

PS SERIES 7 kVA POWER SYSTEM



MODEL NUMBER: PS-94-449-1
U.S. PATENT NO. 6,178,101

INPUT:

Voltage Range	115/200 VRMS \pm 10%
Configuration	3-Phase, wye, grounded neutral
Frequency Range***	30 to 600 Hz
Power Factor	\geq 0.99
Input Current Distortion load	\leq 5% at nominal input voltage and full rated load
Protection	Circuit breaker, over/ undervoltage, loss of phase, overcurrent
Phase Rotation	Any

OUTPUT:

Power*	7 kVA continuous
Overload	125% for 5 minutes, 175% for 10 seconds

APPLICATION:

Since its beginning in 1960, Unitron has focused on the design and development of reliable solid-state power systems. The **Model PS-94-449-1 Power System** supplies 60 Hz electrical power for use in research laboratories, production line testing, onboard aircraft or ships, and in many other applications where precise AC power is required. The unit's unique design allows each of the system's two frequency converters to operate independently, or in parallel, providing either a 3.5 kVA redundant system, or a 7 kVA continuous power supply.

FEATURES:

PS-61-33D Mounting Plate Compatible • Low Input Current Distortion • Wide Input Frequency Range • High Input Power Factor • StopLite BITE™ Self Diagnostic System • Light Weight • High Reliability • Low Audible Noise • 36 Month Warranty

OPTIONS:

Programmable 50, 60, or 400 Hz Output Frequencies •
Partial Load (3.5 kVA) Redundancy • Remote Control

MECHANICAL:

Size	12.2" height, 20" width, 22.75" depth
Weight	90 lbs. dependent on options selected
Mounting	Hard mount or ARINC mount
Connectors	Input: MS3102R24-22P Output: MS3102R28-5S

ENVIRONMENTAL:

Temperature	MIL-STD-810E, Method 501.3, 502.3 (-25°C to +55°C operating; -40°C to +71°C storage)
Altitude	MIL-STD-810E, Method 500.3 (15,000 ft. operating, 45,000 ft. rapid decompression)
Explosion-Proof	MIL-STD-810E, Method 511.3
Shock	MIL-STD-810E, Method 516.4 (10g operational, 20g crash)

* Paralleling options available for power grid expansion.
** EMI option available IAW MIL-STD-461D/MIL-STD462D.
*** Input frequency up to 800 Hz available upon request.
**** Alternate voltages available, contact factory.

ADDITIONAL PS SERIES CONFIGURATIONS

INPUT FREQUENCY	OUTPUT FREQUENCY (Hz)			OUTPUT VOLTAGE		EMI		PARALLEL OPTION	NOTES	MODEL NUMBER
	50	60	400	VOLTS	CONFIG.	MIL-STD-461D	RTCA/DO-160D			
30 Hz to 600 Hz***	X	X	X	Selectable		X		X	1,3,7	PS-94-444-21
	X	X	X	Selectable		X		X	1,2,3	PS-94-444-16
	X	X	X	Selectable			X	X	1,2,3	PS-94-444-14
	X	X	X	Selectable		X		X	1,2	PS-94-444-18
	X	X	X	Selectable			X	X	1,2	PS-94-444-17
	X			115/230	1Ø		X			PS-94-444-7
		X		100	1Ø	X				PS-94-444-11
		X		115	1Ø	X				PS-94-444-12
		X		115	1Ø		X			PS-94-444-2
		X		115	1Ø	X		X	4	PS-94-444-4
		X		115	1Ø	X		X	5	PS-94-444-15
		X		115	1Ø		X	X	4	PS-94-444-10
		X		115	1Ø		X	X	5	PS-94-444-13
		X		115	1Ø	X			6	PS-95-448-1
		X		115/200	3Ø	X				PS-94-444-20
		X		115/200	3Ø		X			PS-94-444-5
		X		115/230	1Ø		X			PS-94-444-8
			X	115	1Ø		X			PS-94-444-3
			X	115/200	3Ø		X			PS-94-444-6
		X	115/200	3Ø		X	X		PS-94-444-19	

NOTES:

1. Programming plug (PP Series) or programming parallel cable (PPC Series) required to determine output frequency and phase configuration.
2. Two paralleled units require one programming parallel cable (PPC Series) only. Three or more paralleled units require a programming parallel box (PB Series) in addition to one programming parallel cable (PPC Series) for each unit. Paralleling for grid expansion up to 17.5 kVA only.
3. Unit does not include circuit breaker.
4. Requires one PC-P1 type parallel cable (PC Series) for each unit.
5. Requires one PC-P3 type parallel cable (PC Series) for each unit. (Limit 3 units.)
6. Portable power supply and distribution system.
7. Two or more paralleled units require a paralleling control box (PCB Series) in addition to one paralleling box cable (PBC Series) and one interconnect power cable (IPC Series) for each unit. Paralleling for common output buss grid expansion (up to 17.5 kVA) or for N+1 redundancy/ hot swap system configuration.

