

# K Series – Dual output



## Programmable DC Power Supply

The K Dual's prominent feature is the programming capability with linear power supply mechanism known as ideal for precision power system applications. The power supply is programmable either locally from the front-panel or remotely over the GPIB and USB interfaces.

| Specifications   | Dual output   |  |  |  |
|--|---|--|--|--|
|  | K1205D  | K3003D                                       | K3005D                                       | K6003D                                       |
|  | 60W x 2<br>120W   | 90W x 2<br>180W                              | 150W x 2<br>300W                             | 180W x 2<br>360W                             |
| <b>DC Output</b>                                       |   |  |  |  |
| Voltage  | 12V x 2   | 30V x 2                                      | 30V x 2                                      | 60V x 2                                      |
| Current  | 5A x 2  | 3A x 2                                       | 5A x 2                                       | 3A x 2                                       |
| <b>Programming Accuracy</b><br>±(% of output + offset) |   |  |  |  |
| Voltage  | P1 : 0.03%+15mV<br>P2 : 0.10%+25mV  | P1 : 0.03%+15mV<br>P2 : 0.10%+25mV           | P1 : 0.03%+15mV<br>P2 : 0.10%+25mV           | P1 : 0.05%+20mV<br>P2 : 0.10%+25mV           |
| Current  | P1 : 0.1%+5mA<br>P2 : 0.1%+10mA   | P1 : 0.1%+5mA<br>P2 : 0.1%+10mA              | P1 : 0.1%+5mA<br>P2 : 0.1%+10mA              | P1 : 0.1%+5mA<br>P2 : 0.1%+10mA              |
| <b>Readback Accuracy</b><br>±(% of output + offset)    |   |  |  |  |
| Voltage  | P1 : 0.03%+10mV<br>P2 : 0.10%+20mV  | P1 : 0.03%+10mV<br>P2 : 0.10%+20mV           | P1 : 0.03%+10mV<br>P2 : 0.10%+20mV           | P1 : 0.05%+15mV<br>P2 : 0.10%+20mV           |
| Current  | P1 : 0.1%+3mA<br>P2 : 0.1%+7mA  | P1 : 0.1%+3mA<br>P2 : 0.1%+7mA               | P1 : 0.1%+3mA<br>P2 : 0.1%+7mA               | P1 : 0.1%+3mA<br>P2 : 0.1%+7mA               |
| <b>Load Regulation</b><br>±(% of output + offset)      |   |  |  |  |
| Voltage  | 0.01%+2mV   | 0.01%+2mV                                    | 0.01%+2mV                                    | 0.01%+2mV                                    |
| Current  | 0.01%+1mA   | 0.01%+1mA                                    | 0.01%+1mA                                    | 0.02%+1mA                                    |
| <b>Line Regulation</b><br>±(% of output + offset)      |   |  |  |  |
| Voltage  | 0.01%+2mV   | 0.01%+2mV                                    | 0.01%+2mV                                    | 0.01%+2mV                                    |
| Current  | 0.01%+1mA   | 0.01%+1mA                                    | 0.01%+1mA                                    | 0.01%+1mA                                    |
| <b>Ripple &amp; Noise</b><br>(20Hz to 20MHz)           |   |  |  |  |
| Normal Mode Voltage                                    | P1 : 0.5mVrms, 3mVpp<br>P2 : 0.5mVrms, 8mVpp  | P1 : 0.5mVrms, 3mVpp<br>P2 : 0.5mVrms, 8mVpp | P1 : 0.5mVrms, 3mVpp<br>P2 : 0.5mVrms, 8mVpp | P1 : 0.5mVrms, 3mVpp<br>P2 : 0.5mVrms, 8mVpp |
| Normal Mode Current                                    | 1mA <sub>rms</sub>  | 1mA <sub>rms</sub>                           | 1mA <sub>rms</sub>                           | 1mA <sub>rms</sub>                           |
| <b>Resolution</b>                                      |   |  |  |  |
| Program  |   | 1mV / 1mA                                    |  | 10mV / 1mA                                   |
| Readback   |   | 1mV / 1mA                                    |  | 10mV / 1mA                                   |
| Meter  |   | 1mV / 1mA                                    |  | 10mV / 1mA                                   |
| <b>Voltage Programming Speed</b>                       |   |  |  |  |
| Up – Full Load   | 6msec   | 12msec                                       | 12msec                                       | 16msec                                       |
| No Load  | 6msec   | 12msec                                       | 12msec                                       | 16msec                                       |
| Down – Full Load                                       | 7msec   | 15msec                                       | 15msec                                       | 20msec                                       |
| No Load  | 80msec  | 110msec                                      | 110msec                                      | 250msec                                      |
| <b>Transient Response</b>                              |   |  |  |  |
|  | Less than 50µs for output recover to within 15mV following a change in current output from full load to half load |  |  |  |
| <b>Command Processing Time</b>                         |   |  |  |  |
|  | 50msec/100msec  |  |  |  |