



The Chroma Programmable AC Power Source model 61700 series delivers pure, 5-wire, 3-phase AC power. Unlike the traditional 3-phase AC power source, it includes low power rating models at very low cost. Users can program voltage and frequency, measure the critical characteristics of the output on its LCD display. It delivers the right solution to simulate all kinds of input condition of UUT to be utilized in R&D and QA. It is also suitable for commercial applications from laboratory testing to mass productions.

The 61700 supplies the output voltage from 0 to 300VAC and it can be set individually for each phase. Users also can set the phase angle from 0° to 360°. These kinds of function make the 61700 series can simulate unbalance 3-phase power. Because of the wide output frequency from 15 to 1200Hz, it is suitable for avionics, marine and military application. The AC+DC mode extends the output function to simulate abnormal situation when power line contains DC offset.

The 61700 series uses the state-of-the-art PWM technology, so it is capable to generate very clean AC output with typical distortion less than 0.3%. With power factor correction circuit, the 61700 series yields higher efficiency and deliver more output power.

By using advanced DSP technology, the 61700 series offers precision and high speed measurements such as RMS voltage, RMS current, true power, power factor, and current crest factor, etc.

The 61700 series offers an optional function to output transient voltage. The function includes LIST, PULSE, STEP and INTERHARMONICS mode. Users can easily program variant

waveform for immunity test. The 61700 series can also be controlled by a powerful and userfriendly softpanel through GPIB or RS-232 interface. Besides that, the softpanel includes a waveform editor that can edit up to 40th order harmonic components. By this way, the 61700 series get the ability to output distorted waveform as users like.

The self-diagnosis routine and protections against overpower, over current, over voltage, over temperature and fan fail, the 61700 series ensure the quality and reliability for even the most demanding engineering testing and production line application.

Programmable AC Source Model 61700 Series 1.5KVA~12KVA

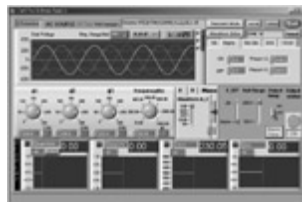
KEY FEATURES

- Output Rating:
Power: 1.5KVA, 3ø (61701); 3KVA, 3ø (61702)
4.5KVA, 3ø (61703); 6KVA, 3ø (61704); 12KVA, 3ø (61705)
Voltage: 0-150V/0-300V
- Frequency: 15~1.2kHz
- Phase angle: 0~360° Programmable
- Built-in PFC, provides input power factor of over 0.98
- AC+DC output mode
- Comprehensive measurement capability, V, Irms, Ipk, Inrush, P, PF, CF of current etc.
- Programmable r.m.s. current limit
- Turn on, turn off phase angle control
- Full protection: OP, OC, OV and OT protection
- Optional GPIB and RS-232 interface
- Advanced PWM technology delivers high power density in a compact rack-mountable package
- User-definable power-on status
- Built-in output isolation relays
- Easy use graphic user interface: softpanel (Option)
- Optional function for transient voltage output, including LIST, PULSE, STEP and INTERHARMONICS mode

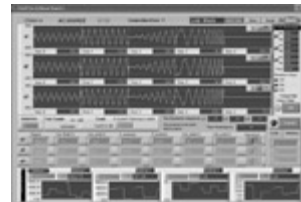
ORDERING INFORMATION

- 61701** : Programmable AC Source 0~300V/DC, 15~1.2kHz, 3ø 1.5KVA
- 61702** : Programmable AC Source 0~300V/DC, 15~1.2kHz, 3ø 3KVA
- 61703** : Programmable AC Source 0~300V/DC, 15~1.2kHz, 3ø 4.5KVA
- 61704** : Programmable AC Source 0~300V/DC, 15~1.2kHz, 3ø 6KVA
- 61705** : Programmable AC Source 0~300V, 15~1.2kHz, 3ø 12KVA
- A615001** : Remote Interface Board for 61500/61600/61700 Series (RS-232 Interface, GPIB Interface)
- A617001** : Softpanel for Model 61700 Series
- A617002** : Transient voltage output function, including WAVEFORM, LIST, PULSE, STEP and INTERHARMONICS mode

Softpanel



Softpanel of 61700 Series : Main page



Optional Function : LIST Mode Voltage Transient Output



Aerospace Testing : MIL-STD-704F



Aerospace Testing : RTCA DO-160D

Programmable AC Source

Model No.

