



# 366X Series

## Programmable Switching DC Power Supply Low Noise Series

- Full-featured keyboard and knobs;
- High definition liquid crystal display;
- The same continuous adjustment (0-Vout) as the linear power supply;
- High-efficient switching-mode power supply;
- Low ripple and noise which rivals the linear power supply;
- Excellent line and load regulation;
- Portable, ruggedized case and flexible system functions;
- SCPI (Standard Commands for Programmable Instruments) compatibility
- Standardized USB interface, optional GPIB and optional USB interface
- Direct setting of I/O parameters from the front-panel.
- OV output is realizable at the maximum current;



## High Reliability

- Protective circuitry provides over-current, over-voltage, over-power, over-temperature and reverse polarity protection to ensure the protection of the electronic load
- A high-speed, power limiting circuit can limit input power rapidly when it is overloaded, thus there is no need to interrupt testing. Equipment adaptability to complicated operational environments is thereby greatly enhanced.
- A high-efficiency, intelligent cooling system can effectively reduce system temperature and enhance power density
- The input binding posts with their innovative design are especially suitable for large current testing. They are easy to operate, reliable and durable
- The specially ruggedized case with its rubber bumpers protects the load thus effectively prolonging the unit's service life

## Great Performance

- Circuit improvement greatly enhances the dynamic response of CR mode and widens the application scope of that mode
- The innovative CPV and CPC modes can be applied to testing voltage/current source with constant power respectively, and both modes can effectively prevent short circuit when the set power level of the load exceeds the output power of the power supply
- Minimum operating voltage is less than 0.6V at the load's full rated current. With optional low-voltage testing devices, the maximum current can be achieved even though the input voltage is 0V. This is especially suitable for fuel cell, solar cell and other new energy test applications
- By adopting the optimum algorithm and high-speed hardware circuitry, the D/A conversion rate can reach up to 100kHz. The overall smoothness of slope control has been raised, meanwhile, the timing precision and resolution of transient test and sequential test have also been improved
- The 24 bit A/D and 17 bit D/A converters incorporated, provide this equipment with greatly enhanced setting and measurement resolution.

## Multifunction、 Easy Operation

- By supporting SCPI, it is easy to build an ATE(automatic test equipment) system that works with other programmable instruments via optional RS232, USB and GPIB interfaces.
- Design optimized for portability and rugged reliability
- Logical keypad design and convenient test operation
- Easy-to-set test parameters coupled with a powerful sequence editing function
- All electronic calibration - therefore no need to dismantle the equipment-chassis;
- Firmware can be updated online.



[www.array.com.cn](http://www.array.com.cn)  
[www.array.sh](http://www.array.sh)

# 366X Specifications

Model		3661A	3662A	3663A	3664A	3665A
Output Ratings	Voltage	0~20V	0~35V	0~80V	0~120V	0~200V
	Current	0~25A	0~14.5A	0~6.5A	0~4.2A	0~2.5A
Ripple and Noise (20 Hz to 20 MHz)	Voltage	<4mV rms <10mV p-p	<5mV rms <10mV p-p	<8mV rms <14mV p-p	<15mV rms <80mV p-p	<20mV rms <80mV p-p
	Current	<4mA rms	<2mA rms	<500uA rms	<500uA rms	<500uA rms
Common Mode Current		<1.5mA rms	<1.5mA rms	<1.5mA rms	<1.5mA rms	<1.5mA rms
Load Regulation	Voltage	3mV	5mV	10mV	10mV	10mV
	Current	3mA	3mA	2mA	1mA	1mA
Line Regulation	Voltage	5mV	5mV	10mV	10mV	10mV
	Current	3mA	3mA	2mA	1mA	1mA
Programming Accuracy	Voltage	0.03%+5mV	0.03%+5mV	0.03%+10mV	0.03%+15mV	0.03%+15mV
	Current	0.15%+8mA	0.15%+6mA	0.15%+3mA	0.15%+2mV	0.15%+1mA
Readback Accuracy	Voltage	0.02%+2mV	0.02%+2mV	0.02%+5mV	0.02%+8mV	0.02%+10mV
	Current	0.02%+8mA	0.02%+5mA	0.02%+2.5mA	0.02%+1.5mV	0.02%+1mA
Programming Resolution	Voltage	1mV	1mV	2mV	4mV	4mV
	Current	1mA	1mA	1mA	1mA	1mA
Readback Resolution	Voltage	0.5mV	1mV	2mV	4mV	4mV
	Current	1mA	1mA	1mA	1mA	1mA
Meter Resolution	Voltage	1mV	1mV	2mV	4mV	4mV
	Current	1mA	1mA	1mA	1mA	1mA
Output Programming Range (maximum programmable values)	Voltage	0~20.2 V	0~35.2 V	0~80.2 V	0~120.2 V	0~200.2 V
	Current	0~25A	0~14.5A	0~6.5A	0~4.2A	0~2.5A
Temperature Coefficient, ± (% of output + offset)	Voltage	30ppm + 0.5mV	30ppm + 0.5mV	30ppm + 0.8mV	30ppm + 1mV	30ppm + 1.5mV
	Current	30ppm + 0.5mA	30ppm + 0.2mA	30ppm + 0.1mA	30ppm + 0.1mA	30ppm + 0.1mA
Stability, ± (% of output + offset)	Voltage	0.02% + 2 mV	0.02% + 2 mV	0.02% + 3 mV	0.02% + 4 mV	0.02% + 5 mV
	Current	0.2% + 8 mA	0.1% + 6 mA	0.05% + 3 mA	0.05% + 2 mA	0.02% + 1 mA

Model	3661A	3662A	3663A	3664A	3665A	
Output Voltage Programming Response Time	Full load up	50 msec	50 msec	50 msec	60 msec	60 msec
	Full load down	50 msec	50 msec	50 msec	60 msec	60 msec
	No load up	50 msec	50 msec	50 msec	60 msec	60 msec
	No load down	200 msec	200 msec	300 msec	300 msec	500 msec
Power Supply	AC100V~240V 47Hz~63Hz 750VA Max					
Operating Temperature	0~40°C 0~80%RH					
Cooling	Fan Cooled					
Output Voltage Overshoot	Less than 1V					
Programming Language	SCPI (Standard Commands for Programmable Instruments)					
Net Weight	5.5kg					
Remote Interface	RS232(Standard), GPIB(Optional)					

