



GW Instek launches the APS-7000E Series the economy version of the APS-7000 Series programmable AC power source. With the height of 2U, the maximum rated output for APS-7050E is 500VA, 310Vrms, 4.2Arms and APS-7100E is 1000VA, 310Vrms, 8.4Arms.

The output frequency range of the series is 45~500Hz. The series is ideal for the test and development of DC power supply devices, consumer electronics, automotive electronics and electronic components.

The APS-7000E Series comprises six measurement and test functions (Vrms, Irms, F, Ipk, W, PF), and provides user interface similar to that of AC Power Meter. The APS-7000E Series, via switching many sets of current levels to increase small current measurement resolution, is ideal for the LED industry and standby mode power consumption test. Ten sets of Preset allow users to store ten settings.

To meet the test criteria of line voltage fluctuation often seen in consumer electronics, the APS-7000E Series not only provides a stable AC power source but also features the Test mode to satisfy special or abnormal voltage and frequency variation demands. Ten sets of the Test mode simulate power outage, voltage rise, and voltage fall. The APS-7000E Series that simulates waveforms of city power grid's transient changes is suitable for verifying electronics products operated under abnormal power source.

The APS-7000E Series is the economy version of the APS-7000 Series. If communications interface and larger voltage/frequency are required, please refer to the APS-7000 Series.

## APS-7000E Series

### FEATURES

- 4.3" large LCD Display
- Output Capacity:  
APS-7050E(500VA, 310Vrms, 4.2/2.1Arms)  
APS-7100E(1000VA, 310Vrms, 8.4/4.2Arms)
- Measurement Function :  
Voltage, Current, Power, Frequency, Power Factor, Ipeak
- Reverse Current Alarm Function
- 10 Sets of The Test Mode Simulate Power Transient Output
- 10 Sets of Preset Allow Users to Store Ten Settings
- OCP/OPP/OTP Protection
- Variable Voltage, Frequency and Current Limiter
- Universal Power Inlet



Europe Type Output Outlet



APS-7100E Rear Panel



APS-7050E Rear Panel

### APPLICATIONS

- The Broad Power Output Range of The Series is Ideal for Various Power Supply Manufacturers
- The Development of Electronic Components and Testing Applications for Manufacturers
- Incoming Quality Control and R & D Applications
- Small AC Current Measurement Applications

