15R (4)	YES	006-213
	5-15P	5-20R (4)	YES	006-216
	5-15P HG	5-15R HG (4)	NO	006-215
	L5-15P	5-15R (2) & L5-15R (2)	NO	006-218
	L5-15P	L5-15R (1)	NO	006-208
	5-20P	5-20R (4)	YES	006-219
	L5-20P	L5-15R (1)	NO	006-217
CP1110	5-15P	5-15R (4)	NO	006-230
	5-15P	5-15R (4)	YES	006-232
	5-15P	5-20R (4)	YES	006-238
	5-15P HG	5-15R HG (4)	NO	006-235
	L5-15P	5-15R (2) & L5-15R (2)	YES	006-237
	5-20P	5-20R (4)	YES	006-239

HG – Hospital Grade (See page 8 for Series MD UL544.)
 All specifications subject to change without notice.



SERIES MD

Single Phase, 60 Hz
Voltage In: 120 V
Voltage Out: 120 V
Rating: 240 VA-1.92 kVA
 2-16 A

MODEL	1102	1103	1105	1107	1110	1115	1120
Output Rating (VA)	240	385	550	750	1000	1440	1920
Load Current Rating (Amps)	2	3.2	4.6	6.25	8.4	12	16
Input Voltage (VAC)	120	120	120	120	120	120	120
Output Voltage (VAC)	120	120	120	120	120	120	120
Load Regulation (RMS)	± 5%	± 3%	± 3%	± 3%	± 3%	± 2%	± 2%
Inrush - 1/2 Cycle (Amps)	40	70	100	140	180	300	400
Surge Current (Amps) 1 sec. typical	15	22	32	45	58	60	80
Surge Current (Amps) 5 sec. typical	5	8	11.5	16	20	31	42
1kHz Forward Transfer Impedance (Ohms)	< 15	< 8	< 5.5	< 4	< 3.6	< 2.5	< 1.9
Leakage Current (µA)	< 50	< 50	< 50	< 50	< 50	< 100	< 100
C-UL	UL 544 CSA C22.2 No. 125						
Line Cord (Feet)	6	6	6	6	6	9	9
Width (Inches)	6.4	6.4	6.4	6.4	6.4	9.5	9.5
Height (Inches)	5.3	5.3	5.3	5.3	5.3	8	8
Depth (Inches)	10.3	10.3	10.3	10.3	10.3	15	15
Shipping Weight (Lbs.)	18	18	21	24	27	46	57

CONNECTORS				
MODEL	INPUT	OUTPUT (#)	WALL MOUNT	PART NO.
MD1102	5-15P HG	5-15R HG (4)	NO	006-255
	5-15P HG	5-15R HG (4)	YES	006-256
MD1103	5-15P HG	5-15R HG (4)	NO	006-265
	5-15P HG	5-15R HG (4)	YES	006-266
MD1105	5-15P HG	5-15R HG (4)	NO	006-275
MD1107	5-15P HG	5-15R HG (4)	NO	006-285
MD1110	5-15P HG	5-15R HG (4)	NO	006-295
MD1115	5-15P HG	5-15R HG (6)	NO	011-100
MD1120	5-20P HG	5-20R HG (6)	NO	011-120
	5-20P HG	5-15R (4) & 5-20R HG (2)	NO	011-121

HG – Hospital Grade Wall mount units Width = 8" Height = 5.4"
 For applications that don't require patient contact, some versions of the CL, CP, and CB series are available with hospital grade plugs and receptacles.
 All specifications subject to change without notice.



SERIES CB

Single Phase, 60 Hz
Voltage In: 120, 240 V
Voltage Out: 120, 240/120 V, Split ø
Rating: 1.44-1.92 kVA
 12-16 A@120 V, 8 A@240 V

MODEL	CB1115	CB1120	CB2320
Output Rating (kVA)	1.44	1.92	1.92
Load Current Rating (Amps)	12	16	8x2
Input Voltage (VAC)	120	120	240
Output Voltage (VAC)	120	120	240/120 split ø
Load Regulation (RMS)	± 2%	± 2%	± 2%
Inrush - 1/2 Cycle (Amps)	300	400	150
Surge Current (Amps) 1 sec. typical	60	80	55
Surge Current (Amps) 5 sec. typical	31	42	19
1kHz Forward Transfer Impedance (Ohms)	< 2.5	< 1.9	< 7.6
Efficiency (%)	> 93	> 93	> 93
Heat Loss, 80% Load (BTU/Hr.)	< 230	< 320	< 340
UL 1012	YES	YES	YES
Line Cord (Feet)	9	9	9
Width (Inches)	9.5	9.5	9.5
Height (Inches)	8	8	8
Depth (Inches)	15	15	15
Shipping Weight (Lbs.)	46	56	60

CONNECTORS			
MODEL	INPUT	OUTPUT (#)	PART NO.
CB1115	5-15P	5-15R (6)	011-000*
	5-15P	5-15R (2) & 5-20R (4)	011-011
	5-15P HG	5-15R HG (6)	011-005*
	5-20P	5-15R (2) & 5-20R (4)	011-013
	L5-20P	5-15R (4) & L5-20R (1)	011-003*
	HW	HW	011-002
CB1120	5-20P	5-20R (6)	011-058
	5-20P	5-20R (4) & L5-20R (1)	011-052
	5-20P HG	5-20R HG (6)	011-055
	L5-20P	5-20R (4) & L5-20R (1)	011-050
	L5-20P	5-15R (2), 5-20R** (2) & L5-20R (1)	011-054*
	L5-30P	5-15R (4) & L5-30R (1)	011-060*
	HW	HW	011-053
CB2320	6-15P	5-15R (2) & 6-15R (2)	011-093*
	L6-20P	5-15R (4) & L6-20R (1)	011-090*
	L14-20P	L14-20R (1) & 5-15R (4)	011-094*
	L6-30P	5-15R (4) & L6-30R (1)	011-092*

HG – Hospital Grade * CSA C22.2 No. 66
 HW – Hardwired (7/8" Knockouts) ** CSA 5-20R
 All specifications subject to change without notice.



SERIES CC

Single Phase, 60 Hz
Voltage In: 120, 208, 240 V
Voltage Out: 120 or 240/120 V, Split ϕ
Rating: 2.88-5.76 kVA
 24-48 A@120 V, 14-24 A@240 V

MODEL	CC1128	CC2333	CC2338	CC2350	CC2357
Output Rating (kVA)	2.88	3.33	3.84	4.99	5.76
Load Current Rating (Amps) 240/120V	24	14/14	16/16	20.8/20.8	24/24
Input Voltage (VAC)	120	208	240	208	240
Output Voltage (VAC)	120	240/120 split ϕ	240/120 split ϕ	240/120 split ϕ	240/120 split ϕ
Load Regulation (RMS)	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$
Inrush - 1/2 Cycle (Amps)	500	400	400	500	500
Surge Current (Amps) 1 sec. typical	170	80	80	120	120
Surge Current (Amps) 5 sec. typical	60	42	42	63	63
1kHz Forward Transfer Impedance (Ohms)	< 1.3	< 3.3	< 3.7	< 2.1	< 2.5
Efficiency (%)	> 95	> 95	> 95	> 95	> 95
Heat Loss, 80% Load (BTU/Hr.)	< 360	< 350	< 385	< 530	< 575
UL 1012	YES	YES	YES	YES	YES
Line Cord (Feet)	10	10	10	10	10
Width (Inches)	10.5	10.5	10.5	10.5	10.5
Height (Inches)	10.5	10.5	10.5	10.5	10.5
Depth (Inches)	17.6	17.6	17.6	17.6	17.6
Shipping Weight (Lbs.)	78	97	97	119	119

CONNECTORS			
MODEL	INPUT	OUTPUT (#)	PART NO.
CC1128	L5-30P	5-15R (2), 5-20R (2), & L5-30R (1)	012-003
	L5-30P	5-20R (6)	012-004
	L5-30P	5-20R (4) & L5-30R (1)	012-000
	L21-30P	5-20R (4) & L21-30R (1)	012-006*
	HW	HW	012-002
CC2333	L14-20P	5-15R (2), C 5-20R (2), & L14-20R (1)	012-042**
	L14-20P	5-20R (4) & L14-20R (1)	012-040
	HW	HW	012-041
CC2338	L6-20P	5-15R (2), C 5-20R (2), & L6-20R (1)	012-086**
	L6-20P	5-20R (4) & L6-20R (1)	012-080
	L14-20P	5-20R (4) & L14-20R (1)	012-081
	L6-30P	5-20R (4) & L6-30R (1)	012-085
	HW	HW	012-082
CC2350	L14-30P	5-20R (4) & L14-30R (1)	012-120
	HW	HW	012-122
CC2357	L6-30P	5-15R (2) & L6-20R (2)	012-164**
	L6-30P	5-15R (2), C 5-20R (2), & L6-30R (1)	012-165**
	L6-30P	5-20R (4) & L6-30R (1)	012-160
	L6-30P	L6-30R (2)	012-166**
	L14-30P	5-20R (4) & L14-30R (1)	012-161
	HW	HW	012-162

HG – Hospital Grade C – Canadian * not UL or CSA
 HW – Hardwired (7/8" Knockouts) ** CSA



SERIES CSD

Single Phase, 60 and 50/60 Hz
Voltage In: 190-240 V
Voltage Out: 240, 240/120 V Split ϕ
Rating: 240 VA-1kVA
 1.2-8.3 A @ 120 V,
 0.6-4.2 A @ 240 V

MODEL	CSD2280	CSD22100	CSD2380	CSD23100
Output Rating (kVA)	8.0	9.6	8.0	9.6
Load Current Rating (Amps)	33.3	40	33.3	40/40
Input Voltage (VAC)*	200-240	190-240	200-240	200-240
Output Voltage (VAC)	240/120	240	240/120	240/120 split ϕ
Load Regulation (RMS)	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$
Inrush - 1/2 Cycle (Amps)	450	520	450	520
Surge Current (Amps) 1 sec. typical	210	248	210	248
Surge Current (Amps) 5 sec. typical	100	128	100	128
1kHz Forward Transfer Impedance (Ohms)	< 2	< 2	< 2	< 2
Heat Loss, 80% Load (BTU/Hr.)	< 550	< 700	< 550	< 700
Efficiency at Rated Output (%)	> 97	> 97	> 97	> 97
C-UL	UL 1012	CSA C22.2	No. 107.1	
Width (Inches)	17	17	17	17
Height (Inches)	23	23	23	23
Depth (Inches)	26	26	26	26
Shipping Weight (Lbs.)	390	345	390	345

CONNECTORS					
MODEL	INPUT VOLTAGE TAP RANGE*	FREQUENCY (HZ)	INPUT	OUTPUT (#)	PART NO.
CSD2280	G	60	HW	HW	Contact Factory
CSD2380	G	60	60-50P	L6-20R(2) L6-15R(3) 5-20R(3)	010-158
CSD22100	D	50/60	HW	HW	010-270
CSD23100	D	60	14-60P	14-60R (1)	010-174
	D	60	HW	HW	010-175
	D	50/60	HW	HW	010-176

*See tap range chart below. HW – Hardwired
 CSD orders must include specific input voltage as a 3-digit suffix to the part number. Example: a 240 V CSD23100 should be ordered as 010-175-240.
 Note: Each CSD can accept up to two (2) receptacle panels, maximum of four (4) receptacles per panel.

