

# Programmable Power Source

Programmable DC Source 750W Programmable AC Source 1.5KVA Programmable AC Source 3KVA Programmable AC Source 6KVA Programmable AC Source 9KVA



www.DeltaPSU.com

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# About Delta

Delta was founded in 1971 and has been the global leader in switching power supply solutions since 2002 and DC brushless fans since 2006. Delta offers some of the most energy efficient power products in the industry, including switching power supplies with efficiency over 90%, telecom power with up to 98%, and PV inverters with up to 98.8% efficiency. We have also developed the world's first server power supply certified as 80 Plus Titanium with over 96% efficiency. We regularly invest 6% to 7% of our annual sales revenues in R&D and have worldwide R&D facilities in Taiwan, China, Europe, India, Japan, Singapore, Thailand, and the U.S.

Delta is a frequent recipient of international awards and related recognition for innovation, design, and corporate social responsibility. Since 2011, Delta has been selected each year for the prestigious Dow Jones Sustainability™ World Index (DJSI World). In 2017, we were also included in the DJSI Emerging Markets Index for the 5th consecutive year. Delta was ranked by CDP (formerly the Climate Disclosure Project) at the Climate Change Leadership Level.



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**Bruce Cheng** Founder and Honorary Chairman



Yancey Hai Chairman

# **Brand Promise**

## Smarter. Greener. Together.

At Delta, we commit ourselves to the advancement of power and electronics technology to provide "smarter" products with high efficiency. It helps us make possible a "greener" and more environment-friendly way of life. We collaborate with our partners, by listening to their needs, to accomplish our mission "together".

## **Corporate Culture**

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This pyramid shows how every employee at Delta should strive to make the company sustainable. Innovation, at the top of the pyramid, is part of Delta's DNA. In the center of the pyramid is customer satisfaction, as we always put our customers first. Through quality, teamwork, and agility, we provide the best services to our customers.

# **Corporate Mission**

To provide innovative, clean, and energy-efficient solutions for a better tomorrow.



# **Business Categories**



- Component
- Embedded Power
- · Fan & Thermal Management
- · Automotive Electronics
- Merchant & Mobile Power





Industrial Automation

Building Automation



- ICT Infrastructure
- Energy Infrastructure







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# Programmable Power Source

As a leading industrial power supply brand, Delta continuously develops innovative, efficient, and reliable products and solutions to serve our global customers.

Among these are the brand new programmable AC/DC power source series - test devices suitable for verification on bench or mass production applications, including general commercial products (TV, LDC monitor, printer), power electronics industrial (power supply, adapter), aviation electronics, military, and regulation component test. Delta's DMEs programmable AC/DC power source is a high performance alternative current power source. It implements advanced digital signal process technics to offer precision power parameters measurement such as Vrms, Irms, Ip+, Ip-,frequency, crest factor, power factor, inrush current, VA, VAR, etc.

The power source is space- and cost efficient, and can be operated remotely by GPIB or RS232.

