

**Industrial
Grade**

KA -SERIES

SHENZHEN KORAD TECHNOLOGY CO.,LTD



Digital Control and Programmable DC Power Supply

KORAD TECHNOLOGY CO., LTD launches the KA series digital control and programmable regulated DC power supplies with industrial-grade performance, which is complete digital control, encoder voltage and current adjustment and fast recall. They can be set to overvoltage and overcurrent protection and there is intelligent temperature-controlled fan. Above all, the aborative circuit design and neat inside construction ensure the stability and reliability of the machine. Compact and portable single DC power supplies and dual DC power supplies from 30V-100V / 2A-10A are supplied.



Application

- Automatic Testing in the Production Line
- School Laboratory
- Repairing
- R&D
- QC
- Aging Test

Main Features

- Complete digital control / programmable
- 4-digit display
- Intelligent temperature-controlled fan with speed controlled by heat temperature and output power
- Compact Design
- 10 mV / 1 mA resolution
- Low noise and ripple
- CV / CC automatical switching
- Output ON/OFF control
- Complete digital panel operation
- 5 sets of parameters can be stored inside for fast recall
- Fine & coarse adjustment for voltage / current control
- Software calibration
- Beep alarm output
- Panel LOCK function
- Settable OCP and OVP
- Reverse polarity protection
- Built-in control interfaces USB / RS232 with photoelectric isolation
- Industrial grade, with load for a long time.

Accurately generating the required voltage and current

KA3000/6000 series power supplies provide the output voltage from 30V to 60V, and the resolution with 10mV and 1mA.

Professional power supply design; intuitionistic operation

More than one power supplies can be superimposed with parallel connection

5 sets of parameters can be stored inside for fast recall

Press one of the 4 buttons (M1, M2, M3, M4) and the LED light turns on accordingly. After you adjust the value, it is saved automatically once it stops blinking.

Avoiding the damage of the loads

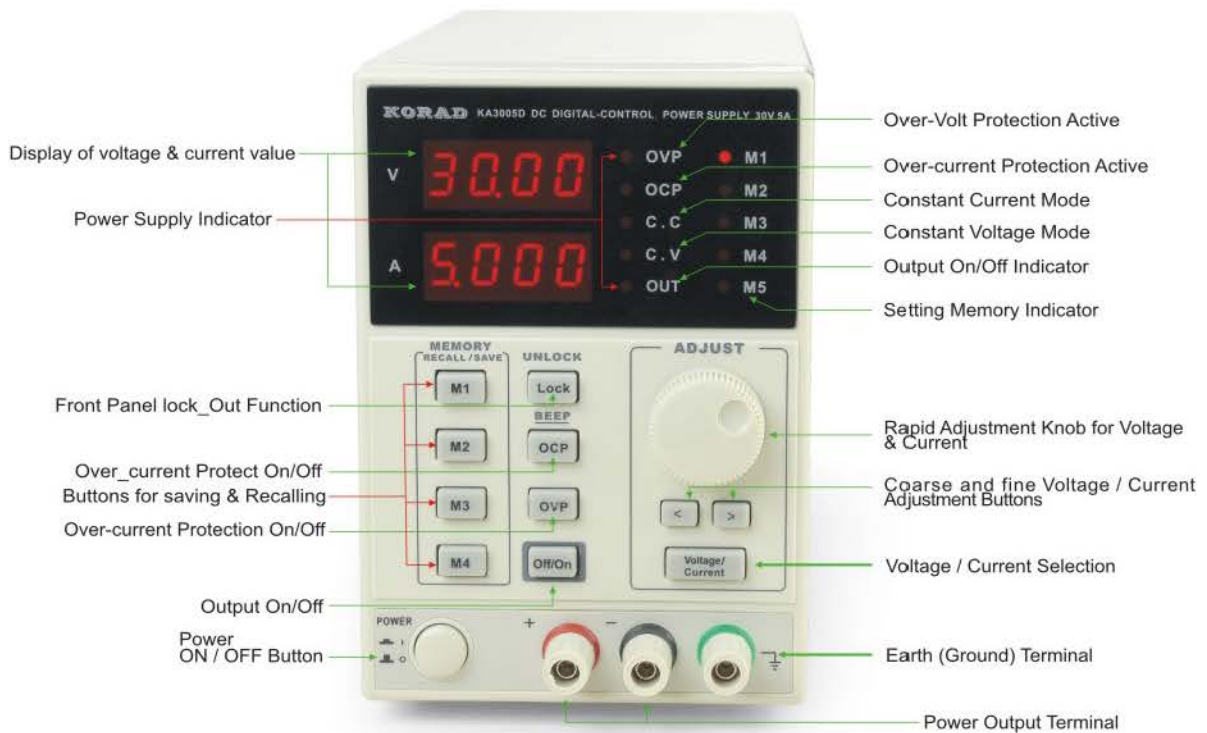
There are functions of Over-current Protection and Over-voltage Protection. And the front panel can be locked by the panel LOCK function to prevent the users from improper operation, which can avoid some undesired results appearing in the key tests.