TAP RANGE CHART	
B-1	190 V, 208 V, 240 V
D	200 V, 208 V, 220 V, 230 V, 240 V
F	380 V, 415 V, 480 V
G	200 V, 208 V, 225 V, 240 V



SERIES CMK

Single Phase, 50/60 Hz
Voltage In: 200-250 V
Voltage Out: 200-250 V
Rating: 125 VA-2 kVA
 0.5-8 A

MODEL	CMK2201	CMK2202	CMK2205	CMK2207	CMK2210	CMK2215	CMK2220
Output Rating at 220-250 V (VA)	125	250	500	750	1000	1500	2000
Load Current Rating (Amps)	0.5	1	2	3	4	6	8
Input Voltage (VAC)	200-250	200-250	200-250	200-250	200-250	200-250	200-250
Output Voltage (VAC)	200-250	200-250	200-250	200-250	200-250	200-250	200-250
Load Regulation (RMS)	± 4%	± 3%	± 2.5%	± 2%	±2%	±1.5%	±1.5%
Inrush - 1/2 Cycle (Amps)	8	15	30	45	60	90	120
Surge Current (Amps) 1 sec. typical	6	5	10	15	20	30	40
Surge Current (Amps) 5 sec. typical	4	2.5	5	7.5	10	15	20
1kHz Forward Transfer Impedance (Ohms)	< 70	< 50	< 25	< 16	<13	<7	<4.5
Heat Loss, 80% Load (BTU/Hr.)	< 40	< 50	< 80	< 105	120	165	235
Efficiency at Full Load (%)	>90	>92	>93	>94	>95	>96	>96
Agency Approvals	BS5850* / BS7702 / VDE 0805 / EN 60 950**						
Number of Output Receptacles	1	3	3	4	4	5	5
Width (mm)	66	248	248	314	314	377	377
Height (mm)	127	136	136	170	170	202	202
Depth (mm)	173	225	225	275	275	290	290
Shipping Weight (kg)	4	8	10	14	16	24	30
Part Number	03-5676†	03-5591	03-5592	03-5593	03-5594	03-5595	03-5596

* UK connectors only ** Except Swiss connectors
 † CMK2201 will not accommodate Italian or Swiss connectors

NOTES ON ORDERING SERIES CMK:

1. The relevant suffix for the appropriate plug and receptacle must be specified.(see page 30)
2. Hardwired units available on all except CMK2201. Units have two hardwire points in place of receptacles. All other receptacle points blank.
3. To order a hardwired unit, add the suffix HW and the proper connector code to the part number. for example, 03,5591HW-3 is a CMK2202, hardwired, with a French connector.



SERIES CBS

Single Phase, 50/60 Hz
Voltage In: 110-240 V
Voltage Out: 114-240 V
Rating: 1.92 kVA
 16 A @ 120V, 8 A @ 240 V

MODEL	CBS1120	CBS2120	CBS2220	CBS2320
Output Rating (kVA)	1.92	1.92	1.92	1.92
Load Current Rating (Amps)	16	16	8	8/8
Input Voltage (VAC)*	100-120	200-240	200-240	200-240
Output Voltage (VAC)	114/120	114/120	228/240	228-240/ 114-120 split ø
Load Regulation (RMS)	± 2%	± 2%	± 2%	± 2%
Inrush - 1/2 Cycle (Amps)	400	150	150	150
Surge Current (Amps) 1 sec. typical	80	55	55	55
Surge Current (Amps) 5 sec. typical	42	19	19	19
1kHz Forward Transfer Impedance (Ohms)	< 1.9	< 7.6	< 7.6	< 7.6
Efficiency (%)	> 95	> 95	> 95	> 95
Heat Loss, 80% Load (BTU/Hr.)	< 200	< 200	< 200	< 200
C-UL	UL 1012	CSA C22.2	No. 66	
Line Cord (Feet)	10	10	10	10
Width (Inches)	9.5	9.5	9.5	9.5
Height (Inches)	8	8	8	8
Depth (Inches)	15	15	15	15
Shipping Weight (Lbs.)	71	71	71	71

CONNECTORS

MODEL	TAP RANGE* IN/OUT	INPUT	OUTPUT (#)	PART NO.
CBS1120	G-1/H-1	L5-20P	5-20R (4) & L5-20R (1)	011-500
	G-1/H-1	HW	HW	011-501**
CBS2120	G-2/H-1	6-15P	5-20R (4) & L5-20R (1)	011-526
CBS2220	G-2/H-3	6-15P	6-15R (4) & L6-20R (1)	011-550
CBS2320	G-2/H-4	L14-20P	5-20R (4) & L14-20R (1)	011-590

*See tap range chart below.

** Not CSA

HW – Hardwired (7/8" Knockouts)

TAP RANGE CHART FOR SERIES CBS


G-1	100 V, 108 V, 120 V
G-2	200 V, 208 V, 216 V, 220 V, 228 V, 240 V
H-1	114 V, 120 V
H-3	228 V, 240 V
H-4	228/114 V, 240/120 V, Split ø

Input and output voltages must be specified when ordering Series CBS or CCS.
 All specifications subject to change without notice.
 50/60 Hz. models are available with CE rating. Please specify when ordering.



SERIES FMV

Single Phase, 50/60 Hz
Voltage In: 100-240 V
Voltage Out: 120 or 240 V
Rating: 550 VA-2.16 kVA
 4.6-18 A @ 120 V,
 2.3-6 A @ 240 V

MODEL	FMV3205	FMV3210	FMV3215	FMV3220
Output Rating (VA)	550	1000	1440	2160
Load Current Rating (Amps) 120/240 V	4.6/2.3	8.4/4.2	12/6	18
Input Voltage(s)*	100-240	100-240	100-240	190-240
Output Voltage(s)*	120 or 240	120 or 240	120 or 240	120
Load Regulation (RMS)	± 3.5%	± 3.5%	± 2%	± 2%
1 kHz Forward Transfer Impedance (Ohms) @ 120/240V	< 6/< 30	< 3.6/< 15	< 3.6/< 15	< 2.6/< 10
Leakage Current (µA)	< 100	< 100	< 100	< 100
 Safety	UL544, UL1012 for all/UL1262 for FMV3220 only			
CSA	C 22.2, No. 66			
Other Approvals	IEC 601-1, VDE 0750			
Width (Inches) (cm)	5.375 (13.65)	5.375 (13.65)	6.375 (16.2)	11.25 (28.58)
Height (Inches) (cm)	4.5 (11.43)	4.5 (11.43)	5.31 (13.5)	8.5 (21.6)
Depth (Inches) (cm)	7 (17.78)	8 (20.32)	9.5 (24.1)	6.75 (17.15)
Shipping Weight (lbs.) (kg)	20 (9.1)	27 (12.5)	40 (18.1)	55 (25)



SERIES CCS

Single Phase, 50/60 Hz
Voltage In: 110-240 V
Voltage Out: 114-240 V
Rating: 2.88-4.8 kVA
 24 A @ 120 V, 12 A @ 240 V

MODEL	CCS1128	CCS2128	CCS2228	CCS2328	CCS1148	CCS2148	CCS2248	CCS2348
Output Rating (kVA)	2.88	2.88	2.88	2.88	4.8	4.8	4.8	4.8
Load Current Rating (Amps) @ Output Voltage	24	24	12	12/12	40	40	20	20-40
Input Voltage (VAC)	100-120	200-240	200-240	200-240	100-120	200-240	200-240	200-240
Output Voltage (VAC)	114/120	114/120	228/240	228-240/ 114-120 Split ø	114/120	114/120	228-240	228-240/ 114-120 Split ø
Load Regulation (RMS)	± 2%	± 2%	± 2%	± 2%	± 2%	± 2%	± 2%	± 2%
Inrush - 1/2 Cycle (Amps)	500	400	400	400	720	500	500	500
Surge Current (Amps) 1 sec. typical	170	80	80	80	260	170	170	170
Surge Current (Amps) 5 sec. typical	60	42	42	42	92	60	60	60
1kHz Forward Transfer Impedance	< 1.25 Ω	< 5 Ω	< 5 Ω	< 5 Ω	< .75 Ω	< 3 Ω	< 3 Ω	< 3 Ω
Efficiency (%)	> 97	> 97	> 97	> 97	> 97	> 97	> 97	> 97
Heat Loss, 80% Load (BTU/Hr.)	< 250	< 250	< 250	< 250	< 410	< 410	< 410	< 410
C-UL	UL 1012	CSA C22.2 No. 66						
Line Cord (Feet)	10	10	10	10	10	10	10	10
Width (Inches)	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Height (Inches)	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Depth (Inches)	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
Shipping Weight (Lbs.)	93	96	96	96	115	115	115	115

CONNECTORS				
MODEL	TAP RANGE* IN/OUT	INPUT	OUTPUT (#)	PART NO.
CCS1128	G-1/H-1	L5-30P	5-20R (4) & L5-30R (1)	012-500
	G-1/H-1	HW	HW	012-501
CCS2128	G-2/H-1	L6-20P	5-20R (4) & L5-30R (1)	012-560
CCS2228	G-2/H-3	L6-20P	6-15R (4) & L6-20R (1)	012-580
CCS2328	G-2/H-4	L14-20P	5-20R (4) & L14-20R (1)	012-660
	G-2/H-3	HW	HW	012-662
	G-2/H-4	6-20P	5-15R(4) & 6-20R (2)	012-663
CCS1148	G-1/H-1	5-50P	5-20R (4) & L5-30R (1)	012-540
	G-1/H-1	HW	HW	012-541
CCS2148	G-2/H-1	HW	HW	012-571
CCS2248	G-2/H-3	L6-30P	L6-20R (2)	012-620
	G-2/H-3	HW	HW	012-622
CCS2348	G-2/H-4	L14-30P	5-20R (4) & L14-30R (1)	012-700
	G-2/H-4	HW	HW	012-703

*See tap range chart. HW – Hardwired (7/8" Knockouts)

TAP RANGE CHART FOR SERIES CCS

G-1	100 V, 108 V, 120 V
G-2	200 V, 208 V, 216 V, 220 V, 228 V, 240 V
H-1	114 V, 120 V
H-3	228 V, 240 V
H-4	228/114 V, 240/120 V, Split ø

Input and output voltages must be specified when ordering Series CCS.
 All specifications subject to change without notice.
 50/60 Hz. models are available with CE rating. Please specify when ordering.