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1	90-254VAC (1 Φ), 47-63Hz	90-254VAC, (1 Φ), 47-63Hz	190-254VAC, (1 Ф), 47-63Hz	190-254 Vac / 342-418 Vac (Version A/B)	190-254 Vac / 342-418 Vac (Version A/B)
2	750W	1500VA	3000VA	6000VA	9000VA
3	0~300V	-424/+424Vdc, 0/300Vac	150V / 300V	150V / 300V	150V / 300V
4	0~2.5A	0~16A	150V/30A, 300V/10A	150V/60A, 300V/20A	150V/90A, 300V/30A
5	±(0.1% + 0.1% F.S.) / 0.012% full scale	±(0.2% + 0.2% F.S.) / 0.1V full scale	±(0.2% + 0.2% F.S.) / 0.1V full scale	±(0.2% + 0.2% F.S.) / 0.1V full scale	±(0.2% + 0.2% F.S.) / 0.1V full scale
6	±(0.3% + 0.1% F.S.) / 0.012% full scale	±(0.4% + 0.1% F.S.) / 0.01A	±(0.4% + 0.1% F.S.) / 0.01A	±(0.4% + 0.3% F.S.) / 0.01A	±(0.4% + 0.3% F.S.) / 0.01A
7	Min 85/88% (100V/200V input under 100% load)	80%	Min. 82% (under the condition of 100% load)	Min. 80% (under the condition of 100% load)	Min. 80% (under the condition of 100% load)
8	≤0.01% of full scale +2mV (from no load to full load)	≤0.1% of full scale	≤0.1% of full scale	≤0.1% of full scale	≤0.1% of full scale
9	≤0.01% of full scale +2mV (85~132V or 170~265V rated load)	≤0.1% of full scale	≤0.1% of full scale	≤0.1% of full scale	≤0.1% of full scale
10	≤0.02% of full scale +5mA (rated voltage change)				
11	≤0.01% of full scale +2mA (85~132V or 170~265 rated load)				
12	CV / CC	CV	CV	CV	CV
13	<150ms (rated load by fixed resistor)				
14	<150ms (full load) <1s (no load)				
15	OVP, OCP, OPP, OTP, SCP, Fan Lock	OVP, OCP, OPP, OTP, SCP, Fan Lock	OVP, OCP, OPP, OTP, SCP, Fan Lock	OVP, OCP, OPP, OTP, SCP Fan Lock	OVP, OCP, OPP, OTP, SCP Fan Lock
16	CE	CE	CE	CE	CE
17	0~50C	0~40C	0~40C	0~40C	0~40C

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Input Voltage Range Maximum Output Power

- 2. 3. 4. 5. 6. Output Voltage Range Output Current Range Programming Output Voltage Accuracy/Resolution Programming Output Current Accuracy/Resolution

- 7. Efficiency %
   8. Load Voltage Regulation
   9. Line Voltage Regulation
   10. Load Current Regulation

- Line Current Regulation 11.
- 12. Operating Mode
- Voltage Rise Time Voltage Fall Time Protection 13.
- 14.
- 15.
- Certificate 16.
- 17. Operating Temperature
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# Delta Programmable DC Source 750W DME-D751ABS A

Delta's DME-D751ABS A DC Source is a high performance switching mode power supply can operate at a wide range of mains worldwide. There is no need for an input voltage selection switch. The LED at front panel continuously displays the output voltage and its current & operation status. Users can set the output voltage and current level, protection trig level (OVP, UVP, OCP) and preview these settings from the front panel. The back panel includes necessary connectors so the voltage & current output control and monitor can be done by analog signal or RS232/GPIB.



# Mechanical

Model	DME-D751ABS A
Weight	4.5 kg
Dimensions (LxWxH)	458 x 214 x 43.6 mm
Interface	GPIB, RS232, RS485
Cooling	Fan Cooling

**Protection Function** 



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Over Current Protection





SCP

Short Circuit

Protection





## Main Features

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- Active PFC circuit
- Software calibration
- (no need for adjustable resistor for calibration)Constant voltage and constant current
- output operation (auto switch)90V~254V full range mains input
- Built-in GPIB/RS232 interface
- · High resolution output voltage and current setting
- High accurate output voltage & current setting and measurement
- OCP, OPP, OTP, OVP, SCP, Fan Lock protections
- · Able to save the last operation configurations and settings
  - Parallel operation up to four units (active current sharing)
- Output line drop compensation
- · Fan speed is proportionate to output power
- · Low noise at light load
- External analog signal to set and monitor output voltage and current (5V / 10V range selectable)
- Small size to save space

