TEKLAB introduced **Programmable AC Power Supply** adopts advanced and high-precision linear amplification design to provide low noise and high stability output. **TEKLAB Programmable AC Power Supply** delivers stable AC power with a specific output voltage, current, and frequency to a device or circuit.

This series is 400Hz AC power source, designed for avionics and military equipment. It can be used in aircraft and airborne equipment, radar, GPS, military equipment, and other equipment required 400Hz power source.

Moreover, **TEKLAB Programmable AC Power Supply's** gentle and stylish look will give your lab the perfect look you deserve...

FEATURES

- Adopt IGBT drive and SPWM modulation technology, good reliability, fast response and high efficiency
- Adopt double closed loop feedback control, good output stability
- Single phase or three phase output selectable
- Rated frequency 400Hz, adjustable range 320.0Hz ~480.0Hz
- Rated voltage 115V (L-N), adjustable range 10.0V~150.0V (L-N)
- Display for voltage, current, frequency, active power, power factor
- 4 digits high accuracy LED display for voltage, current, frequency, active power, power factor
- Temperature-controlled cooling fan
- RS232 or RS485 interface, support Modbus-RTU
- Optional function: 0-5V or 0-10V analogue control, LIST mode function, STEP mode function
- Optional output voltage range 0~1000V
- Optional output frequency range 200Hz~2500Hz
- Customized specifications and functions acceptable

All AC power supply inputs are fully isolated: Source AC can be out of phase between multiple power supplies in the same chassis.

a) 1.5KVA – 750KVA

SPECIFICATIONS (THREE PHASE OUTPUT)

CIRCUIT MODE	IGBT/PWM
Phase	Three phase 3 wires +GND, transformer isolated
Rated voltage	115V (L-N) / 200V (L-L)
Adjustable voltage range	10.0V~150.0V (L-N) / 17.0V ~ 200.0V (L-L), setting resolution 0.1V
Rated frequency	400Hz
Adjustable frequency range	320.0Hz ~ 480.0Hz, setting resolution 0.1Hz Optional output frequency range 200Hz~2500Hz
Voltage stability	≤1% FS
Frequency stability	≤0.01%FS
Waveform	Sine
Total Harmonic Distortion	≤2% FS (resistive load)
Efficiency	≥8 5 %
3 phase voltage unbalances	Can be connected to unbalanced load, can be used as single phase
METER	
Voltmeter	Resolution 0.1V, accuracy ≤0.5%rdg + 0.2% FS
Frequency meter	Resolution 0.1Hz, accuracy ≤0.02%rdg
Ammeter	Resolution 0.01A/0.1A, accuracy ≤0.5%rdg + 0.2% FS
Power meter	Resolution 0.01kW, accuracy ≤0.5%rdg +.2% FS
Remote control interface	RS 232 or RS 485
Protection	Fuse switch for input and output. Fast-response circuit to detect over voltage, over current, overload, over temperature (85°C±5°C) and short circuit; Output will be shut down in protection mode.
Preset function	Preset output voltage, output frequency and output voltage floating ratio
Alarm function	Audible and visual alarm once protective device activated; display error code.
Overload capacity	1.0Ie<Iout≤1.1Ie, Delay 60s 1.1Ie<Iout≤1.2Ie, Delay 5s
Withstanding voltage	Input/output to chassis: AC1500V/1min, Leakage current <20mA
Insulation resistance	Input/output to chassis: ≥2 0 M ohm (DC500V)
Cooling	Cooling fan
Cabinet protection grade	IP20
Operation environment	-20°C ~50°C, ≤9 0 % RH(Non-condensing), Altitude: 2000 feet

SELECTION GUIDE

MODEL	MAX. CURRENT		N. W	G.W.	DIMENSION
	Capacity	@115V	Input	(kg)	(mm)
TL1500-APS	1.5KVA	4.3A	1P 230V AC	30	40	450W×176H×500D
TL3000-APS	3KVA	8.6A	3P 415V AC	40	50	450W×176H×500D
TL6000-APS	6KVA	17.3A	3P 415V AC	150	175	500W×900H×680D
TL10000-APS	10KVA	29A	3P 415V AC	170	200	500W×900H×680D
TL15000-APS	15KVA	43A	3P 415V AC	200	240	500W×900H×680D
TL20000-APS	20KVA	58A	3P 415V AC	260	300	590W×1100H×800D
TL30000-APS	30KVA	86A	3P 415V AC	300	360	590W×1100H×800D
TL45000-APS	45KVA	130A	3P 415V AC	400	450	720W×1220H×1080D
TL60000-APS	60KVA	173A	3P 415V AC	500	580	720W×1220H×1080D
TL75000-APS	75KVA	217A	3P 415V AC	530	610	750W×1300H×1382D
TL90000-APS	90KVA	260A	3P 415V AC	650	730	750W×1300H×1382D
TL100000-APS	100KVA	289A	3P 415V AC	700	820	1380W×1580H×870D
TL120000-APS	120KVA	347A	3P 415V AC	800	900	1380W×1580H×870D
TL150000-APS	150KVA	434A	3P 415V AC	900	1000	1380W×1580H×870D
TL180000-APS	180KVA	521A	3P 415V AC	1200	1320	1650W×1800H×1150D
TL200000-APS	200KVA	579A	3P 415V AC	1300	1420	1650W×1800H×1150D
TL250000-APS	250KVA	724A	3P 415V AC	1500	1620	1650W×1800H×1150D
TL300000-APS	300KVA	869A	3P 415V AC	800	900	2000W×1700H×1080D
TL400000-APS	400KVA	1159A	3P 415V AC	1000	1150	2000W×1700H×1080D
TL500000-APS	500KVA	1449A	3P 415V AC	1800	2000	2700W×2100H×1100D
TL600000-APS	600KVA	1739A	3P 415V AC	2000	2200	2700W×2100H×1100D
TL750000-APS	750KVA	2173A	3P 415V AC	3000	3500	3200W×2200H×1400D