SERIES CX

PLATE VERSION

Single Phase, 50/60 Hz
Voltage In: 120, 240, 480 V
Voltage Out: 240/120 V Split ϕ
Rating: 240 VA-1kVA
 1.2-8.3 A @ 120 V,
 0.6-4.2 A @ 240 V

MODEL	CX140	CX250	CX500	CX750	CX1000
Output Rating (VA)	140	250	500	750	1000
Load Current Rating (Amps) @ 120/240 V	1.2/0.6	2.0/1.0	4.2/2.1	6.25/3.1	8.3/4.2
Input Voltage	120, 240, 480	120, 240, 480	120, 240, 480	120, 240, 480	120, 240, 480
Output Voltage	240/120 split ϕ	240/120 split ϕ	240/120 split ϕ	240/120 split ϕ	240/120 split ϕ
1 kHz Forward Transfer Impedance (Ohms) @ 120/240 V	< 25/< 100	< 18/< 72	< 13/< 52	< 8/< 32	< 5/< 20
Efficiency at Rated Output (%)					
Heat Loss, 80%	> 90	> 90	> 90	> 97	> 97
Load (BTU/Hr.)	< 30	< 43	< 68	< 90	< 110
UL/CSA	UL Recognized 1012, 478 CSA C22.2 No. 66				
Shipping Weight (lbs.) (kg)	14 (6.36)	17 (7.73)	23 (10.45)	33 (15.0)	43 (19.54)

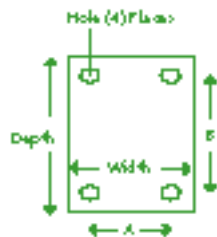
PLATE VERSION

MODEL	CX140	CX250	CX750	CX500	CX1000
Width (Inches) (cm)	4.74 (12.04)	5.49 (13.94)	5.82 (14.78)	6.79 (17.25)	6.71 (17.04)
Height (Inches) (cm)	3.20 (8.13)	3.81 (9.68)	3.81 (9.68)	4.32 (10.97)	4.32 (10.97)
Depth (Inches) (cm)	6.64 (16.87)	6.64 (16.87)	8.26 (20.98)	9.51 (24.15)	10.91 (27.71)
A (Inches) (cm)	4.34 (11.02)	5.08 (12.90)	5.41 (13.74)	6.40 (16.26)	6.32 (16.05)
B (Inches) (cm)	6.24 (15.85)	6.24 (15.85)	7.86 (19.96)	9.21 (23.39)	10.51 (26.69)
Hole diameter (Inches) (cm)	.218 (.554)	.218 (.554)	.218 (.554)	.218 (.554)	.218 (.554)

SIDE VIEW

PLATE VERSION

BOTTOM VIEW



SERIES CX

CHASSIS VERSION

Single Phase, 50/60 Hz
Voltage In: 120, 240, 480 V
Voltage Out: 240/120 V Split ϕ
Rating: 240 VA-1kVA
 1.2-8.3 A @ 120 V,
 0.6-4.2 A @ 240 V

CONNECTORS					
MODEL	STYLE	INPUT	OUTPUT	PART NO.	
CX140	Chassis Plate (Open-frame)	7/8" Knockouts Conduit Terminal Block	7/8" Knockouts Conduit Terminal Block	006-700 006-701	
CX250	Chassis Plate (Open-frame)	7/8" Knockouts Conduit Terminal Block	7/8" Knockouts Conduit Terminal Block	006-705 006-706	
CX500	Chassis Plate (Open-frame)	7/8" Knockouts Conduit Terminal Block	7/8" Knockouts Conduit Terminal Block	006-710 006-711	
CX750	Chassis Plate (Open-frame)	7/8" Knockouts Conduit Terminal Block	7/8" Knockouts Conduit Terminal Block	006-715 006-716	
CX1000	Chassis Plate (Open-frame)	7/8" Knockouts Conduit Terminal Block	7/8" Knockouts Conduit Terminal Block	006-720 006-721	

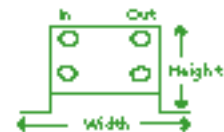
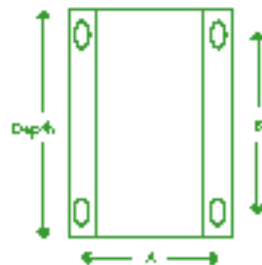
CHASSIS VERSION

MODEL	CX140	CX250	CX500	CX750	CX1000
Width (Inches) (cm)	7.82 (19.86)	7.82 (19.86)	7.82 (19.86)	9.40 (23.88)	9.40 (23.88)
Height (Inches) (cm)	5.06 (12.85)	5.06 (12.85)	5.06 (12.85)	5.72(14.53)	5.72 (14.53)
Depth (Inches) (cm)	11.06 (28.09)	11.06 (28.09)	11.06 (28.09)	13.80 (35.05)	13.80 (35.05)
A (Inches) (cm)	7.06 (17.93)	7.06 (17.93)	7.06 (17.93)	8.61 (21.87)	8.61 (21.87)
B (Inches) (cm)	9.32 (23.67)	9.32 (23.67)	9.32 (23.76)	10.90 (27.69)	10.90 (27.69)
Slot (Inches) (cm)	.281 (.714)W x.750(1.905)L	.281 (.714)W x.750(1.905)L	.281 (.714)W x.750(1.905)L	.406(1.031)W x1.000(2.540)L	.406(1.031)W x1.000(2.540)L

TOP VIEW

CHASSIS VERSION

END VIEW





SERIES CSD

Three Phase, 50/60 and 60 Hz

Voltage In: 190-480 V

Voltage Out: 208/120 V

Rating: 5.76-19.8 kVA
16-55 A/ø

MODEL	CSD31060	CSD31100	CSD31150	CSD31200
Output Rating (kVA)	5.76	10.8	14.4	19.8
Load Current Rating (Amps)	16/ø	30/ø	40/ø	55/ø
Input Voltage (VAC) (Delta)*	190-480	200-480	200-240	200-240
Output Voltage (VAC) (Wye)	208/120	208/120	208/120	208/120
Load Regulation (RMS)	± 2%	± 2%	± 2%	± 2%
Inrush - 1/2 Cycle (Amps)	300	450	520	715
Surge Current (Amps) 1 sec. typical	110	171	248	348
Surge Current (Amps) 5 sec. typical	39	90	128	176
1kHz Forward Transfer Impedance (Ohms)	< 1.9	< 1	< 1	< 1
Efficiency at Rated Output (%)	> 97	> 97	> 97	> 97
Heat Loss, 80% Load (BTU/Hr.)	< 600	< 700	< 700	< 1550
UL 1012	Yes	Yes	Yes	Yes
CSA C22.2 No. 66	Yes	Yes	Yes	No
Width (Inches)	11.46	17	17	17
Height (Inches)	10.53	23	23	23
Depth (Inches)	22.66	26	26	26
Shipping Weight (lbs.)	200	340	370	385

CONNECTORS

MODEL	INPUT VOLTAGE TAP RANGE*	FREQUENCY (HZ)	INPUT	OUTPUT (#)	PART NO.
CSD31060	B-1	50/60	HW	HW	010-185
	208 V	50/60	L21-30P	L21-20R (2)	010-186
	F	50/60	HW	HW	010-187
CSD31100	D	50/60	HW	HW	010-192
	480 V	60	HW	HW	010-193
	208 V	60	15-60P	15-60R (1)	010-194
	D	60	HW	HW	010-195
	208 V	60	L21-30P	L5-20R (2), L21-30R (1) & 5-20R (2)	010-196
CSD31150	D	50/60	HW	HW	010-222
	208 V	60	15-60P	15-60R (1)	010-223
	D	60	HW	HW	010-224
CSD31200	D	50/60	HW	HW	010-235

*See tap range chart on lower left. HW – Hardwired
CSD orders must include specific input voltage as a 3-digit suffix to the part number. Example: a 240 V CSD31060 should be ordered as 010-185-240.
Note: Each CSD can accept up to two (2) receptacle panels, maximum of four (4) receptacles per panel.
50/60 Hz. models are available with CE rating. Please specify when ordering.



SERIES CLD

Three Phase, 50/60 Hz

Voltage In: 190-480 V

Voltage Out: 208/120 V

Rating: 54-100 kVA
150-278 A/ø

MODEL	31500	31500	31750	31810	311000
Output Rating (kVA)	54	54	72	81	100
Load Current Rating (Amps)	150/ø	150/ø	200/ø	225/ø	278/ø
Input Voltage (VAC) (Delta) Tap Range (see chart below)	B-1	B-2	B-2	B-2	B-2
Output Voltage (VAC) (Wye)	208/ 120*	208/ 120*	208/ 120*	208/ 120*	208/ 120*
1 kHz Forward Transfer Impedance (Ohms)	< 0.25	< 0.25	< 0.2	< 0.2	< 0.2
Efficiency at Rated Load (%)	> 98	> 98	> 98	> 98	> 98
Heat Loss, 80% Load (BTU/Hr.)	3688	3688	4918	5200	5800
UL 1012 and IEC 380	YES	YES	YES	YES	YES
Input/Output Terminations	HW	HW	HW	HW	HW
Width (Inches)	30.6	30.6	30.6	30.6	30.6
Height (Inches)	50.5	50.5	50.5	50.5	50.5
Depth (Inches)	32.6	32.6	32.6	32.6	32.6
Floor Footprint (Square Inches)	998	998	998	998	998
Shipping Weight (Lbs.)	1080	1080	1455	1455	1805
Part Number	010-301	010-300	010-320	010-340	010-360

*Standard unit output voltage is 208/120. If 415/240 is required, it must be specified as a special option. Please consult ONEAC Technical Support for pricing and specifications.

INPUT TAP RANGE CHART

B-1	190 V, 208 V, 240 V
B-2	380 V, 400 V, 480 V
D	200 V, 208 V, 220 V, 230 V, 240 V
F	380 V, 415 V, 480 V

CLD orders must include specific input voltage as a 3-digit suffix to the part number.