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## Electrical



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Input Voltage Range	90-254VAC, (1 Φ) 47-63Hz
Maximum Output Power	750W
Output Voltage Range	0~300V
Output Current Range	0~2.5A
Programming Output Voltage Accuracy / Resolution	±(0.1% + 0.1% F.S.) / 0.012% full scale
Programming Output Current Accuracy / Resolution	±(0.3% + 0.1% F.S.) / 0.012% full scale
Efficiency %	Min 85/88% (100V/200V input under 100% load)
Load Voltage Regulation	≤0.01% of full scale +2mV (from no load to full load)
Line Voltage Regulation	≤0.01% of full scale +2mV (85~132V or 170~265V rated load)
Load Current Regulation	≤0.02% of full scale +5mA (rated voltage change)
Line Current Regulation	≤0.01% of full scale +2mA (85~132V or 170~265 rated load)
Operation Mode	CV / CC
Voltage Rise Time	<150ms (rated load by fixed resistor)
Voltage Fall Time	<150ms (full load) <1s (no load)
Protection	OVP, OCP, OPP, OTP, SCP, Fan Lock
Certificate	CE
Operating Temperature	0~50 C



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# Delta Programmable AC Source 1.5KVA DME-ACS1152B A

Delta's DME-ACS1152B A AC power source is a high performance alternative current power source. It implements advanced digital signal process technics to offer precision power parameters measurement, such as Vrms, Irms, Ip+, Ip-, frequency, crest factor, power factor, inrush current, VA, and VAR, etc. It has a function capable of synthesizing 30 different waveforms and can deliver a maximum power up to 1.5KW. Its frequency range is 30-1KHz programmable. It can be operated remotely by GPIB or RS232. It is suitable to implement in testing for verification or mass production, applications including general commercial products, power electronics industrial, aviation electronics, military and regulation test.

## Mechanical

Electrical

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Model	DME-ACS1152B A
Weight	22 kg
Dimensions (LxWxH)	500 x 425 x 133 mm
Interface	GPIB, RS232
A/C Input Connector	Terminal
D/C Output Connector	Terminal
Cooling	Fan Cooling

Input Voltage Range	90-254VAC (1 Φ) , 47-63Hz
Maximum Output Power	1500VA
Output Voltage Range	-424 +424Vdc, 0-300Vac
Output Current Range	0-16A
Programming Output Voltage Accuracy / Resolution	±(0.2% + 0.2% F.S.) / 0.1V
Programming Output Current Accuracy / Resolution	±(0.4% + 0.3% F.S.) / 0.01A
Efficiency %	80%
Operation Mode	CV
Protection	OVP, OCP, OPP, OTP, SCP, Fan Lock
Certificate	CE
Operating Temperature	0~40 C
Peak Current	90A/45A (150V/300V)

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## **Main Features**

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Programmable voltage and current setting

- High surge output current capability can provide ideal for surge current test
- Comprehensive measurement function
- RS232 and GPIB remote control
- Turn on and turn off phase control
- OCP, OPP, OTP, OVP, SCP, Fan Lock protections
  Harmonics, sub-harmonics waveforms synthesis
- test for IEC-1000-4-13
- IEC-1000-4-11 voltage variation simulation
- · Capability to simulate distortion of city power
- · Compact size to save space

## **Protection Function**



Over Current Protection





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SCP





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Delta's programmable AC power sources have built-in precision measurement circuit and firmware utilities to measure the steady and transient responses of true RMS voltage (Vrms), true RMS current (Irms), true power (W), apparent power (VA), reactive power (VAR), power factor (PF), frequency (F), peak repetitive current, inrush current, and current crest factor (CFI).











Powerful waveforms output capabilities

It has built-in 30 different Distortion Waveforms are stored in the waveform library for user edit and execution. Therefore; it is easy to simulate the observed waveforms from the power line.





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# Delta Programmable AC Source 3KVA **DE-A3000AB B**

Delta's DE-A3000AB B AC power source is a high performance alternative current power source. It implements advanced digital signal process technics to offer precision power parameters measurement, such as Vrms, Irms, Ip+, Ip-, frequency, crest factor, power factor, inrush current, VA, and VAR, etc. It has a function capable of synthesizing 30 different waveforms and can a maximum power up to 3KW. Its frequency range is 30-1KHz programmable. It can be operated remotely by GPIB or RS232. It is suitable to implement in testing for verification or mass production, applications including general commercial products, power electronics industrial, aviation electronics, military and regulation test.

