

Application Chart: Which KISAE Model to Select?

The following chart provides examples of various loads, how much power they use while operating, and the KISAE models that will run them.

	APPLICATION	POWER LEVEL	MODIFIED SINEWAVE	MODIFIED SINEWAVE	MODIFIED SINEWAVE	MODIFIED SINEWAVE	TRUE SINEWAVE	TRUE SINEWAVE	TRUE SINEWAVE	TRUE SINEWAVE
			MW 1204	MW 1210	MW 1215	MW 1230HW	SW 1204	SW 1210 SWXFR 1210	SW 1220 SWXFR 1220	SWXFR 1230
			400W	1000W	1500W	3000W	400W	1000W	2000W	3000W
ENTERTAINMENT	DVD PLAYER	30W	✓	✓	✓	✓	✓	✓	✓	✓
ENTERTAINMENT	PORTABLE STEREO	40W	✓	✓	✓	✓	✓	✓	✓	✓
ENTERTAINMENT	22" LCD TV	60W	✓	✓	✓	✓	✓	✓	✓	✓
ENTERTAINMENT	32" LCD TV	120W	✓	✓	✓	✓	✓	✓	✓	✓
ENTERTAINMENT	XBOX	130W	✓	✓	✓	✓	✓	✓	✓	✓
ENTERTAINMENT	HOME STEREO SYSTEM	250W		✓	✓	✓	✓	✓	✓	✓
OFFICE	17" LCD MONITOR	40W	✓	✓	✓	✓	✓	✓	✓	✓
OFFICE	INK JET PRINTER	60W	✓	✓	✓	✓	✓	✓	✓	✓
OFFICE	LASER PRINTER	250W		✓	✓	✓	✓	✓	✓	✓
OFFICE	DESKTOP COMPUTER	350W		✓	✓	✓	✓	✓	✓	✓
LIGHTING	ENERGY SAVING LIGHTS BULBS (3 X 17W)	51W	✓	✓	✓	✓	✓	✓	✓	✓
LIGHTING	ENERGY SAVING LIGHTS BULBS (6 X 17W)	102W			✓	✓	✓	✓	✓	✓
LIGHTING	INCANDESCENT LIGHTS (2X60W)	120W	✓	✓	✓	✓	✓	✓	✓	✓
LIGHTING	INCANDESCENT LIGHTS (5X60W)	300W		✓	✓	✓	✓	✓	✓	✓
LIGHTING	FLOODED LIGHT	500W		✓	✓	✓		✓	✓	✓
LIGHTING	HALOGEN SPOT LIGHT	1000W			✓	✓		✓	✓	✓
KITCHEN	HANDHELD MIXER	220W	✓	✓	✓	✓	✓	✓	✓	✓
KITCHEN	BLENDER	350W		✓	✓	✓		✓	✓	✓
KITCHEN	FREEZER 14 CU FT	450W		✓	✓	✓		✓	✓	✓
KITCHEN	REFRIGERATOR 20 CU FT	550W			✓	✓		✓	✓	✓
KITCHEN	COFFEE MAKER/TOASTER	800W		✓	✓	✓		✓	✓	✓
KITCHEN	MICROWAVE 800W	800W			✓	✓			✓	✓
KITCHEN	MICROWAVE 1200W	1200W			✓	✓			✓	✓
HOUSEHOLD	FAN 10", HUMIDIFIER	30W	✓	✓	✓	✓	✓	✓	✓	✓
HOUSEHOLD	SEWING MACHINE	100W		✓	✓	✓	✓	✓	✓	✓
HOUSEHOLD	AIR PURIFIER	100W	✓	✓	✓	✓	✓	✓	✓	✓
HOUSEHOLD	ELECTRIC BLANKET	200W	✓	✓	✓	✓	✓	✓	✓	✓
HOUSEHOLD	GARAGE DOOR OPENER	350W			✓	✓		✓	✓	✓
HOUSEHOLD	IRON	1200W			✓	✓			✓	✓
HOUSEHOLD	HOUSEHOLD VACUUM	1200W				✓			✓	✓
HOUSEHOLD	HAIR DRYER	1750W				✓			✓	✓
HOUSEHOLD	AIR CONDITIONER (ROOM)	1500W								✓
CONSTRUCTION	SOLDERING IRON	40W	✓	✓	✓	✓	✓	✓	✓	✓
CONSTRUCTION	1/4" DRILL	250W	✓	✓	✓	✓	✓	✓	✓	✓
CONSTRUCTION	GRINDER	300W		✓	✓	✓		✓	✓	✓
CONSTRUCTION	WEED EATER	350W		✓	✓	✓	✓	✓	✓	✓
CONSTRUCTION	1/2" DRILL	700W			✓	✓		✓	✓	✓
CONSTRUCTION	AIR COMPRESSOR 3/4 HP	750W			✓	✓		✓	✓	✓
CONSTRUCTION	12" CHAIN SAW	1200W			✓	✓			✓	✓
CONSTRUCTION	8 1/4" CIRCULAR SAW	1500W			✓	✓			✓	✓