Example: a 190 V CLD 31500 should be ordered as 010-301-190.

Emergency Power Off feature available as an option.

50/60 Hz. models are available with CE rating. Please specify when ordering.



SERIES CD

Three Phase, 50/60 Hz
Voltage In: 190-600 V
Voltage Out: 208/120 V
Rating: 21.6-100 kVA
 60-278 A/ø

MODEL	CD 31200	CD 31300	CD 31500	CD 31750	CD 31810	CD 311000
Output Rating (kVA)	21.6	28.8	54	72	81	100
Load Current Rating (Amps)	60/ø	80/ø	150/ø	200/ø	225/ø	278/ø
Input Voltage (Delta)*	190- 600	190- 600	190- 600	190- 600	380- 600	380- 600
Output Voltage (Wye)**	208/ 120	208/ 120	208/ 120	208/ 120	208/ 120	208/ 120
1kHz Forward Transfer Impedance (Ohms)	< 0.6	< 0.5	< 0.25	< 0.2	< 0.2	< 0.2
Efficiency at Rated Load (%)	> 98	> 98	> 98	> 98	> 98	> 98
Heat Loss, 80% Load (BTU/Hr.)	1475	1967	3688	4918	5200	5800
UL 1012/CSA 22.2 No. 66 IEC 380	Yes	Yes	No	No	No	No
Input Termination	HW	HW	HW	HW	HW	HW
Output Termination	HW	HW	HW	HW	HW	HW
Maximum Conduit Landing Configuration @ .5"	24	24	80	80	80	80
Width (Inches)	27	27	30.5	30.5	30.5	30.5
Height (Inches)	48.5	48.5	68	68	68	68
Depth (Inches)	22	22	36	36	36	36
Floor Footprint (Square Inches)	611	611	1116	1116	1116	1116
Shipping Weight (Lbs.)	865	965	1250	1550	1550	1900

*See tap range chart below. **Standard unit output voltage is 208/120. If 415/240 is required, it must be specified as a special option.

50/60 Hz. models are available with CE rating. Please specify when ordering.

MODEL	INPUT VOLTAGE TAP RANGE*	AVAILABLE CIRCUIT BREAKER POLES	EMERGENCY POWER OFF	PART NUMBER
CD31200	A-1	42	YES	010-050
	A-1	42	NO	010-051
	A-2	42	YES	010-052
	A-2	42	NO	010-053
CD31300	A-1	42	YES	010-060
	A-1	42	NO	010-061
	A-2	42	YES	010-062
	A-2	42	NO	010-063
CD31500	A-1	42	YES	010-070
	A-1	84	YES	010-071
	A-2	84	YES	010-072
	A-2	84	YES	010-073
	600 V	84	YES	010-074
	A-1	42	YES	010-076*
	A-2	42	YES	010-077*
CD31750	A-1	42	YES	010-085*
	A-1	42	YES	010-080
	A-1	84	YES	010-081
	A-2	42	YES	010-082
	A-2	84	YES	010-083
	A-2	42	YES	010-086*
CD31810	A-2	42	YES	010-091
	A-2	42	YES	010-095*
	A-2	84	YES	010-093
CD311000	E	42**	YES	010-100
	E	42**	YES	010-103*

*Without J-Box

**Maximum output current rating=225A Split ø

ACCESSORIES	PART NUMBER
Input Voltage Conversion Kit for CD31300 converts input voltage to 190-240 V from any other existing range	350-077
Input Voltage Conversion Kit for CD31300 converts input voltage to 380-600 V from any other existing range	350-078
Input Voltage Conversion Kit for CD31500 converts input voltage to 190-240 V from any other existing range	350-057
Input Voltage Conversion Kit for CD31750 converts input voltage to 190-240 V from any other existing range	350-081
Input Voltage Conversion Kit for CD31500 converts input voltage to 380-600 V from any other existing range	350-056
Input Voltage Conversion Kit for CD31810 converts input voltage to 190-240 V from any other existing range	350-079
Input Voltage Conversion Kit for CD31810 converts input voltage to 380-600V from any other existing range	350-080
Input Voltage Conversion Kit for CD31750 converts input voltage to 380-600 V from any other existing range	350-082
EPO (Emergency Power Off) Disable Kit for any CD series with standard EPO covers the EPO switch to disallow EPO	350-105
EPO (Emergency Power Off) Conversion Kit for CD31200 converts EPO from standard to failsafe EPO 380-600V	350-124
EPO (Emergency Power Off) Conversion Kit for CD31200 converts EPO from standard to failsafe EPO 190-240V	350-125
Input Voltage Conversion Kit for CD311000 converts input voltage to 190-240 V from any other existing range	350-130
Input Voltage Conversion Kit for CD311000 converts input voltage to 380-600 V from any other existing range	350-131

TAP RANGE CHART

A-1	190 V, 200 V, 208 V, 220 V, 230 V, 240 V
A-2	380 V, 390 V, 400 V, 415 V, 440 V, 460 V, 480 V
E	480 V, 600 V

CD orders must include specific input voltage as a 3-digit suffix to the part number. Example: a 208 V input CD31200 should be ordered as 010-050-208.



SERIES FA

Three Phase*, 50-60 Hz
Voltage In: 190-600 V
Voltage Out: 190-600 V
Rating: 30-200 A/ø

*MAY ALSO BE UTILIZED IN SINGLE PHASE AND SPLIT PHASE APPLICATIONS.

MODEL	FA23030	FA63030	FA23060	FA63060	FA23100	FA63100	FA23200	FA43200	FA63200
Load Current Rating	30/ø	30/ø	60/ø	60/ø	100/ø	100/ø	200/ø	200/ø	200/ø
Input/Output Voltage Range, WYE (VAC)	173/100 to 250/144	173/100 to 600/346	173/100 to 250/144	173/100 to 600/346	173/100 to 250/144	173/100 to 600/346	173/100 to 250/144	173/100 to 480/277	173/100 to 600/346
Input/Output Voltage Range, DELTA (VAC)	173 to 250	173 to 600	173 to 250	173 to 600	173 to 250	173 to 600	173 to 250	173 to 480	173 to 600
Surge Current (Amps) 10 sec. typical	150	150	300	300	500	500	1000	1000	1000
1 kHz Forward Transfer Impedance (Ohms)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Efficiency at Rated Load (%)	> 98	> 98	> 98	> 98	> 98	> 98	> 98	> 98	> 98
UL/CSA	YES	YES	YES	YES	YES	YES	YES	YES	YES
Enclosure Rating*	NEMA 12	NEMA 12	NEMA 12	NEMA 12	NEMA 12	NEMA 12	NEMA 12	NEMA 12	NEMA 12
Input/Output Connectors	Hardwired	Hardwired	Hardwired	Hardwired	Hardwired	Hardwired	Hardwired	Hardwired	Hardwired
Width (Inches)	16	16	20	20	24	24	30	30	30
Height (Inches)	24	24	30	30	30	30	36	41	41
Depth (Inches)	9	9	9	9	13	13	17	17	17
Shipping Weight (Lbs.)	85	85	150	150	210	210	365	455	455
Part Number	026-005	026-075	026-060	026-076	026-070	026-077	026-011	026-012	026-078

*NEMA 12 — Drip and Dust Tight
 NEMA 2 — Drip Tight

ACCESSORIES	PART NUMBER
Floor Mounting Kit for FA 23030, FA63030	350-091
Floor Mounting Kit for FA23060, FA63060	350-073
Floor Mounting Kit for FA23100, FA63100	350-046
Floor Mounting Kit for FA23200, FA43200, FA63200	350-064

All specifications subject to change without notice.

ONEAC Conditioned UPSs

ONEAC conditioned UPSs provide battery backup to allow uninterrupted service or controlled system shutdown in the event of a power outage. Plus, they include ONEAC power conditioning to eliminate power line contaminants for improved system reliability. Intelligent network communication and remote management capabilities can also be added by purchasing an ONEAC UPS Communications Kit (see page 24 for details). Typical applications ONEAC conditioned UPSs are used to protect include:

- Retail information systems
- Single and multi-server PC LANs for in-office work groups
- UNIX-based multi-user or multi-tasking workstation environments
- Customer premise, central and remote office telephone systems
- Bio-medical instrumentation
- Computer Integrated Manufacturing Systems



ONEAC Conditioned UPSs Selection Guide

STEP 1: CHOOSE AN ONEAC UPS SERIES BASED ON YOUR EQUIPMENT’S LOAD, BACKUP TIME REQUIREMENTS, AND PHYSICAL SPACE CONSTRAINTS.

ONEAC offers 4 models of ON Series UPSs for applications up to 2 kVA — a standard floor model, a rackmount model, a floor standing extended runtime model, and a space-saving wallmount extended runtime model — plus, the DCI Series UPS for applications from 3 kVA to 15 kVA. From the table below, choose the ONEAC UPS model that best meets your application needs, and refer to the page indicated to complete steps 2 and 3.

System Load Rating	Backup Time Requirements	Footprint	ONEAC UPS Model	Page
up to 2 kVA	safe system shutdown	floor unit	ON Series	19
up to 2 kVA	safe system shutdown	rackmount unit	ON Series RM	20
up to 2 kVA	extended runtime (up to 8 hrs.)	floor unit	ON Series XA	21
up to 2 kVA	extended runtime (up to 8 hrs.)	wall mount	ON Series XA-WL	22
3 to 15 kVA	safe system shutdown	floor unit	DCI Series	23

NOTE: For low load applications, you can achieve extended runtime (up to several hours) by oversizing a standard floor or rackmount ON Series UPS.

STEP 2: CHOOSE THE ONEAC UPS MODEL THAT PROVIDES THE SPECIFIC BACKUP TIME YOU NEED FOR YOUR EQUIPMENT’S LOAD.

Refer to the backup runtime chart at the bottom of the page (for the UPS Series you’ve selected) to select the ONEAC UPS model that best meets your backup time and load requirements.

STEP 3: DETERMINE THE ONEAC UPS PART NUMBER BASED ON INPUT/OUTPUT VOLTAGE AND PLUG RECEPTACLE TYPES.

INPUT/OUTPUT VOLTAGE:

Choose between standard U.S. model UPSs at 120 V, 60Hz, or international models at 230V, 50/60 Hz. Other configurations are available upon request—in the U.S., call ONEAC Technical Support at 1-800-327-8801 Ext. 3; in Europe, call the ONEAC U.K. Help Line at +44-(0)-1235-534721.

