

Manufacturer of True Sine Wave Power Inverters and Related Products

## XP SERIES POWER INVERTERS



XP 125



XP 250



XP 600



XP 1100

Made in America, **EXELTECH XP SERIES INVERTERS** are the most affordable, reliable, lightweight and best regulated, true sine wave inverters available. The **XP SERIES** inverter will operate any AC load anywhere. Ultra lightweight, yet rugged enough for the most extreme mobile environments, the **XP SERIES** is available in 100Vac, 120Vac, or 230Vac in 50Hz, 60Hz or 400Hz for land, marine or military applications, worldwide.

- TRUE SINE WAVE
- 125 WATTS TO 1100 WATTS
- 12VDC TO 108VDC INPUT
- RACK MOUNT OPTIONAL
- REMOTE SWITCHING
- 21.5 YEARS MTBF

# XP SERIES PART NUMBERING SYSTEM

**EXELTECH XP SERIES**    XP    \_ - \_ - \_ - \_ - 1 - \_  
**MODEL NUMBER**

**Step 1:** Model number always starts with XP.

**Step 2:** To designate wattage enter the single character code  
 1 for 125, 2 for 250, 6 for 600, K for 1100

**Step 3:** To designate output voltage enter the single character code from the Vac chart

Vac OUTPUT VOLTAGE CHART			
AC Volts	100	120	230*
Designation	0	1	3

\*Not available in 125watt models

**Step 4:** To designate input voltage enter the single character code from the Vdc chart

Vdc INPUT VOLTAGE CHART						
DC Volts	12	24	32	48	66	108
Designation	1	2	B	4	E	I

**Step 5:** Output frequency is designated by using the first number of the frequency  
 5 for 50Hz, 6 for 60Hz and 4 for 400 Hz

**Step 6:** This designates revision level (For EXELTECH use only).

**Step 7:** To designate option, enter the code from the option chart below. If no option is required please leave it blank.

OPTION CHART	
Option	Code
Conformal coating	07
Low idle current drain	02*
Circuit board with heat sink only	04**
50MS transfer relay	20***

\* available thru a distributor only(only on XP1100W)

\*\*available for OEM's only

\*\*\*available on XP600 and XP1100 only

**EXAMPLE:** XP600 with  
 117Vac output, 12Vdc input,  
 60Hz with the conformal  
 coating option would require  
 the following model number:  
**XP6-1-1-6-1-07**



# XP SERIES POWER INVERTER SPECIFICATIONS

## OUTPUT POWER

CONTINUOUS POWER	SURGE POWER	NO LOAD POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	WEIGHT LBS.
125W	150W	5W	100 +/-6%	1.2	2
125W	150W	5W	117 +/-6%	1.1	2
250W**	300W	6W	100 +/-6%	2.5	5
250W**	300W	6W	117 +/-6%	2.1	5
250W**	300W	7W	230 +/-6%	1.1	5
600W**	1100W	8W	100 +/-6%	6.0	6.5
600W**	1100W	8W	117 +/-6%	5.1	6.5
600W**	1100W	9W	230 +/-6%	2.7	6.5
1100W**	2200W	20W*	100 +/-6%	11.0	10
1100W**	2200W	20W*	117 +/-6%	9.5	10
1100W**	2200W	20W*	230 +/-6%	4.8	10

\*10W with X2 option  
\*\*remote switchable

## INPUT POWER

MODEL VOLTAGE	MINIMUM <sup>1</sup> (TYPICAL)	SYSTEM (TYPICAL)	MAXIMUM <sup>1</sup> (TYPICAL)	TYPICAL EFFICIENCY @ FULL POWER	PEAK EFFICIENCY @ 1/3 POWER
12V	10.4/10.6*	13.8V	16.5V	85%	87%
24V	19/21V*	27.6V	33V	87%	89%
32V	26.5/28V*	36.8V	44V	88%	90%
48V	41.5/42.5V	55.2V	62V	87%	89%
66V	57.5/58.5V*	75.9V	91V	88%	90%
108V	94/95V*	125V	149V	87%	90%

\*Indicates typical cut-off voltage/warning buzzer voltage

<sup>1</sup> +/- 3%

## GENERAL

CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
WAVEFORM	-	SINUSOIDAL	-
VOLTAGE OUTPUT	-5%	NOMINAL	+5%
LINE REGULATION	-	0.1%	0.5%
LOAD REGULATION	-	0.5%	1%
DISTORTION	-	1.5%	2%
FREQUENCY	-0.1%	NOMINAL	+0.1%

See [www.exeltech.com](http://www.exeltech.com) for more data regarding XP Series inverters.

