# **ONEAC ConditionOne® Series Power Conditioners (75 - 1000 VA):**

Business systems, which are critical to generating revenue and maintaining data, face reliability and performance expectations which cannot be compromised. ONEAC ConditionOne Series power conditioners provide the clean power necessary for those systems to perform as they were designed.

### Computer-based business systems need clean power

Computers, point of sale equipment, telecommunications and manufacturing systems all rely on semiconductors to operate. Semiconductors perform by processing electric signals of less than a few volts each. Transient voltage disturbances confuse that process. Data may be lost or corrupted. Instructions garbled. Processes stopped. Systems need to be reset. Worst case, electrical overstress can destroy or degrade semiconductor material. The results are increasingly unreliable operation or seemingly random, sudden failures.

#### ONEAC's unique solution

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ONEAC power conditioners assure reliable electronic performance by isolating critical semiconductor-based circuits from the harsh electrical environment. They differ from surge suppressors in that they limit not only peak voltages (amplitude), but also edge speed (frequency) of electrical transients. ONEAC's low impedance transformer and Virtual Kelvin Ground<sup>®</sup> remove the full spectrum of conducted power-line noise in all modes. And, they convert a noisy safety ground to a noise-free signal ground. It's an approach that has proven uniquely effective against all electrical disturbances.

#### For increased productivity

By any technical measure — surge voltage let-through, high frequency filtering, stability, predictability, or durability — ONEAC power conditioners meet a far higher performance standard than conventional protection products. That translates into more reliable performance from the systems ONEAC protects. Field tests confirm it. Those who use ONEAC power conditioners in place of surge suppressor-based products, with or without a dedicated I/G circuit, dramatically reduce system crashes, unexplained system errors and other "soft" failures as well as hardware failures. So they enjoy a reduction in downtime and fewer service calls.

### Robust design, proven durability

Designed and manufactured under ISO 9001 quality procedures, ONEAC power conditioners have no parts that wear out. They last far longer than surge suppressors. And are highly reliable, even in harsh electrical environments. Their exceptionally high mean time between failures (MTBF) backs that up. So do we with a comprehensive 5-year warranty. Plus ONEAC can engineer site-specific protection schemes to protect critical equipment by eliminating power problems entirely.



- · Global variations: available for world-wide specifications
- Reliable low impedance transformer design: provides constant and consistent protection against voltage spikes.
- Tight surge let-through: highest possible assurance that conducted transient voltages won't damage or degrade hardware components.
- Virtual Kelvin Ground: maximizes system reliability by preventing "soft errors" and other symptoms of logic disruption caused by high-frequency noise.
- Optional ONEground™ technology: prevents costly damage to I/O boards, minimizes disruption and degradation caused by ground voltage differentials.
- Front panel indicator lights: inform the user of output power and possible wiring fault conditions.
- Maintenance-free: no parts that wear out so total lifetime cost is limited to the original purchase price.
- Small footprint, optional wallmount, quiet operation: unobtrusively fits into any environment.
- Plug and play: easy installation saves money and adds flexibility.
- Designed and manufactured under ISO 9001: assures consistent quality and performance.
- Safety approvals: UL, cUL and CE on I models
- **5-year warranty:** the best assurance of product quality and performance in the industry.

# **ONEAC ConditionOne Series Power Conditioners (75 - 1000 VA): Specifications**

## Power Conditioning

ONEAC's unique power conditioning architecture provides unmatched protection against the full range of power line disturbances. Components include:

Full output isolation: ONEAC's proprietary low impedance transformer design. Completely safeguards against lightning and other high energy surges without creating detrimental side effects.

Virtual Kelvin Ground: Eliminates the full spectrum of conducted power line noise (from 50 kHz to 10 MHz) in all modes, reduces the effects of electrostatic discharge (ESD), and provides an exceptionally clean signal reference ground for electronic systems.

**Optional ONEground:** Diverts transient errant current from flowing through ground circuit leads of datacom cables-minimizing the effect of ground potential shifts that can effect the performance of interconnected systems.

#### Agency Approvals

60 Hz units are UL and cUL listed under UL1012 and C22.2, No. 107.1. 50/60 Hz units are UL and cUL listed under UL1012 and UL60950 and carry the CE mark.