PLUGS & RECEPTACLES

ON SERIES:

ONEAC ON Series UPSs are available with standard U.S. and twist-lock plugs and receptacles, as well as many international configurations. “HG” versions offer hospital grade plugs and receptacles for applications where low leakage current is required. Choose the ONEAC part number corresponding the plug and receptacle configuration you need (see page 30 for a visual reference of plug and receptacle types).

DCI SERIES:

Standard DCI Series UPSs are in hardwired configuration. But a wide range of plug and receptacle types are available upon request—contact ONEAC for details.

ON SERIES CONDITIONED UPS GENERAL SPECIFICATIONS:

SURGE VOLTAGE WITHSTAND CAPABILITY:

Withstands ANSI/IEEE C62.41 Category A & B, 6 kV/200 and 500 Amp, 100 kHz ringwave.

NOISE REJECTION ISOLATION:

With unit under power, 6 kV ANSI/IEEE C62.41 Category A pulse applied either line-to-neutral (normal mode) or live & neutral-to-ground (common mode) at the input, the noise output voltage will be less than 10 V line-neutral, and less than 0.5 V neutral-ground in all four quadrants using a keytek 711AJ (or equivalent) surge generator and a low-voltage, high sensitivity probe.

Overload Protection: Input circuit breaker, electronic output overload protection.

Operating Temperature: 32° - 104° F (0° -40° C).

Operating Humidity: 5-95% R.H. non-condensing.

Output Waveform on Inverter: Sine wave

Transfer Time (typical/max.): <2.0/2.25 msec. including decision time.

Recharge Time: 4 hours to 60% capacity.

Output Waveform on Line: Tracks AC with noise removed



SERIES ON

Single Phase, 120 V, 60 Hz
for US Models
Rating: 400 VA-2 kVA
250-1300 W

MODEL	ON 400A	ON 600A	ON 900A	ON 1300A	ON 2000A*
Output Rating (VA)	400	600	900	1300	1850
Watts (W)	250	400	600	900	1300
Frequency (Hz)	60	60	60	60	60
Input/Output Voltage (VAC)	120	120	120	120	120
Load Regulation (RMS)	± 3%	± 3%	± 3%	± 3%	± 3%
Inrush - 1/2 Cycle (Amps)	100	150	200	300	400
Surge Current (Amps) 1 sec. typical	20	30	40	60	80
Surge Current (Amps) 4 sec. typical	10	15	20	30	40
1 kHz Forward Transfer Impedance (Ohms)	< 5	< 4	< 3	< 2.5	< 2
Efficiency (%)	90	83	83	87	83
Approvals	UL, C/UL (all models)				
Line Cord (feet)	6	6	6	6	6
Height Inches (cm)	7.5" (19)	7.5" (19)	12" (31)	12" (31)	12" (31)
Width Inches (cm)	8.3" (21)	8.3" (21)	8.3" (21)	8.3" (21)	8.3" (21)
Depth Inches (cm)	15.5" (39)	18.5" (47)	18.5" (47)	21" (53)	18.5" (47)
Shipping Weight lbs. (kg.)	37 (17)	48 (22)	68 (30)	95 (43)	66 (30)

*Note: The ON2000 consists of a power unit and a separate battery unit. Dimensions for the battery unit are H = 7.5" (19cm), W = 8.3" (21cm), D = 18.5" (47cm). Shipping weight is 76lbs.(35kg).

PART NUMBER	PLUG	RECEPTACLES (#)
ON400A - SN	5-15P	5-15R (4)
ON600A - SN	5-15P	5-15R (4)
ON900A - SN	5-15P	5-15R (6)
ON1300A - SN	5-15P	5-15R (8)
ON2000A - SN	5-20P	5-15R (8)



SERIES ON

Single Phase, 230 V, 50/60 Hz
for International Models
Rating: 400 VA-2 kVA
250-1400 W

MODEL	ON 400I	ON 600I	ON 900I	ON 1300I	ON 2000I*
Output Rating (VA)	400	600	900	1300	2000
Watts (W)	250	400	600	900	1400
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
Input/Output Voltage (VAC)	230	230	230	230	230
Load Regulation (RMS)	± 3%	± 3%	± 3%	± 3%	± 3%
Inrush - 1/2 Cycle (Amps)	60	80	100	200	240
Surge Current (Amps) 1 sec. typical	12	15	20	40	48
Surge Current (Amps) 4 sec. typical	6	7.5	10	20	24
1 kHz Forward Transfer Impedance Ohms	< 20	< 15	< 12	< 10	< 8
Efficiency (%)	90	83	83	87	83
Approvals	CE, GS (all models)				
Line Cord (cm)	180	180	180	180	180
Height Inches (cm)	7.5" (19)	7.5" (19)	12" (31)	12" (31)	12" (31)
Width Inches (cm)	8.3" (21)	8.3" (21)	8.3" (21)	8.3" (21)	8.3" (21)
Depth Inches (cm)	15.5" (39)	18.5" (47)	18.5" (47)	21" (53)	18.5" (47)
Shipping Weight lbs. (kg.)	37 (17)	48 (22)	68 (30)	95 (43)	66 (30)

60 Hz, 230 V models are available upon request.

MODEL	BACKUP RUNTIME (HOURS:MINUTES)													
	VA LOAD: WATT LOAD:	100 65	150 100	200 130	250 165	300 195	400 260	500 325	600 390	700 455	800 520	900 585	1200 780	1850 1200
ON400		:30	:17	:12	:09	:07	:04							
ON600		:59	:44	:31	:23	:20	:15	:09	:08					
ON900		1:20	1:10	:51	:33	:27	:20	:14	:12	:10	:07	:06		
ON1300		3:22	2:10	1:35	1:14	1:00	:44	:34	:28	:23	:20	:17	:12	
ON2000		5:10	3:37	2:48	2:17	1:56	1:29	1:12	1:00	:52	:45	:40	:29	:17



SERIES ON - RACK MOUNT

Single Phase, 120 V, 60 Hz
for US Models
Rating: 600 VA-2 kVA
600-1300 W

MODEL	ON 600A-RM	ON 900A-RM	ON 1300A-RM	ON 2000A-RM*
Output Rating (VA)	600	900	1300	1850
Watts (W)	400	600	900	1300
Frequency (Hz)	60	60	60	60
Input/Output Voltage (VAC)	120	120	120	120
Load Regulation (RMS)	± 3%	± 3%	± 3%	± 3%
Inrush - 1/2 Cycle (Amps)	150	200	300	400
Surge Current (Amps) 1 sec. typical	30	40	60	80
Surge Current (Amps) 4 sec. typical	15	20	30	40
1 kHz Forward Transfer Impedance (Ohms)	< 4	< 3	< 2.5	< 2
Efficiency (%)	83	83	87	83
Approvals	UL, C/UL (all models)			
Line Cord (feet)	6	6	6	6
Height Inches (cm)	6.9" (18)	6.9" (18)	10.5" (27)	10.5" (27)
Width Inches (cm)	19" (48)	19" (48)	19" (48)	19" (48)
Depth Inches (cm)	15" (38)	15" (38)	15" (38)	15" (38)
Shipping Weight lbs. (kg.)	50 (23)	69 (31)	101 (46)	72 (33)

*The ON2000 consists of a power unit and a separate battery unit. Dimensions for the battery unit are H = 10.5" (27cm), W = 19" (48cm), D = 9" (23cm). Shipping weight is 76lbs.(35kg).

PART NUMBER	PLUG	RECEPTACLES (#)
ON600A-RM - SN	5-15P	5-15R (6)
ON900A-RM - SN	5-15P	5-15R (6)
ON1300A-RM - SN	5-15P	5-15R (8)
ON2000A-RM - SN	5-20P	5-15R (8)



SERIES ON - RACK MOUNT

Single Phase, 230 V, 50/60 Hz
for International Models
Rating: 600 VA-2 kVA
600-1400 W

MODEL	ON 600I-RM	ON 900I-RM	ON 1300I-RM	ON 2000I-RM*
Output Rating (VA)	600	900	1300	2000
Watts (W)	400	600	900	1400
Frequency (Hz)	50/60	50/60	50/60	50/60
Input/Output Voltage (VAC)	230	230	230	230
Load Regulation (RMS)	± 3%	± 3%	± 3%	± 3%
Inrush - 1/2 Cycle (Amps)	80	100	200	240
Surge Current (Amps) 1 sec. typical	15	20	40	48
Surge Current (Amps) 4 sec. typical	7.5	10	20	24
1 kHz Forward Transfer Impedance (Ohms)	< 15	< 12	< 10	< 8
Efficiency (%)	83	83	87	83
Approvals	CE, GS (all models)			
Line Cord (cm)	180	180	180	180
Height Inches (cm)	6.9" (18)	6.9" (18)	10.5" (27)	10.5" (27)
Width Inches (cm)	19" (48)	19" (48)	19" (48)	19" (48)
Depth Inches (cm)	15" (38)	15" (38)	15" (38)	15" (38)
Shipping Weight lbs. (kg.)	50 (23)	69 (31)	101 (46)	72 (33)

PART NUMBER	PLUG	RECEPTACLES (#)
ON600I-RM - SN	IEC	IEC (4)
ON900I-RM - SN	IEC	IEC (4)
ON1300I-RM - SN	IEC	IEC (8)
ON2000I-RM - SN	IEC	IEC (8)

All specifications subject to change without notice.