**All specifications and appearances are subject to change without prior notice*

b) 500VA-3KVA

SINGLE PHASE OUTPUT

CIRCUIT MODE	IGBT/SPWM
Phase	Single phase 2 wires
Rated voltage	300V AVC
Adjustable voltage range	1.00V AC-300V AC
Rated frequency	250
Adjustable frequency range	45Hz ~ 250Hz
Voltage stability	≤1% FS
Frequency stability	≤0.01%FS
Waveform	Sine
Total Harmonic Distortion	≤2% FS (resistive load)
Efficiency	≥85 %
METER	
Voltmeter	Resolution 0.1V, accuracy ≤0.5%rdg + 0.2% FS
Frequency meter	Resolution 0.1Hz, accuracy ≤0.02%rdg
Ammeter	Resolution 0.01A/0.1A, accuracy ≤0.5%rdg + 0.2% FS
Power meter	Resolution 0.01kW, accuracy ≤0.5%rdg +.2% FS
Remote control interface	RS 232 or RS 485
Protection	Fuse switch for input and output. Fast-response circuit to detect over voltage, over current, overload, over temperature (85°C±5°C) and short circuit; Output will be shut down in protection mode.
Preset function	Preset output voltage, output frequency and output voltage floating ratio
Alarm function	Audible and visual alarm once protective device activated; display error code.
Overload capacity	1.0Ie<Iout≤1.1Ie, Delay 60s 1.1Ie<Iout≤1.2Ie, Delay 5s
Withstanding voltage	Input/output to chassis: AC1500V/1min, Leakage current <20mA
Insulation resistance	Input/output to chassis: ≥20 M ohm (DC500V)
Cooling	Cooling fan
Operation environment	-20℃ ~50℃, ≤90 % RH(Non-condensing), Altitude: 2000 feet

SELECTION GUIDE

MODEL	MAX. CURRENT		N. W	G.W.	DIMENSION
	Capacity	@230V	Input	(kg)	(mm)
TL500-APS	500VA	1.5A	1P 230V AC	17	17	430W×133H×500D
TL1000-APS	1000VA	3.3A	1P 230V AC	21	21	430W×133H×500D
TL2000-APS	2000VA	6.5A	1P 230V AC	30	30	430W×222H×500D
TL3000-APS	3000VA	10A	1P 230V AC	33	33	430W×222H×500D

*All specifications and appearances are subject to change without prior notice

c) 8KVA-11KVA

CIRCUIT MODE	IGBT/SPWM
Output	0-115 VAC
Rated frequency	250
Adjustable frequency range	45Hz ~ 250Hz
Voltage stability	≤1% FS
Frequency stability	≤0.01%FS
Waveform	Sine
Total Harmonic Distortion	≤2% FS (resistive load)
Efficiency	≥8 5 %
METER	
Voltmeter	Resolution 0.1V, accuracy ≤0.5%rdg + 0.2% FS
Frequency meter	Resolution 0.1Hz, accuracy ≤0.02%rdg
Ammeter	Resolution 0.01A/0.1A, accuracy ≤0.5%rdg + 0.2% FS
Power meter	Resolution 0.01kW, accuracy ≤0.5%rdg +.2% FS
Remote control interface	RS 232 or RS 485
Protection	Fuse switch for input and output. Fast-response circuit to detect over voltage, over current, overload, over temperature (85°C±5°C) and short circuit; Output will be shut down in protection mode.
Preset function	Preset output voltage, output frequency and output voltage floating ratio
Alarm function	Audible and visual alarm once protective device activated; display error code.
Overload capacity	1.0Ie<Iout≤1.1Ie, Delay 60s 1.1Ie<Iout≤1.2Ie, Delay 5s
Withstanding voltage	Input/output to chassis: AC1500V/1min, Leakage current <20mA
Insulation resistance	Input/output to chassis: ≥2 0 M ohm (DC500V)
Cooling	Cooling fan
Operation environment	-20°C ~50°C, ≤9 0 % RH(Non-condensing), Altitude: 2000 feet

SELECTION GUIDE

MODEL	MAX. CURRENT			W	DIMENSION
	Capacity	@115V	Input	(kg)	(mm)
TL8000-APS	8KVA	70A	3P 400V AC	150	500W×900H×680D
TL9000-APS	9KVA	80A	3P 400V AC	160	500W×900H×680D
TL10000-APS	10KVA	85A	3P 400V AC	170	500W×900H×680D
TL11000-APS	11KVA	95A	3P 400V AC	180	500W×900H×680D