#### **Performance Characteristics**

Nominal input/output voltage: A Models - 120/120 V, 60 Hz I Models - 200-240 VAC, 50/60 Hz

Surge voltage withstand capability: ANSI/IEEE C62.41 Category A&B, 6 kV/200 & 500 A, 100 kHz ringwave

Surge and Noise Rejection-Isolation: with unit under power, and ANSI/IEEE C62.41 Category A pulse applied either normal mode (L-N) or common mode (N-G) 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

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

**Overload Protection:** push to reset circuit breaker (75-350 Va models) rocker arm switch circuit breaker (550-1000 VA models)

Cooling: convection

VA	Amps	Input Connectors*	Output Connectors	H x W x D Inches (mm)	Shipping Weight - Ibs (kg)	Standard Part Number	Wall Mount** Part Number	ONEground Part Number
75	0.63	5-15P	(2) 5-15R	4.8 x 4.1 x 7.4 (122 x 104 x 188)	6 (2.7)	PC075A-S2S	PC075A-S2SW	PC075AG-S2S
120	1	5-15P	(2) 5-15R	4.8 x 4.1 x 7.4 (122 x 104 x 188)	7 (3.2)	PC120A-S2S	PC120A-S2SW	PC120AG-S2S
180	1.5	5-15P	(2) 5-15R	4.8 x 4.1 x 7.4 (122 x 104 x 188)	8 (3.6)	PC180A-S2S	PC180A-S2SW	PC180AG-S2S
240	2	5-15P	(4) 5-15R	4.8 x 4.1 x 7.4 (122 x 104 x 188)	11 (5.0)	PC240A-S4S	PC240A-S4SW	PC240AG-S4S***
360	3	5-15P	(4) 5-15R	4.8 x 4.1 x 7.4 (122 x 104 x 188)	12 (5.4)	PC360A-S4S	PC360A-S4SW	PC360AG-S4S***
550	4.6	5-15P	(4) 5-15R	5.4 x 6.4 x 10.9 (137 x 163 x 277)	21 (9.5)	PC550A-S4S	PC550A-S4SW	PC550AG-S4S
750	6.2	5-15P	(4) 5-15R	5.4 x 6.4 x 10.9 (137 x 163 x 277)	24 (10.9)	PC750A-S4S	PC750A-S4SW	PC750AG-S4S
1000	8.4	5-15P	(4) 5-15R	5.4 x 6.4 x 10.9 (137 x 163 x 277)	27 (12.3)	PC1000A-S4S	PC1000A-S4SW	PC1000AG-S4S
75	0.32	IEC320	(2) IEC320	4.8 x 4.1 x 7.4 (122 x 104 x 188)	8 (3.6)	PC075I-C2C	PC075I-C2CW	PC075IG-C2C
120	0.5	IEC320	(2) IEC320	4.8 x 4.1 x 7.4 (122 x 104 x 188)	8 (3.6)	PC120I-C2C	PC120I-C2CW	PC120IG-C2C
180	0.75	IEC320	(4) IEC320	4.8 x 4.1 x 7.4 (122 x 104 x 188)	12 (5.4)	PC180I-C4C	PC180I-C4CW	PC180IG-C4C***
240	1	IEC320	(4) IEC320	4.8 x 4.1 x 7.4 (122 x 104 x 188)	12 (5.4)	PC240I-C4C	PC240I-C4CW	PC240IG-C4C***
360	1.5	IEC320	(4) IEC320	4.8 x 4.1 x 9.0 (122 x 104 x 229)	13 (8.9)	PC360I-C4C	PC360I-C4CW	PC360IG-C4C
550	2.3	IEC320	(4) IEC320	5.4 x 6.4 x 10.9 (137 x 163 x 277)	19 (8.6)	PC550I-C4C	PC550I-C4CW	PC550IG-C4C
750	3.1	IEC320	(4) IEC320	5.4 x 6.4 x 10.9 (137 x 163 x 277)	25 (11.3)	PC750I-C4C	PC750I-C4CW	PC750IG-C4C
1000	4.2	IEC320	(4) IEC320	5.4 x 6.4 x 10.9 (137 x 163 x 277)	30 (13.6)	PC1000I-C4C	PC1000I-C4CW	PC1000IG-C4C

Six foot line cord is standard on 60 Hz units.

\*\* Wallmount option adds 1.2 inches (31 mm) to overall depth of each unit.

\*\*\* Add 1.6 inches (41 mm) to overall depth of indicated unit.

All A models (60 Hz) are available with hardwired input and output. To order, use part number suffix XXB (i.e. PC075A-XXB) Other output configurations are available. Contact factory for details.

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ONEAC is a UL/BSI registered corporation ---Certification No. A2900

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