MODEL	VA LOAD WATT LOAD:	BACKUP RUNTIME(HOURS:MINUTES)												
		100 65	150 100	200 130	250 165	300 195	400 260	500 325	600 390	700 455	800 520	900 585	1200 780	1850 1200
ON600		:59	:44	:31	:23	:20	:15	:09	:08					
ON900		1:20	1:10	:51	:33	:27	:20	:14	:12	:10	:07	:06		
ON1300		3:22	2:10	1:35	1:14	1:00	:44	:34	:28	:23	:20	:17	:12	
ON2000		5:10	3:37	2:48	2:17	1:56	1:29	1:12	1:00	:52	:45	:40	:29	:17



**SERIES ON -
EXTENDED RUN TIME UNITS**

**Single Phase, 120 V, 60 Hz
for US Models**
Rating: 600, 900, and 1850 VA
400, 600, and 1300 W



**SERIES ON -
EXTENDED RUN TIME UNITS**

**Single Phase, 230 V, 50/60 Hz
for International Models**
Rating: 600, 900, and 2000 VA
400, 600, 1400 W

MODEL	ON 600A	ON 900A	ON 2000A	BATTERY CABINET
Output Rating (VA)	600	900	1850	n/a
Output Rating (W)	400	600	1300	n/a
Frequency (Hz)	60	60	60	n/a
Input/Output (Volts)	120	120	120	n/a
Load Regulation (RMS)	± 3%	± 3%	± 3%	n/a
Inrush - 1/2 cycle (Amps)	150	200	400	n/a
Surge Current (Amps) 1 sec. typical	30	40	80	n/a
Surge Current (Amps) 4 sec. typical	15	20	40	n/a
1 KHZ Forward Transfer Impedance (Ohms)	< 4	< 3	< 2	n/a
Efficiency %	83	83	83	n/a
Approvals	UL, C/UL (all models)			
Line Cord Feet	6	6	6	6
Height Inches(cm)	7.5"(19)	12" (30)	12" (30)	7.5" (27)
Width Inches (cm)	8.3" (22)	8.3" (22)	8.3" (22)	8.3" (22)
Depth Inches (cm)	18.5" (47)	18.5" (47)	21" (53)	9" (23)
Shipping Weight lbs (kg.)	48 (22)	68 (31)	66 (30)	74 (34)

MODEL	ON 600I	ON 900I	ON 2000I	BATTERY CABINET
Output Rating (VA)	600	900	2000	n/a
Output Rating (W)	400	600	1400	n/a
Frequency (Hz)	50/60	50/60	50/60	n/a
Input/Output (Volts)	230	230	230	n/a
Load Regulation (RMS)	± 3%	± 3%	± 3%	n/a
Inrush - 1/2 cycle (Amps)	80	100	240	n/a
Surge Current (Amps) 1 sec. typical	15	20	48	n/a
Surge Current (Amps) 4 sec. typical	7.5	10	24	n/a
1 KHZ Forward Transfer Impedance (Ohms)	< 15	< 12	< 8	n/a
Efficiency %	83	83	83	n/a
Approvals	CE, GS (all models)			
Line Cord (cm)	180	180	180	180
Height Inches (cm)	7.5" (19)	12" (30)	12" (30)	7.5" (27)
Width Inches (cm)	8.3" (22)	8.3" (22)	8.3" (22)	8.3" (22)
Depth Inches (cm)	18.5" (47)	18.5" (47)	21" (53)	9" (23)
Shipping Weight lbs (kg.)	48 (22)	68 (31)	66 (30)	74 (34)

PART NUMBER	PLUG	RECEPTACLES (#)
ON600-XASN	5-15P	5-15R (4)
ON900-XASN	5-15P	5-15R (6)
ON2000-XASN	5-20P	5-15R (8)
ONXBC - 417 (Floor Mount Battery Cabinet)	n/a	n/a

PART NUMBER	PLUG	RECEPTACLES (#)
ON600XI - SN	IEC	IEC (4)
ON900XI - SN	IEC	IEC (4)
ON2000XI - SN	IEC	IEC (8)
ONXBC - 417 (Floor Mount Battery Cabinet)	n/a	n/a

All specifications subject to change without notice.

Note: adding a "K" to the end of a part number identifies a power unit and one battery pack. Additional battery packs can be ordered separately under part no. ONXBC-217.

POWER HEAD REQUIRED		VA LOAD	BACKUP RUNTIME(HOURS:MINUTES)				
			NUMBER OF BATTERY PACKS:				
			1	2	4	6	8
	ON600	100	5:54	11:12			
	ON600	200	3:29	7:02	15:32		
	ON900	400	1:40	3:43	8:14	12:41	19:46
ON2000	ON900	600	1:04	2:34	5:36	8:28	12:00
ON2000	ON900	800	0:48	2:02	4:23	6:25	9:13
ON2000		1000	0:38	1:42	3:38	5:07	7:28
ON2000		1500	0:22	1:00	2:16	2:56	4:28
ON2000		1850	0:16	0:41	1:39	2:09	3:20



SERIES ON - WALLMOUNT EXTENDED RUN TIME UNITS

Single Phase, 120 V, 60 Hz
for US Models
Rating: 400 and 600 VA
250 and 400 W

MODEL	ON400A	ON600A	BATTERY CABINET
Output Rating (VA)	400	600	n/a
Output Rating (W)	250	400	n/a
Frequency (Hz)	60	60	n/a
Input/Output (Volts)	120	120	n/a
Load Regulation (RMS)	± 3%	± 3%	n/a
Inrush - 1/2 cycle (Amps)	100	150	n/a
Surge Current (Amps) 1 sec. typical	20	30	n/a
Surge Current (Amps) 4 sec. typical	10	15	n/a
1 KHZ Forward Transfer Impedance (Ohms)	< 5	< 4	n/a
Efficiency %	90	83	n/a
Approvals	UL, C/UL (all models)		
Line Cord Feet	6	6	6
Height Feet (cm)	15" (38)	15" (38)	7.5" (27)
Width Feet (cm)	8.3" (22)	8.3" (22)	8.3" (22)
Depth Feet (cm)	9" (23)	9" (23)	9" (23)
Shipping Weight lbs (kg.)	29 (13)	33 (15)	39 (18)

PART NUMBER	PLUG	RECEPTACLES (#)
ON400XA - WL-SN	5-15P	5-15R (4)
ON600XA - WL-SN	5-15P	5-15R (4)
ONXBC - WL - 217 (Battery Cabinet)	n/a	n/a

Note: adding a "K" to the end of a part number identifies a power unit and one battery pack. Additional battery packs can be ordered separately under part no. ONXBC-WL-217.
All specifications subject to change without notice.



SERIES ON - WALLMOUNT EXTENDED RUN TIME UNITS

Single Phase, 230 V, 50/60 Hz
for International Models
Rating: 400 and 600 VA
250 and 400 W

MODEL	ON400I	ON600I	BATTERY CABINET
Output Rating (VA)	400	600	n/a
Output Rating (W)	250	400	n/a
Frequency (Hz)	50/60	50/60	n/a
Input/Output (Volts)	230	230	n/a
Load Regulation (RMS)	± 3%	± 3%	n/a
Inrush - 1/2 cycle (Amps)	60	80	n/a
Surge Current (Amps) 1 sec. typical	12	15	n/a
Surge Current (Amps) 4 sec. typical	6	7.5	n/a
1 KHZ Forward Transfer Impedance (Ohms)	< 20	< 15	n/a
Efficiency %	90	83	n/a
Approvals	CE, GS (all models)		
Line Cord (cm)	180	180	180
Height Feet (cm)	15" (38)	15" (38)	7.5" (27)
Width Feet (cm)	8.3" (22)	8.3" (22)	8.3" (22)
Depth Feet (cm)	9" (23)	9" (23)	9" (23)
Shipping Weight lbs (kg.)	29 (13)	33 (15)	39 (18)

PART NUMBER	PLUG	RECEPTACLES (#)
ON400XI - WL-SN	IEC	IEC (4)
ON600XI - WL-SN	IEC	IEC (4)
ONXBC - WL - 217 (Battery Cabinet)	n/a	n/a

POWER HEAD REQUIRED		VA LOAD	BACKUP RUNTIME (HOURS:MINUTES)				
			NUMBER OF BATTERY PACKS:				
			1	2	4	6	8
ON400	ON400	100	3:03	6:30	15:00		
ON600	ON400	200	1:36	2:42	6:00	17:00	
ON600	ON400	400	0:48	1:28	3:06	5:30	8:30
ON600	ON600	600	0:35	0:51	1:46	3:10	6:10



SERIES DCI

Single and Three Phase, 60 Hz
Rating: 3-15 kVA/kW

MODEL	DCI3000			DCI5000			DCI7500			DCI10000			DCI15000				
kVA/kW Rating	3			5			7.5			10			15				
Input Voltage (VAC)	120	208*	240	120	208*	240	208*	240	208*	240	480	208*	240	480			
Input Voltage Range	+15%, -20% of nominal <u>without</u> transferring to battery																
Input Frequency Range (Hz)	47 to 63 Hz <u>without</u> transferring to battery																
Phase	1	1	1	1	1	1	1	1	1	1	1	1/3	1/3	1/3	1/3	1/3	1/3
Max. Input Current (Vac)	48	30	30	79	48	48	74	74	74	74	30/59	113/52	56/26	180/80	157/70	78/35	
Output Voltage (Vac)	120	208*	240	120	208*	240	120	208*	240	120	208*	240	120	208*	240	240	
Phase	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Frequency (Hz)†	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
Max. Output Current (Aac)	25	14.5	12.5	42	24	21	62.5	36	31	62.5	48	42	12.5	72	62.5		
Efficiency Half/Full Load (Single-Phase Output)	78%/79%			83%/83%			81%/85%			81%/85%			81%/85%				
Efficiency Half/Full Load (Three-Phase Input)	-	-	-	86%/86%			86%/87%										
Surge Voltage Withstand Capability	ANSI/IEEE C62.41 Category A & B ringwave, 6kV/200 & 500A, 100Khz and Category B impulse, 6kV/3kA.																
Surge Voltage Let-Through (Max.) when subjected to 6kV ANSI/IEEE C62.41 Cat. A Test	Less than 10V Normal Mode (L-N), less than 0.5 V Common Mode (N-G) in <u>both</u> normal and bypass conditions.																
Load Power Factor	Any																
Load Crest Factor Range	Up to 5:1 crest factor without derating																
Standard Input Conn.	Hardwired**			Hardwired**			Hardwired**			Hardwired**			Hardwired**				
Standard Output Conn.	Hardwired**			Hardwired**			Hardwired**			Hardwired**			Hardwired**				
Heat Rejection (BTU/hr.)(Single-Phase Input)	2100			3500			5250			6020			9038				
Heat Rejection (BTU/hr.)(Three-Phase Input)	-			-			-			5560			7650				
Typical Battery Runtime (full load/half load)***	7/22 mins			7/22 mins			10/30 mins			22/64 mins			14/42 mins				
Typical Battery Recharge Time to 100% Capacity	45 mins.			45 mins.			60 mins.			90 mins.			75 mins.				
Limited Warranty	1 year parts, 90 days on-site labor																
Approvals	UL Listed, FCC Class A compliance																
Weight (lbs.)	310			425			620			1200			1200				
Height (Inches)	27			27			36			53			53				
Width (Inches)	13			13			16			18			18				
Depth (Inches)	31			31			31			38.5			38.5				

* Standard Voltages

** Optional plug and receptacle versions available-contact factory for details

*** Optional Extended Run-Time Battery Packs available-up to 8 hours

† 50 Hz models available-contact factory for details

All specifications are subject to change without notice.