## Mechanical

Model	DE-A3000AB B
Weight	28 kg
Dimensions (LxWxH)	520 x 425 x 176 mm
Interface	GPIB, RS232
A/C Input Connector	Terminal
D/C Output Connector	Terminal
Cooling	Fan Cooling

Electrical

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Input Voltage Range	190-254VAC (1 Φ) , 47-63Hz
Maximum Output Power	3000VA
Output Voltage Range	150V / 300V
Output Current Range	150V / 30Arms & 300V / 15Arms
Programming Output Voltage Accuracy / Resolution	±(0.2% + 0.2% F.S.) / 0.1V
Programming Output Current Accuracy / Resolution	±(0.4% + 0.1% F.S.) / 0.01A
Efficiency %	Min 82% (Under condition 100% load)
Operation Mode	CV
Protection	OVP, OCP, OPP, OTP, SCP, Fan Lock
Certificate	CE
Operating Temperature	0~40 C
Peak Current	90A/45A (150V/300V)



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## **Main Features**

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- · Programmable voltage and current setting
- High surge output current capability can provide ideal for surge current test
- Comprehensive measurement function
- RS232 and GPIB remote control
- Turn on and turn off phase control
- OCP, OPP, OTP, OVP, SCP, Fan Lock protections
- Harmonics, sub-harmonics waveforms synthesis test for IEC-1000-4-13
- IEC-1000-4-11 voltage variation simulation
- · Capability to simulate distortion of city power
- Compact size to save space

## **Protection Function**





Over Volt Protection

> 1 SCP

Short Circuit





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Delta's Programmable AC power sources have built-in precision measurement circuit and firmware utilities to measure the steady and transient responses of true RMS voltage (Vrms), true RMS current (Irms), true power (W), apparent power (VA), reactive power (VAR), power factor (PF), frequency (F), peak repetitive current, inrush current, and current crest factor (CFI).



**List Mode** 







**Step Mode** 



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It has built-in 30 different Distortion Waveforms are stored in the waveform library for user edit and execution. Therefore; it is easy to simulate the observed waveforms from the power line.





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# Delta Programmable AC Source 6KVA DME-A602ABS A

Delta's DME-A602ABS A AC power source is a high performance alternative current power source. It implements advanced digital signal process technics to offer precision power parameters measurement, such as Vrms, Irms, Ip+, Ip-, frequency, crest factor, power factor, inrush current, VA, and VAR, etc. It has a function capable of synthesizing 30 different waveforms and can deliver a maximum power up to 6KW. Its frequency range is 30-1KHz programmable. It can be operated remotely by GPIB or RS232. It is suitable to implement in testing for verification or mass production, applications including general commercial products, power electronics industrial, aviation electronics, military and regulation test.

## Mechanical

Model	DME-A602ABS A
Weight	116 kg
Dimensions (LxWxH)	700 x 546 x 845 mm
Interface	GPIB, RS232
A/C Input Connector	Terminal
Cooling	Fan Cooling

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## Electrical

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Input Voltage Range	190-254 Vac / 342-418 Vac (Version A/B)
Maximum Output Power	6000VA
Output Voltage Range	150V/300V
Output Current Range	150V/60A, 300V/20A
Programming Output Voltage Accuracy / Resolution	±(0.2% + 0.2% F.S.) / 0.1V
Programming Output Current Accuracy / Resolution	±(0.4% + 0.3% F.S.) / 0.01A
Efficiency %	Min 80% (under condition 100% load)
Efficiency % Operation Mode	Min 80% (under condition 100% load) CV
Efficiency % Operation Mode Protection	Min 80% (under condition 100% load) CV OVP, OCP, OPP, OTP, SCP, Fan Lock
Efficiency % Operation Mode Protection Certificate	Min 80% (under condition 100% load) CV OVP, OCP, OPP, OTP, SCP, Fan Lock CE
Efficiency % Operation Mode Protection Certificate Operating Temperature	Min 80% (under condition 100% load) CV OVP, OCP, OPP, OTP, SCP, Fan Lock CE 0~40 C

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## **Main Features**

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- Programmable voltage and current setting
- High surge output current capability can provide ideal for surge current test