| SPECIFICATIONS                  |            |                                                                                                                               |                                          |
|---------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Model                           |            | APS-7050E                                                                                                                     | APS-7100E                                |
| Power Rating                    |            | 500VA                                                                                                                         | 1000VA                                   |
| Output Voltage                  |            | 0 ~ 155Vrms/0 ~ 310.0 Vrms                                                                                                    | 0 ~ 155Vrms/0 ~ 310.0 Vrms               |
| Output Frequency                |            | 45.00 ~ 500.0 Hz                                                                                                              | 45.00 ~ 500.0 Hz                         |
| Maximum Current (r.m.s)         | 0~155Vrms  | 4.2A                                                                                                                          | 8.4A                                     |
|                                 | 0~310Vrms  | 2.1A                                                                                                                          | 4.2A                                     |
| Maximum Current (peak)          | 0~155Vrms  | 16.8A                                                                                                                         | 33.6A                                    |
|                                 | 0~310Vrms  | 8.4A                                                                                                                          | 16.8A                                    |
| Total Harmonic Distortion (THD) |            | ≤0.5% at 45 ~ 500Hz (Resistive Load)                                                                                          |                                          |
| Crest Factor                    |            | ≤4                                                                                                                            |                                          |
| Line Regulation                 |            | 0.1% (% of full scale)                                                                                                        |                                          |
| Load Regulation                 |            | 0.3% (% of full scale)                                                                                                        |                                          |
| Response Time                   |            | <100 μs                                                                                                                       |                                          |
| Reverse Current                 |            | 30% of Maximum Output RMS Current (Continue); 100% of Maximum Output RMS Current (Within 3 minutes)                           |                                          |
| SETTING                         |            |                                                                                                                               |                                          |
| Voltage                         | Range      | 0 ~ 155Vrms/0 ~ 310Vrms/Auto                                                                                                  |                                          |
|                                 | Resolution | 0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms                                                                          |                                          |
|                                 | Accuracy   | ±(0.5% of setting+2 counts)                                                                                                   |                                          |
| Frequency                       | Range      | 45 ~ 500Hz                                                                                                                    |                                          |
|                                 | Resolution | 0.01Hz at 45.00 ~ 99.99Hz/0.1Hz at 100.0 ~ 500.0Hz                                                                            |                                          |
|                                 | Accuracy   | ±0.02% of setting                                                                                                             |                                          |
| MEASUREMENT                     |            |                                                                                                                               |                                          |
| Voltage(RMS)                    | Range      | 0.20~38.75Vrms/38.76~77.50 Vrms/77.51~155.0Vrms/155.1~310.0Vrms                                                               |                                          |
|                                 | Resolution | 0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms                                                                          |                                          |
|                                 | Accuracy   | ±(0.5% of reading + 2 counts)                                                                                                 |                                          |
| Frequency                       | Range      | 45 ~ 500Hz                                                                                                                    |                                          |
|                                 | Resolution | 0.01Hz (at 45Hz~99.99Hz)/0.1Hz (at 100Hz~500.0Hz)                                                                             |                                          |
|                                 | Accuracy   | ±0.1Hz                                                                                                                        |                                          |
| Current(RMS)                    | Range      | 2.00 ~ 70.00mA/60.0 ~ 350.0mA/0.300 ~ 3.500A/3.00 ~ 17.5A                                                                     |                                          |
|                                 | Resolution | 0.01mA, 0.1mA, 0.001A, 0.01A                                                                                                  |                                          |
|                                 | Accuracy   | ±(0.6% of reading+5 counts); 2.00~350.0mA/±(0.5% of reading+5 counts); 0.350~3.500A/±(0.5% of reading+3 counts); 3.500~17.50A |                                          |
| Current(Peak)                   | Range      | 0.0 ~ 70.0A                                                                                                                   |                                          |
|                                 | Resolution | 0.1A                                                                                                                          |                                          |
|                                 | Accuracy   | ±(1% of reading+1 count)                                                                                                      |                                          |
| Power(W)                        | Resolution | 0.01W, 0.1W, 1W                                                                                                               |                                          |
|                                 | Accuracy   | ±(0.6% of reading+5 counts); 0.20~99.99W; ±(0.6% of reading+5 counts); 100.0~999.9W ±(0.6% of reading+2 counts); 1000~9999W   |                                          |
| Power Factor                    | Resolution | 0.001                                                                                                                         |                                          |
|                                 | Accuracy   | ±(2% of reading + 2 counts)                                                                                                   |                                          |
| GENERAL                         |            |                                                                                                                               |                                          |
| Number of Preset Protection     |            | 10(0~9 Numeric keys)<br>OCP, OPP, OTP and Alarm                                                                               |                                          |
| ENVIRONMENT CONDITIONS          |            |                                                                                                                               |                                          |
| Operation Temperature           |            | 0 ~ +40℃                                                                                                                      |                                          |
| Storage Temperature             |            | -10 ~ +70℃                                                                                                                    |                                          |
| Operating Temperature           |            | 20 ~ 80% RH (No Condensation)                                                                                                 |                                          |
| Storage Humidity                |            | 80% RH or less(No Condensation)                                                                                               |                                          |
| AC INPUT                        |            |                                                                                                                               |                                          |
| Input Power Source              |            | 1φ AC 115/230Vac ±15%                                                                                                         |                                          |
| DIMENSIONS & WEIGHT             |            |                                                                                                                               |                                          |
|                                 |            | 430(W) x 88(H) x 400(D) mm; Approx. 24kg                                                                                      | 430(W) x 88(H) x 560(D) mm; Approx. 38kg |