ONEAC UPS Communication Kits

ONEAC UPS Communication Kits, with an ON Series UPS, provide a comprehensive range of powerful performance features for attaining total power fault tolerance and complete manageability. Features include unattended shutdown when a prolonged power outage strikes, intelligent communications for remote control, UPS and AC line event monitoring and logging and customized programmable performance options.

ONEAC UPS communications kits are available for Novell NetWare (3 options to choose from), OS/2, Windows NT, Banyan, all major versions of UNIX, plus SNMP network management systems such as HP OpenView, Novell NMS, SunNet Manager and others. Refer to the chart below to determine the ONEAC part number and features available for your operating system.

STEP 1: SELECT THE ONEAC ACCESSORY KIT FROM THE TABLE ON THE FACING PAGE (PAGE 25), BASED ON YOUR OPERATING SYSTEM, AND THE LEVEL OF MANAGEMENT CAPABILITY REQUIRED.

STEP 2: SELECT THE ONEAC ACCESSORY KIT PREFIX, BASED ON YOUR REQUIREMENTS (DOES NOT APPLY TO "OTHER" OPERATING SYSTEMS)

KIT TYPE	INCLUDES	PREFIX
Accessory Kit	Interface Card, Software and Cable	AK-
Software Kit	Software and Cable	SK-
Cable Kit	Cable	CK-

Example: To order an ONEAC Accessory Kit for NetWare with remote management capability that includes interface card, software, cable and manual, the ONEAC part number is AK-NOVMOP1RM.

	NOVELL NETWARE (3 OPTIONS)			UNIX	OS/2 LAN SERVER	WINDOWS NT BANYAN	SNMP
	BASIC	ADVANCED	REMOTE MGMT.				
Automated Power Fail Response							
Automatic system shutdown	■	■	■	■	■	■	
Automatic system reboot	■	■	■	■	■	■	
Multiple server shutdown/reboot			■				
Administrator/user alerts	■	■	■	■	■	■	■
Customizable shutdown script	■	■	■	■	■	■ (NT)	
UPS battery conservation mode	■	■	■	■	■	■ (NT)	
UPS & AC Line Status Information							
Report results of UPS self-tests		■	■	■	■		■
Service/maintenance alerts		■	■	■	■		■
Battery replacement warning		■	■	■	■		■
UPS status information		■	■	■	■		■
UPS & power event logging		■	■	■	■		■*
Remote Management							
Remote control via workstation			■				■
Real-time paging alerts		■	■	■	■		■
Real-time e-mail alerts				■			
SNMP							■

*depends on manager

► NetWare 3.x, 4.1

ONEAC offers a number of management support options for NetWare — three cable/board interface kits for supporting the UPS.NLM provided with NetWare, and three ONEAC software interface kits to support basic, advanced or remote management features.

Software Interface Kits (Add features and functionality beyond that provided in NetWare):

MopUPS (Basic — Unattended Shutdown)	(AK- OR SK-)NOVMOP
--------------------------------------	--------------------

MopUPS Basic UPS monitoring software monitors Power Fail, Power Return, and Low Battery conditions. Upon receiving alerts, the program sends messages to the system console and to all users logged onto the server. Broadcast message text can be customized.

MopUPS ^{Plus} (Advanced — Adds Testing and UPS Status Monitoring)	(AK- OR SK-)NOVMOP+
--	---------------------

Includes all the features provided by MopUPS, plus the capability to log broadcast alert conditions in the System Error Log file, remote pager capability, and a graphical/GUI-based monitoring utility.

MopUPS/RM (Adds Advanced Remote Management Capabilities)	(AK- OR SK-)NOVMOP/RM
--	-----------------------

Advanced monitoring software provides all features of MopUPS^{Plus} plus the ability to review system error messages via the "View Log File" from the Available Topics menu, multiple server support to execute unattended shutdown of two servers sharing a single UPS, and local access to remote servers or workstations running MopUPS/RM.

Cable/Board Interface Kits (Allow you to use the UPS.NLM provided with NetWare):

Using a PS/2 compatible mouseport	CK-NOV/PS2M
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Using a UPS monitoring board, or disk co-processor board (DCB) that supports UPS monitoring	CK-NOV/DCB
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If you do not have a DCB UPS board and wish to leave the serial port open	IK-UPSMON
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► UNIX

ONEAC UNIX software monitors UPS status, and initiates an automated and orderly shutdown in the event of a prolonged outage. Additional features include UPS event logging, user alerts, and e-mail messaging when attention is required.

AIX — IBM	(AK- OR SK-)AIXMOP	DG/UX — Data General	(AK- OR SK-)JGDMOP
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Digital UNIX - DEC	(AK- OR SK-)DECMOP	HP-UX for PA-RISC — Hewlett Packard	(AK- OR SK-)HPUXMOP
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IRIX — Silicon Graphics	(AK- OR SK-)SGIMOP	MP-RAS — NCR	(AK- OR SK-)JMPRAS
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SCO UNIX — Intel	(AK- OR SK-)JSCOMOP	Solaris 2.x, SPARC — Sun Microsystems	(AK- OR SK-)SOLMOP
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Sv/88k — Motorola	(AK- OR SK-)MOTMOP (4mm)	SunOS 4.13 Solaris 1.x SPARC — Sun Microsystems	(AK- OR SK-)SUNMOP
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UnixWare	(AK- OR SK-)UWAREMOP		
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► OS/2	(AK- OR SK-)OS2MOP
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MopUPS Basic UPS monitoring software monitors Power Fail, Power Return, and Low Battery conditions. Upon receiving alerts, the program sends messages to the system console and to all users logged onto the server. Broadcast message text can be customized to log broadcast alert conditions in the System Error Log file, remote pager capability, and a graphical/GUI-based monitoring utility.

► Other Operating Systems

Offers basic cable shutdown using built-in OS functionality.

WindowsNT	CK-WINNT
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Banyan VINES	CK-BANYAN
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AS/400	CK-AS/400
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► SNMP

Provides all the capabilities inherent in the proposed standard UPS MIB including-Traps/Alarms to alert the network to UPS status condition requiring attention; Remote Control to program the UPS to shutdown after a preset interval, restart or reboot attached devices; Remote Testing to determine UPS status from anywhere across the WAN; and Retrievable Information to access UPS status information.

HP OpenView, Novell NMS, SunNet Manager and other SNMP network management systems	AK-SNMP-NE
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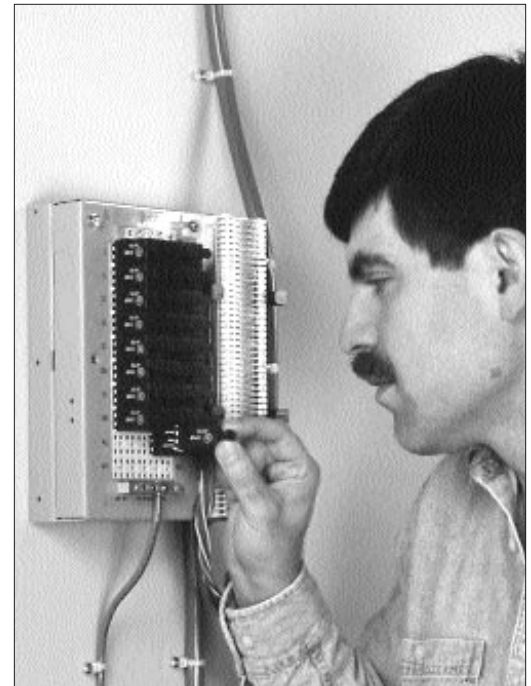
Communications Line Protector Selection Guide

ONEAC BREAKS "THE RING VOLTAGE BARRIER"

Conventional protectors (either gas tube or solid-state) are designed to clamp above the operating DC bias and the ring voltage level. The OnLine's ability to differentiate signals based on frequency permits the useful signals to pass while preventing transients from damaging semiconductor based electronics.

STEP 1: CHOOSE THE ONEAC ONLINE PRODUCT SERIES THAT MATCHES THE BASE/BLOCK USED BY YOUR COMMUNICATIONS INTERFACE.

STEP 2: SELECT THE ONEAC PART NUMBER APPROPRIATE TO THE TYPE OF SERVICE USED.



BASE TYPE	SERIES	APPLICATION	MODEL/PART#	COLOR/DESCRIPTION
66 Block M1-50 (page 27)	6 Series	Standard Service-Truck Lines Analog OPX Stations with Ring Signal	6-AP	Black
		T-1 (DS-1) Digital Carrier, Digital Data	6-DC	Blue
		ISDN, Digital OPX Stations without Ring Signal	6-DP	Yellow
		Ground (earthing) Bar	350-032	n/a
5-Pin Base (page 27)	5 Series	Standard Service-Truck Lines, Analog OPX Stations with Ring Signal	5S-AP	Black
		ISDN, Digital OPX Stations without Ring Signal	5S-DP	Yellow
Modular Jacks (page 28)	J Series	Standard Service-Trunk Lines Analog OPX Stations with Ring Signal	RJ-AP11 RJ-AP14 RJ-AP45	6 position, 2 wire, 1 line 6 position, 4 wire, 2 line 8 position, 8 wire, 4 line
		ISDN, Digital OPX without Ring Signal	RJ-DP11 RJ-DP14 RJ-DP45	6 position, 2 wire, 1 line 6 position, 4 wire, 2 line 8 position, 8 wire, 4 line
		Standard service Analog-Fax, Modem & Data Terminal	LJ-AP-420	6 position, 4 wire, 2 line
Krone LSA Plus 237A or Compatible (page 29)	10 Series	Standard service CO line (for either analog or digital exchange) Analog external extensions (key station or standard system telephone) ISDN-Digital external extensions (key station or standard system phone)	10-AP-200 10-DP	White Yellow
		10-1 Series	Standard service CO line (for either analog or digital exchange) Analog external extensions (key station or standard system telephone) ISDN-Digital external extensions (key station or standard system phone)	10AP-1 10DP-1
		One ground (earthing) bar is required for each termination strip	350-139	n/a

ONEAC offers two types of communication line protectors for the Krone LSA Plus 237A or compatible. Choose the 10 Series product if you use all 10 positions for the same type of service. The 10-1 Series fits on the same 10-position block, but provides an individual protector for each telecom line. Choose it to allow the flexibility to accommodate different service types on the same block, or if fewer than 10 positions are in use.