61700 Series

SPECIFICATIONS					
Model	61701	61702	61703	61704	61705
AC Output Rating					
Max. Power	1500VA	3000VA	4500VA	6000VA	12000VA
Per Phase	500VA	1000VA	1500VA	2000VA	4000VA
Voltage (per phase)					
Range	150V/ 300V	150V/ 300V	150V/ 300V	150V/ 300V	150V/ 300V
Accuracy	0.2%+0.2%F.S.	0.2%+0.2%F.S.	0.2%+0.2%F.S.	0.2%+0.2%F.S.	0.2%+0.2%F.S.
Resolution	0.1V	0.1V	0.1V	0.1V	0.1V
Distortion *1	0.3%@50/60Hz 1.5% 15-1.2kHz	0.3%@50/60Hz 1.5% 15-1.2kHz	0.3%@50/60Hz 1.5% 15-1.2kHz	0.3%@50/60Hz 1.5% 15-1.2kHz	0.3%@50/60Hz 1.5% 15-1.2kHz
Line regulation	0.1%	0.1%	0.1%	0.1%	0.1%
Load regulation *2	0.2%	0.2%	0.2%	0.2%	0.2%
Temp. coefficient	0.02% per degree from 25°C				
Maximum Current (per phase)					
r.m.s.	4A/2A	8A/4A	12A/6A	16A/8A	32A/20A
peak	24A/12A	48A/24A	72A/36A	96A/48A	192A/96A
Frequency					
Range	DC, 15-1.2kHz	DC, 15-1.2kHz	DC, 15-1.2kHz	DC, 15-1.2kHz	DC, 15-1.2kHz
Accuracy	0.15%	0.15%	0.15%	0.15%	0.15%
Phase Angle					
Range	0-360°	0-360°	0-360°	0-360°	0-360°
Resolution	0.3°	0.3°	0.3°	0.3°	0.3°
Accuracy	< 0.8° @50/60Hz	< 0.8° @50/60Hz	< 0.8° @50/60Hz	< 0.8° @50/60Hz	< 0.8° @50/60Hz
DC Output Rating (per phase)					
Power	250W	500W	750W	1KW	2KW
Voltage	212V/424V	212V/424V	212V/424V	212V/424V	212V/424V
Current	2A/1A	4A/2A	6A/3A	8A/4A	16A/8A
Input 3-Phase Power (per phase)					
Voltage range	90-250V	90-250V	190-250V	190-250V	190-250V
Frequency range	47-63Hz	47-63Hz	47-63Hz	47-63Hz	47-63Hz
Current	9A Max.	16A Max.	10A Max.	14A Max.	28A Max.
Power factor *3	0.97 Min.	0.98 Min.	0.98 Min.	0.98 Min.	0.98 Min.
Measurement					
Voltage (Line-Neutral)					
Range	150V/300V	150V/300V	150V/300V	150V/300V	150V/300V
Accuracy	0.2%+0.2%F.S.	0.2%+0.2%F.S.	0.2%+0.2%F.S.	0.2%+0.2%F.S.	0.2%+0.2%F.S.
Resolution	0.1V	0.1V	0.1V	0.1V	0.1V
Current (per phase)					
Range (peak)	24A	48A	72A	96A	192A
Accuracy (r.m.s.)	0.4%+0.3%F.S.	0.4%+0.3%F.S.	0.4%+0.3%F.S.	0.4%+0.3%F.S.	0.4%+0.3%F.S.
Accuracy (peak)	0.4%+0.6%F.S.	0.4%+0.6%F.S.	0.4%+0.6%F.S.	0.4%+0.6%F.S.	0.4%+0.6%F.S.
Resolution	0.01A	0.01A	0.01A	0.01A	0.01A
Power (per phase)					
Accuracy	0.4%+0.4% F.S.	0.4%+0.4% F.S.	0.4%+0.4% F.S.	0.4%+0.4% F.S.	0.4%+0.4% F.S.
Resolution	0.1W	0.1W	0.1W	0.1W	0.1W
Others					
Efficiency *4	68 %	77 %	81 %	82%	82%
Dimension (H x W x D)	400 x 482.6 x 600.5 mm / 15.75 x 19 x 23.64 inch	400 x 482.6 x 600.5 mm / 15.75 x 19 x 23.64 inch	400 x 482.6 x 600.5 mm / 15.75 x 19 x 23.64 inch	400 x 482.6 x 600.5 mm / 15.75 x 19 x 23.64 inch	896.4 x 546 x 699.9 mm / 35.28 x 21.5 x 27.56 inch
Weight	75 kg / 165.2 lbs	75 kg / 165.2 lbs	75 kg / 165.2 lbs	75 kg / 165.2 lbs	150 kg / 330.4 lbs
Protection	UVP, OCP, OPP, OTP, FAN				
Temperature Range					
Operation	0°C-40°C				
Storage	-40°C-85°C				
Humidity	30 %-90 %				
Safety & EMC	CE				

Note*1 : Maximum distortion is tested on output 125VAC (150V RANGE) and 250VAC (300V RANGE) with maximum current to linear load.

Note*2 : Load regulation is tested with sine wave and remote sense.

Note*3 : Input power factor is tested on input 220V, full load condition

Note*4 : Efficiency is tested on input voltage 110V for 61701 and 61702, 220V for 61703, 61704 and 61705.

All specifications are subject to change without notice.

Solar Cell
Test Equipment

Semiconductor/IC
Test Equipment

LED
Test Equipment

LCD/LCM
Test Equipment

Video & Color
Test Equipment

Optical Inspection
Equipment

Power Supply
Test Equipment

Passive Component
Test Instruments

Electrical Safety
Test Instruments

General Purpose
Test Instruments

PXI Instruments
& Systems