How Long Will You Run? Battery Run Time Chart

AC Load Run-time Calculator based on using KISAE Power Inverter running on 12 V lead acid battery.

AC LOAD	12V - 20AH	12V - 40AH	12V - 60AH	12V - 120AH	12V - 180AH	12V - 240AH	12V - 300AH
20 W	6 hrs	13 hrs	21 hrs	44 hrs	66 hrs	87 hrs	110 hrs
40 W	4 hrs	8.5 hrs	13 hrs	27 hrs	41 hrs	54 hrs	68 hrs
50 W	3 hrs	6.2 hrs	10.5 hrs	22 hrs	33 hrs	44 hrs	55 hrs
100 W	1.5 hrs	3 hrs	5 hrs	10.5 hrs	16.5 hrs	23 hrs	29 hrs
150 W	54 mins	2 hrs	3 hrs	6.2 hrs	10.8 hrs	14 hrs	19 hrs
200 W	36 mins	1.3 hrs	2.2 hrs	4.5 hrs	7.5 hrs	11 hrs	13 hrs
350 W	13 mins	40 mins	1 hrs	2.2 hrs	4.2 hrs	5.5 hrs	7.2 hrs
500 W	N/A	25 mins	45 mins	1.8 hrs	3 hrs	4 hrs	5 hrs
750 W	N/A	13 mins	22 mins	54 mins	2 hrs	2.5 hrs	3.2 hrs
1000 W	N/A	7 mins	15 mins	49 mins	1.2 hrs	1.8 hrs	2.2 hrs
1250 W	N/A	N/A	11 mins	37 mins	1 hr	1.3 hrs	1.9 hrs
1500 W	N/A	N/A	7 mins	25 mins	47 mins	1 hr	1.4 hrs
1750 W	N/A	N/A	5 mins	18 mins	41 mins	52 mins	1.1 hrs
2000 W	N/A	N/A	N/A	15 mins	32 mins	43 mins	54 mins
3000 W	N/A	N/A	N/A	7 mins	15 mins	22 mins	37 mins

Selecting a KISAE Battery Charger

Maximum Battery Charging Current vs. Battery Size

AC1220	AC1220	AC1240	AC1240	AC1260	AC1260	AC2430	AC2430
12V - 20A	12V - 20A	12V - 40A	12V - 40A	12V - 60A	12V - 60A	24V - 30A	24V - 30A
Current Setting	Battery Capacity	Current Setting	Battery Capacity	Current Setting	Battery Capacity	Current Setting	Battery Capacity
5A	Min 10Ah	5A	Min 10Ah	5A	Min 10Ah	5A	Min 10Ah
10A	Min 20Ah	10A	Min 20Ah	20A	Min 40Ah	10A	Min 20Ah
15A	Min 30Ah	20A	Min 40Ah	40A	Min 80Ah	20A	Min 40Ah
20A	Min 40Ah	40A	Min 80Ah	60A	Min 120Ah	30A	Min 60Ah

Note: The rule of thumb is the maximum battery charging current is half the battery capacity size.