OnLine — for 5 Pin Protector Bases & 66 Blocks



DESCRIPTION	MODEL	5-PIN BASE		66 BLOCK M1-50		
		5S-AP	5S-DP	6-AP	6-DC	6-DP
Transient Voltage Performance with 1/1 μ s, 200 V Peak:		28 V	28 V	28 V	28 V	28 V
Impulse Voltage Performance with 10/1000 μ s, 1500 V, 100 A:		100 V	50 V	100 V	100 V	50 V
DC Breakdown Voltage @ 2000 V/sec.		280 V	70 V	280 V	280 V	70 V
Rated Impulse Discharge with 10/1000 μ s:		100A	100A	100A	100A	100A
Response Time:		< 1 Nanosecond (all models)				
DC Holdover @ 25° C, 20 ms max.		200mA	200mA	200mA	200mA	200mA
On State Voltage with 1 Amp RMS:		< 5V	< 5V	< 5V	< 5V	< 5V
Capacitance @ 50 VDC, 5VAC, 1KHZ:		<200 pf	<200 pf	<200 pf	<200 pf	<200 pf
Insulation Resistance:		>100 M Ω	>100 M Ω	>100 M Ω	>100 M Ω	>100 M Ω
Fused (fails open)		n/a	n/a	yes	yes	yes
Service Life with 10/1000 μ s @ +/- 10 Amps: @ +/- 100 Amps: @ +/- 300 Amps:		Unlimited Unlimited Fail-Safe	Unlimited Unlimited Fail-Safe	Unlimited Unlimited Fail-Safe	Unlimited Unlimited Fail-Safe	Unlimited Unlimited Fail-Safe
Resettable Overcurrent Protection (Sneak Current) @ 25° C,		300 mA	300 mA	300 mA	300 mA	300 mA
UL Listings		497	497	497, 497A	497, 497A	497, 497 A
Storage Temperature		-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Operating Temperature		-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
Color Code		Black	Yellow	Black	Blue	Yellow
Test Points		Yes	Yes	Yes	Yes	Yes



OnLine — For Modular Jacks

SPECIFICATION	MODEL	ANALOG CIRCUITS US RJ-AP	INTERNATIONAL LJ-AP	DIGITAL CIRCUIT GLOBAL RJ-DP
Transient Voltage Performance Output Voltage with Transient Input (@ 1/1 μ s, 200V Peak)		28 V	30V Typical, 40V max.	28 V
Impulse Voltage Performance Impulse Input @ 10/1000 μ s, 1500V, 100A Output Voltage @ 10/1000 μ s, 1500V, 50A Output Voltage (8 Position only)				
1. Impulse Applied to inputs A or B with respect to Earth and measured at outputs A or B with respect to Earth.		100 V	530V Typical, 600V max.	50 V
2. Impulse applied between inputs A and B, with one input tied to Earth, and measured between outputs A and B.			100V Typical, 170V max.	
Rated Impulse Discharge (@ 10/1000 μ s)		100A	100A	100A
Response Time		< 1 nanosecond	< 1 nanosecond	< 1 nanosecond
DC Breakdown Voltage (@ 2000V/sec)		280 V	420V min.-600V max.	70 V
DC Holdover (@ 25°C, 20 milliseconds max., +/- 52V DC)		200mA	200mA	200mA
Insulation Resistance		>100M Ω	> 100M Ω	>100M Ω
Capacitance (@ 50VDC, 5VAC, 1KHz)		<200pf	< 200 pf	<200 pf
On-State Voltage (@ 1 Amp)		<5 V	< 100 pf	<5 V
Operating Temperature		-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
Storage Temperature		-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Input Fused		Yes	Yes	Yes
UL Listings		497A	–	497A



OnLine — For Krone LSA Plus 237A Connection Strip

SPECIFICATION	APPLICATION	ANALOG CIRCUITS		DIGITAL CIRCUITS	
	MODEL	US 10APU	UK 10-AP-200	GLOBAL 10DP-1	UK 10-DP
Transient Voltage Performance Output Voltage with Transient Input (@ 1/1 μ s, 200V Peak)		30V Typical, 40V Max.	30V Typical, 40V max.	30V Typical, 40V max.	30V Typical, 40V max.
Impulse Voltage Performance Output Voltage with @ 10/1000 μ s, 1500V, 100A Impulse Input					
1. Impulse Applied to inputs A or B with respect to Earth and measured at outputs A or B with respect to Earth.		240V Typical, 300V max	80V Typical, 100V max.	240V Typical, 300V max	80V Typical, 100V max
2. Impulse applied between inputs A and B, with one input tied to Earth, and measured between outputs A and B.		70V Typical, 100V max.	60V Typical, 85V max.	70V Typical, 100V max.	60V Typical, 85V max
Rated Impulse Discharge (@ 10/1000 μ s)		100A	100A	100A	100A
Response Time		< 1 nanosecond	< 1 nanosecond	< 1 nanosecond	< 1 nanosecond
DC Breakdown Voltage (@ 2000V/sec)		180V min.-300V max.	60V min.-95V max.	180V min.-300V max.	60V min.-95V max.
DC Holdover (@ 25°C, 20 milliseconds max., +/- 52V DC)		200mA	200mA	200mA	200mA
Insulation Resistance		>100M Ω	>100M Ω	>100M Ω	>100M Ω
Capacitance 1 mi to ground (@ 50Vdc, 5Vac, 1KHz)		<200pf	<200pf	<200pf	<200pf
On-State Voltage (@ 1 Amp)		<5 V	<5 V	<5 V	<5 V
Operating Temperature		-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
Storage Temperature		-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Input Fused		Yes	Yes	Yes	Yes
Connections		Single circuit Krone 237A* or Compatible	Single circuit Krone 237A* or Compatible	10 circuit Krone 237A or Compatible	10 circuit Krone 237A or Compatible
Color Code		Black	Yellow	White	Yellow

*Compatible ground (earthing) bar required for termination strip.

CIRCUIT	POSITION	PART #
Analog	(UK)	10
		1
	(US)	10
		1
Digital	(UK)	10
		1
	(US)	10
		1

Key to connectors:

U.S. STANDARD PLUG RECEPTACLE



5-15P



5-15R



5-20P



5-20R



5-50P



5-50R



6-15P



6-15R



6-20P



6-20R



14-60P



14-60R



15-60P



15-60R

U.S. TWIST LOCK PLUG RECEPTACLE



L5-15P



L5-15R



L5-20P



L5-20R



L5-30P



L5-30R



L6-20P



L6-20R



L6-30P



L6-30R



L14-20P



L14-20R



L14-30P



L14-30R



L21-20P



L21-20R



L21-30P



L21-30R

INTERNATIONAL



CSA5-20R



IEC



U.K.



FRENCH



ITALIAN



SWISS



AUSTRALIAN



GERMAN
"Schuko"

Technical Support

ONEAC dedicates itself to supporting customers long after the sale takes place by providing a broad range of product services.

STANDARD SERVICES INCLUDE:

- Telephone support during normal business hours.
- After hours telephone support beeper service.
- Assistance with orders for replacement batteries and units.
- In-house repair of all ONEAC products.
- Technical assistance and applications advice.

ADDITIONAL SERVICE OPTIONS INCLUDE:

- On-site service by a trained ONEAC Service Technician.
- Customer training seminars for help desk personnel, depot repair technicians, and others. Subjects include an overview of product functions and operation, installation and maintenance, basic telephone support, and more.
- On-site assistance with product installations.
- Warranty matching — ONEAC will match any competitor's warranty package.
- Hot Spares Program — Products of a customer's choice will be kept at an Airline Air Freight Company for immediate overnight shipment to any customer location.
- ON Series UPS Battery Program — Custom battery protection replacement can be made available to meet individual customer needs.
- Enhancement Program for UPS and instrumentation products — These products can be returned to ONEAC for latest product upgrades.
- Warranty replacement for UPS products — Reconditioned UPS products are also available for purchase.

HOW TO CONTACT ONEAC TECHNICAL SUPPORT:

TELEPHONE NUMBER	800-327-8801, Extension 3
NORMAL HOURS	7 a.m. - 5 p.m. Central Time, Monday through Friday, except company holidays
BEEPER HOURS	5 p.m. - 7 a.m.

After the hours of 5pm CST, all calls are forwarded to a beeper. An ONEAC Technical Support Representative will return your call within one half hour, except during the hours of 10 p.m. - 7 a.m. Response during 10 p.m. - 7 a.m. is on an emergency basis only.

Warranty

UNITS

ONEAC products are warranted free from defects in materials and workmanship for five years. This warranty is limited to repairing or replacing, at ONEAC's option, any defective component, circuit board, or module contained within the product only when it is returned with an ONEAC Return Material Authorization (RMA) number to ONEAC or to an ONEAC-designated repair facility. In all cases, the customer is responsible for shipping charges to and from ONEAC or the ONEAC-designated repair facility.

BATTERIES

Certain modules or peripherals included with the product but not manufactured by ONEAC, including but not limited to batteries or battery packs, are warranted for two years or the extent of the manufacturer's warranty, whichever is longer.

LIMITATIONS OF WARRANTY

This limited warranty does not cover any losses or damage resulting from shipment to or from the customer, or from improper installation, inappropriate environment, abuse, modifications, adjustments, or unauthorized repair.

EXCLUSIVE REMEDIES

Except as set forth herein and except as to title, there are no warranties, express or implied, or any affirmations of fact or promises by ONEAC for the products, their merchantability, or fitness for any particular purpose. In no event shall ONEAC be liable for lost profits, goodwill, or any other special or consequential damages.

RETURN PROCEDURE

To return a unit, contact ONEAC for a Return Material Authorization (RMA) number. This number must be marked on the shipping carton and packing slip of the unit returned. The customer is responsible for repair charges for damages incurred in shipment that result from inadequate packing of the product.

We live in an information age.

One made possible by semiconductor technology. The irony is, as that technology increases in sophistication, so does its susceptibility to power disturbances. To the point where traditional protection devices that had been adequate in the past are now falling short. That's not true of ONEAC.

ONEAC products meet today's needs.

Created by a design group that leads the industry in developing products capable of taming even the most hostile environments, ONEAC, in installation after installation, has proven its ability to provide the advanced protection modern electronic systems require. And we maintain a leading position in customer service, as well. With flexible, quality-driven manufacturing facilities organized to ship within 24 hours, even when product variations to meet specific applications are required.

ONEAC: A higher level of confidence

An ISO 9001 company, ONEAC has manufacturing plants in Libertyville, Illinois and Abingdon, England.

ONEAC USA

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Libertyville, Illinois 60048-9700
USA

Tel 847-816-6000
Toll Free 800-327-8801
Fax 847-680-5124

ONEAC EUROPE

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UNITED KINGDOM

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