

Major Inverters - 1 K to 50 kVA, Single Phase

Major Series Industrial Inverters are high quality, low noise, telecom grade units available in a wide range of input voltages (24 VDC to 600 VDC) up to 50 kVA, single phase.

Major Inverters offer true sine wave output for a wide variety of inverter applications.



Product Features

- Telecom Quality Inverters
 - True Sine Wave
 - Wide DC Input Range
 - High Efficiency Units
 - Minimal Parts Count
 - Proven Reliability
 - FET and IGBT Technology
- Ideal for:
 - ▶ Telecommunication
 - ▶ Utility Stand-by AC Power
 - ▶ Nuclear Protection System
 - ▶ Battery-operated stand-by equipment
 - ▶ Military & Industrial
 - ▶ Fuel cell power conversion
 - ▶ Solar Cell Power Conversion
 - ▶ Wind Power Conversion

Options

1	Output Ammeter - add suffix (A).
2	Output Voltmeter - add suffix (V).
3	Output Frequency Meter - add suffix (F).
4	Front panel output voltage adjustment (Requires V-Option) (Vadj).
5	Switchable output frequency 50/60 (3/4).
6	Inverter standby as UPS transfer circuit (RS).
7	Elapsed Time Meter - add suffix (ET).
8	Extended Temperature Range, -25°C to +55°C - add suffix (M).
9	Extended Humidity Range - add suffix (H).
10	Overtemperature Protection - add suffix (T).
11	Dual Output Voltage Range for Service at Either 115VAC or 230VAC -add suffix (E).
12	400 Hz Input - add suffix (HZ).
13	Slides - add suffix (S).
14	Military Type Connectors - add suffix (MS).

Product Specifications

Input	
Voltage	24/28/36/48/120/200/250/384/600 VDC (listed below). 60 VDC and others available.
Voltage Range	-15%, +20% typical
Output	
Voltage	Single Phase - 115 V, 60/400Hz outputs; 220 V, 50Hz output. Other voltages available.
Voltage Regulation	2% or less for combined no load to full load changes and rated input voltage changes.
Frequency	Output frequency for each model shown below. Custom output frequencies available.
Frequency Stability	Oscillator included. Fixed frequency oscillators crystal controlled with stability of $\pm 0.05\%$.
Power	Rated output power for each model is shown below, opposite model number.
Waveshape	Sinewave <3% THD, 1% max, any single frequency. <4% for non-linear loads.
Load Power Factor	0.7 lead to 0.7 lag. Continuous 0 lead to 0 lag at full rated output without damage.
Peak Output Current	110%, subcyclic reset
Duty Cycle	Continuous at full rated output
Efficiency	Between 70 - 95% depending upon DC input voltage.
Configuration	Input to output is transformer isolated and floating. Either side may be grounded. (Delta output available as no charge option.)
Phase Angle Accuracy	Digitally controlled to within $\pm 2^\circ$ for balanced loads, for fixed or adjustable outputs.
Protective Circuits	All models equipped with automatic overload protection, including short circuit. Automatic reset upon overload removal. Circuit breaker or fuse on the input and fuse on the output. Automatic shutdown for input over-voltage, undervoltage.
Meters	Output voltmeter, ammeter, frequency meter & elapsed time meter offered as options.
Environmental	
Ambient Temp Range	Operating 0-40°C. Non operating -20 to 85°C. Extended temp range available as option.
Ambient Humidity	$\pm 95\%$ to 25°C, $\pm 75\%$ to 40°C and $\pm 45\%$ to 50°C.
Mechanical	
Input and Output Terminations	Rear mounted barrier strips provided. High current DC inputs have brass studs or bus bar. Rear mounted MS connectors and mates provided 4kVA or less 400Hz output units.
Construction	Units less than 6KVA are standard 19" Rackmount. Larger units are cabinet models.

Model Selection Guide

Model														
Output Power (VA)	Output Freq. (Hz)	Available VDC Inputs									Height (in)	Width (in)	Depth (in)	Weight (lbs)
		24	28	36	48	120	200	250	384	600				
Major.5K														
500	60/50/400	✓	✓	✓	✓	✓	✓	✓			3½	19	19	40
Major1K														
1000	60/50/400	✓	✓	✓	✓	✓	✓	✓			3½	19	19	50
Major2K														
2000	60/50/400	✓	✓	✓	✓	✓	✓	✓			8¾	19	20	85
Major4K														
4000	60/50/400	✓	✓	✓	✓	✓	✓	✓			12¼	19	20	150
Major6K														
6000	60/50/400				✓	✓	✓	✓			30	24	30	400
Major8K														
8000	60/50/400				✓	✓	✓	✓			30	24	30	440
Major10K														
10000	60/50/400					✓	✓	✓			30	24	30	540
Major20K														
20000	60/50/400					✓	✓	✓			30	24	30	1050
Major30K														
30000	60/50							✓	✓	✓	30	24	30	1500
Major50K														
50000	60/50								✓	✓	82	24	30	2200

Some options may alter dimensions offered on this table