Software Testing



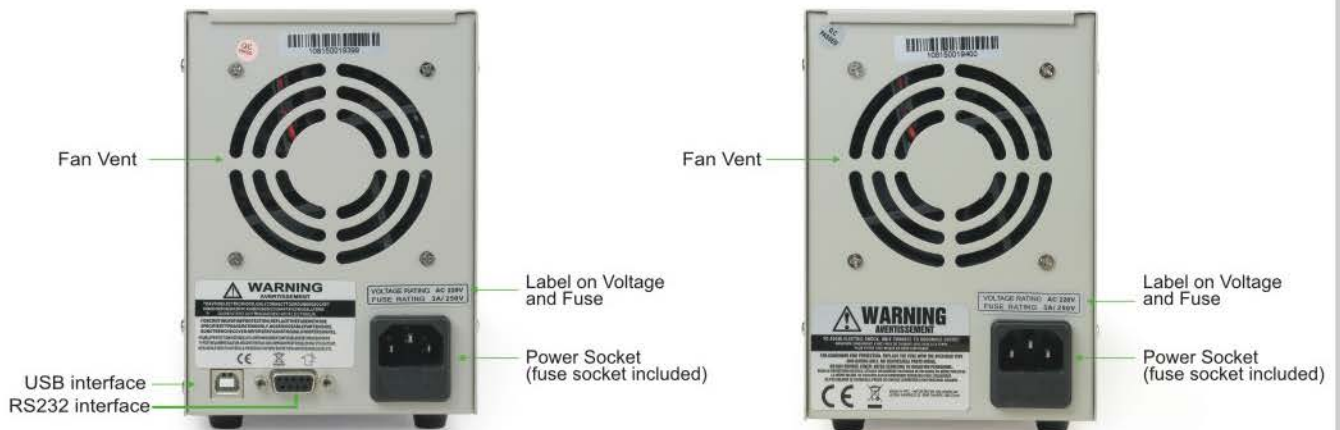
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Output Indicators



KA..P Version

KD..D Version



SPECIFICATIONS

Note: The specifications below are tested under the conditions of temperature $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and the warm-up for 20 minutes.

Models	KA3003	KA3005	KA3010	KA6002	KA6003	KA6005
Voltage Range	0-30V	0-30V	0-30V	0-60V	0-60V	0-60V
Current Range	0-3A	0-5A	0-10A	0-2A	0-3A	0-5A
Load Regulation						
Voltage	$\leq 0.01\%+2\text{mV}$	$\leq 0.01\%+2\text{mV}$	$\leq 0.01\%+3\text{mV}$	$\leq 0.01\%+2\text{mV}$	$\leq 0.01\%+2\text{mV}$	$\leq 0.01\%+2\text{mV}$
Current	$\leq 0.1\%+5\text{mA}$	$\leq 0.1\%+10\text{mA}$	$\leq 0.1\%+20\text{mA}$	$\leq 0.1\%+5\text{mA}$	$\leq 0.1\%+5\text{mA}$	$\leq 0.1\%+10\text{mA}$
Line Regulation						
Voltage	$\leq 0.01\%+3\text{mV}$	$\leq 0.01\%+3\text{mV}$	$\leq 0.01\%+3\text{mV}$	$\leq 0.01\%+3\text{mV}$	$\leq 0.01\%+3\text{mV}$	$\leq 0.01\%+3\text{mV}$
Current	$\leq 0.1\%+3\text{mA}$	$\leq 0.1\%+3\text{mA}$	$\leq 0.1\%+3\text{mA}$	$\leq 0.1\%+3\text{mA}$	$\leq 0.1\%+3\text{mA}$	$\leq 0.1\%+3\text{mA}$
Setup Resolution						
Voltage	10mV	10mV	10mV	10mV	10mV	10mV
Current	1mA	1mA	1mA	1mA	1mA	1mA
Setup Accuracy ($25^{\circ}\text{C} \pm 5^{\circ}\text{C}$)						
Voltage	$\leq 0.5\%+20\text{mV}$	$\leq 0.5\%+20\text{mV}$	$\leq 0.5\%+20\text{mV}$	$\leq 0.5\%+30\text{mV}$	$\leq 0.5\%+30\text{mV}$	$\leq 0.5\%+30\text{mV}$
Current	$\leq 0.5\%+5\text{mA}$	$\leq 0.5\%+10\text{mA}$	$\leq 0.5\%+20\text{mA}$	$\leq 0.5\%+5\text{mA}$	$\leq 0.5\%+10\text{mA}$	$\leq 0.5\%+5\text{mA}$
Ripple(20-20M)						
Voltage	$\leq 1\text{mVrms}$	$\leq 2\text{mVrms}$	$\leq 2\text{mVrms}$	$\leq 1\text{mVrms}$	$\leq 1\text{mVrms}$	$\leq 1\text{mVrms}$
Current	$\leq 3\text{mA}_{\text{rms}}$	$\leq 3\text{mA}_{\text{rms}}$	$\leq 5\text{mA}_{\text{rms}}$	$\leq 3\text{mA}_{\text{rms}}$	$\leq 3\text{mA}_{\text{rms}}$	$\leq 3\text{mA}_{\text{rms}}$
Temp. Coefficient						
Voltage	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$
Current	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$
Read Back Resolution						
Voltage	10mV	10mV	10mV	10mV	10mV	10mV
Current	1mA	1mA	1mA	1mA	1mA	1mA
Read Back Temp. Coefficient						
Voltage	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$
Current	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$	$\leq 150\text{ppm}$
Reaction Time						
Voltage Rise	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$
Voltage Drop	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$	$\leq 100\text{mS}$
(10% Rated load) ; (10% Rated load) ; (10% Rated load) ; (10% Rated load) ; (10% Rated load) ; (10% Rated load)						
Interface						
Optional Interfaces (for programmable models only): RS232, USB						
Accessories						
User manual *1, ; Power cord*1						
Weight and Dimension						
KA3003,KA3005:110mm(W)*156mm(H)*260(D) KA3010,KA6005:110mm(W)*156mm(H)*300(D) KA3003x3.6Kg,KA3005x4.8Kg,KA6005,KA3010x7.5Kg,						