## MECHANICAL

Case size (HxWxD)
125W case size= 2.16" X 4.93" X 7.90" (2 lbs)
250W case size= 2.77" X 5.23" X 12.03" (5 lbs)
600W case size= 3.57" X 7.69" X 12.10" (6.5 lbs)
1100W case size= 3.57" X 7.69" X 15.05" (10 lbs)

## OPTIONS

XP Options:
- conformal coating (07 option)
- low idle current drain (02 option)*
- circuit board with heat sink only (04 option) many other options available for OEM applications, consult factory.

\*1100 watt only

## PROTECTION CIRCUITRY

*Over Voltage:	Shut off at maximum input voltage, per input conditions. Automatic reset upon fault correction.
*Under Voltage:	Shut off at minimum input voltage, per input conditions
*Thermal:	105 C internal temperature. Warning buzz 5 C before shut off
Output Short:	Unit shuts off (manual reset)

\*Automatically reset

## ENVIRONMENTAL

Temperature:	-25 to 30 C full power derated 20% per 10 C, above 30 C.
Humidity:	5 to 95% non condensing
Altitude:	-200 to 10k feet full power, derated above 10k
Audible Noise:	Less than 45dba
Cooling:	600W/1100W Thermo-statically controlled forced air. 125W/250W convection cooled.
Finish:	Painted aluminum
Warranty:	Full year parts labor

# EXELTECH

7317 Jack Newell Blvd. North  
Fort Worth, Texas 76118-7100  
817-595-4969 voice, 817-595-1290 fax  
800-886-4683 toll free  
website [www.exeltech.com](http://www.exeltech.com)

# COMPANY PROFILE

EXELTECH was founded in 1990, based on the philosophy that efficiencies in the manufacturing process through product design, coordinated with facility layout, was paramount to productivity and the key to a quality product. Our mission is to provide leadership electronics and superior customer service through the merging of innovative designs with advanced Manufacturing technology.

Quality through design for manufactureability is a primary goal. Utilizing surface mount technology, all design and manufacturing is performed in our facility, located in FORT WORTH, TEXAS. "Pick and place" machines are set up with parts that are standard to all models, allowing for zero setup time and eliminating errors created when reloading or setting up machines. Only large capacitors and magnetics are placed by hand, in an effort to minimize human error through automation. Hand soldering is eliminated through the use of vapor phase reflow. Point to point wiring is eliminated with extensive use of PCB's to perform interconnectivity functions. The use of extruded aluminum for mechanics has reduced the number of nut/bolt and screw points to one-fourth that of previous products, while increasing heat dissipation efficiency and lending a functional form factor to the product.

While design of the products to comply with automated manufacturing processes continues, our people remain the most important part of the quality equation. All employees go through a six month internship before becoming full-time staff members. All employees are cross trained for multi-task capability. Using a PULL system, each station performs a quality check on the performance of the previous station. Data for first time yield and DPU is recorded and analyzed by each station and test bench in an ongoing effort to yield a zero defect process. Upon final assembly, all products then proceed to A.L.T. for "accelerated life testing" to minimize "infant mortality". Packaging and shipping procedures are constantly evaluated to reduce damage.

All repairs are performed at the factory for quality feedback and input for future design. The net result of these philosophies is a line of products that demonstrates an MTBF(mean time between failure) in excess of 20 years and offers the most competitively priced true sine wave inverters available anywhere.

Our commitment to quality and total customer satisfaction has allowed EXELTECH to become innovators in the DC to AC power product market. A few of our "firsts" include; The smallest, lightest high frequency PWM sine wave inverter. The first "N+1" redundant inverter systems, "hot" swappable capability and "modular" design. Our many satisfied customers include AT&T, BROOKHAVEN NATIONAL LABS, DIGITAL EQUIPMENT CORPORATION, MOTOROLA, MCI, GTE GOVERNMENT SYSTEMS and numerous federal and state agencies. We are found quite literally, around the world. We also provide back up power for the communications room in every U.S. Embassy worldwide.

Give us the opportunity to help solve your power problem.



[www.exeltech.com](http://www.exeltech.com)

7317 Jack Newell Blvd North Fort Worth, Texas 76118-7100 voice- 817.595.4969 fax- 817.595.1290 toll free- 800.886.4683