- Comprehensive measurement function
- RS232 and GPIB remote control
- Turn on and turn off phase control
- OCP, OPP, OTP, OVP, SCP, Fan Lock protections
- Harmonics, sub-harmonics waveforms synthesis test for IEC-1000-4-13
- IEC-1000-4-11 voltage variation simulation
- · Capability to simulate distortion of city power
- Compact size to save space

## **Protection Function**





Over Volt Protection



Over Temperatur Protection



Xe LOCK Fan Lock Protection

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Delta's Programmable AC power sources have built-in precision measurement circuit and firmware utilities to measure the steady and transient responses of true RMS voltage (Vrms), true RMS current (Irms), true power (W), apparent power (VA), reactive power (VAR), power factor (PF), frequency (F), peak repetitive current, inrush current, and current crest factor (CFI).











Powerful waveforms output capabilities

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It has built-in 30 different Distortion Waveforms are stored in the waveform library for user edit and execution. Therefore; it is easy to simulate the observed waveforms from the power line.





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# Delta Programmable AC Source 9KVA DME-A902ABT A

Delta's DME-A902ABT A AC power source is a high performance alternative current power source. It implements advanced digital signal process technics to offer precision power parameters measurement, such as Vrms, Irms, Ip+, Ip-, frequency, crest factor, power factor, inrush current, VA, and VAR, etc. It has a function capable of synthesizing 30 different waveforms and can deliver a maximum power up to 9KW. Its frequency range is 30-1KHz programmable. It can be operated remotely by GPIB or RS232. It is suitable to implement in testing for verification or mass production, applications including general commercial products, power electronics industrial, aviation electronics, military and regulation test.

## Mechanical

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Model	DME-A902ABT A
Weight	153 kg
Dimensions (LxWxH)	700 x 546 x 1025 mm
Interface	GPIB, RS232
A/C Input Connector	Terminal
Cooling	Fan Cooling

## Electrical



Input Voltage Range	190-254 Vac / 342-418 Vac (Version A/B)
Maximum Output Power	9000VA
Output Voltage Range	150V/300V
Output Current Range	150V/90A, 300V/30A
Programming Output Voltage Accuracy / Resolution	±(0.2% + 0.2% F.S.) / 0.1V
Programming Output Current Accuracy / Resolution	±(0.4% + 0.3% F.S.) / 0.01A
Efficiency %	Min 80% (under condition 100% load)
Efficiency % Operation Mode	Min 80% (under condition 100% load) CV
Efficiency % Operation Mode Protection	Min 80% (under condition 100% load) CV OVP, OCP, OPP, OTP, SCP, Fan Lock
Efficiency % Operation Mode Protection Certificate	Min 80% (under condition 100% load) CV OVP, OCP, OPP, OTP, SCP, Fan Lock CE
Efficiency % Operation Mode Protection Certificate Operating Temperature	Min 80% (under condition 100% load) CV OVP, OCP, OPP, OTP, SCP, Fan Lock CE 0~40 C



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# RS-232 GPIB PFC CE

## Main Features

- Programmable voltage and current setting
- High surge output current capability can provide ideal for surge current test

- Comprehensive measurement function
- RS232 and GPIB remote control
- Turn on and turn off phase control
- OCP, OPP, OTP, OVP, SCP, Fan Lock protections
- Harmonics, sub-harmonics waveforms synthesis test for IEC-1000-4-13
- IEC-1000-4-11 voltage variation simulation
- Capability to simulate distortion of city power
- Compact size to save space

## Protection Function









SCP

Short Circuit





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Delta's Programmable AC power sources have built-in precision measurement circuit and firmware utilities to measure the steady and transient responses of true RMS voltage (Vrms), true RMS current (Irms), true power (W), apparent power (VA), reactive power (VAR), power factor (PF), frequency (F), peak repetitive current, inrush current, and current crest factor (CFI).











Powerful waveforms output capabilities

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It has built-in 30 different Distortion Waveforms are stored in the waveform library for user edit and execution. Therefore; it is easy to simulate the observed waveforms from the power line.





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October 2017 - All information and specifications are subjected to change without prior notice.

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