

# SPX Series Single Output DC Power Supply Technical Specifications

The instrument must be operated continuously for more than 30 minutes at the specified operating temperature to achieve the following specifications.

| Model                                                                                                                                                                          | SPX3103       | SPX6103  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|
| Input Characteristics                                                                                                                                                          |               |          |
| Supply Voltage                                                                                                                                                                 | 198V-240 V/AC |          |
| Input Frequency                                                                                                                                                                | 50/60 Hz      |          |
| Input Fuse                                                                                                                                                                     | 250V, F5A     |          |
| Rated Output                                                                                                                                                                   |               |          |
| Voltage                                                                                                                                                                        | 0~30V         | 0~60V    |
| Current                                                                                                                                                                        | 0~10A         | 0~10A    |
| Power                                                                                                                                                                          | 300W          | 300W     |
| Regulation(CV)                                                                                                                                                                 |               |          |
| Load                                                                                                                                                                           | ≤33mV         |          |
| Line                                                                                                                                                                           | ≤33mV         |          |
| Regulation(CC)                                                                                                                                                                 |               |          |
| Load                                                                                                                                                                           | ≤30mA         |          |
| Line                                                                                                                                                                           | ≤20mA         |          |
| Ripple & Noise (Noise bandwidth 20MHz, ripple bandwidth 1MHz, connect 10uF electrolytic capacitor in parallel with 0.1uF ceramic capacitor to the output terminal for testing) |               |          |
| Voltage (Vrms)                                                                                                                                                                 | ≤40mVrms      | ≤60mVrms |
| Current (Arms)                                                                                                                                                                 | ≤40mArms      | ≤40mArms |
| Setting Resolution                                                                                                                                                             |               |          |
| Voltage                                                                                                                                                                        | 10mV          | 10mV     |
| Current                                                                                                                                                                        | 10mA          | 10mA     |
| Readback Resolution                                                                                                                                                            |               |          |
| Voltage                                                                                                                                                                        | 10mV          | 10mV     |
| Current                                                                                                                                                                        | 10mA          | 10mA     |
| Setting Accuracy                                                                                                                                                               |               |          |
| Voltage                                                                                                                                                                        | ≤0.2%+0.2%FS  |          |

| Model                                           | SPX3103                                                      | SPX6103 |
|-------------------------------------------------|--------------------------------------------------------------|---------|
| Current                                         | ≤0.2%+0.2%FS                                                 |         |
| Readback Accuracy                               |                                                              |         |
| Voltage                                         | ≤0.2%+0.2%FS                                                 |         |
| Current                                         | ≤0.2%+0.2%FS                                                 |         |
| Response time                                   |                                                              |         |
| Transient recovery time<br>(10%~90% rated load) | ≤5.0ms                                                       |         |
| Protective function                             |                                                              |         |
| OVP                                             | 0~31V                                                        | 0~61V   |
| OCP                                             | 0~10.1A                                                      | 0~10.1A |
| OTP                                             | 85℃                                                          | 85℃     |
| Temperature coefficient of output               |                                                              |         |
| Voltage                                         | 100ppm/℃                                                     |         |
| Current                                         | 200ppm/℃                                                     |         |
| Temperature coefficient of readback value       |                                                              |         |
| Voltage                                         | 100ppm/℃                                                     |         |
| Current                                         | 200ppm/℃                                                     |         |
| Display                                         |                                                              |         |
| Display Type                                    | 3 x 4bit LED                                                 |         |
| Environment                                     |                                                              |         |
| Temperature                                     | Working Temperature: 0℃~40℃<br>Storage Temperature: -20℃~60℃ |         |
| Relative Humidity                               | ≤90%RH; no condensation                                      |         |
| Height                                          | 2,000 meters                                                 |         |
| Cooling                                         | Fan cooling, temperature intelligent speed control           |         |
| Others                                          |                                                              |         |
| Dimension                                       | 82mm(Width)× 142mm(Height)×226mm(Depth)                      |         |
| Weight                                          | Approx. 1.5kg                                                |         |



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V1.0.0