

# AC Power Supply

## Single-phase Output AC Power Supply ATS-1000 Series

### Product description:

ATS-1000 series is economic type single-phase Frequency Conversion AC power supply can simulate the grid voltage of all countries in the world, providing customers with high purity and high reliability sine wave power output, which is mainly used in home appliances, small household appliances, motors, etc.



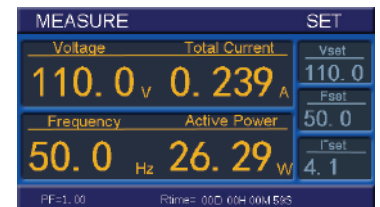
ATS-1000 ~ 1003



ATS-1005/1010

### Features

- High power MOS/IGBT drive with reliable operation and high over-load cap.
- High frequency SPWM hardware adjustment technology with rapid response speed and stable output.
- Applicable for various loads such as resistive, inductive and rectifier loads
- Protection function : over heat, over current and short circuit abnormality
- Power source voltage is adjustable on-line and output frequency is selectable
- With parameter memory function and shortcut key operation mode, easy & convenient to operation
- Adopting very bright LED display, which is clearly visible with large viewing angle, suitable to be used for production line
- Having RS-232 communication interface and baud rate can reach 9600
- Analog output 0-5V (option)



LCD-Display

### Specifications

| Model                      |           | ATS-1000                                                                                                                                                                     | ATS-1001    | ATS-1002    | ATS-1003    | ATS-1005                  | ATS-1010    | ATS-1015                 | ATS-1020     |
|----------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|---------------------------|-------------|--------------------------|--------------|
| Output Capacity            |           | 500VA                                                                                                                                                                        | 1kVA        | 2kVA        | 3kVA        | 5kVA                      | 10kVA       | 15kVA                    | 20kVA        |
| Input Parameters           |           |                                                                                                                                                                              |             |             |             |                           |             |                          |              |
| Isolated Function          |           | Built-in Isolated transformer                                                                                                                                                |             |             |             |                           |             |                          |              |
| Input Power                |           | 220V±10%, 50Hz±5%                                                                                                                                                            |             |             |             |                           |             | 380V±10%, 50Hz±5%        |              |
| Wire Connection            |           | Single-phase, 2 Wire + PE                                                                                                                                                    |             |             |             |                           |             | Three-phase, 4 Wire + PE |              |
| Output Parameter           |           |                                                                                                                                                                              |             |             |             |                           |             |                          |              |
| Output Mode                |           | Single-phase, 2 Wire + PE                                                                                                                                                    |             |             |             |                           |             |                          |              |
| Output Voltage             | Auto      | Phase voltage : (Low gear) 0.0 ~ 150.0V (L-N) / (High gear) : 150.1 ~ 300.0V (L-N)                                                                                           |             |             |             |                           |             |                          |              |
|                            | High Lock | Phase voltage : 0.0 ~ 300.0V (L-N)                                                                                                                                           |             |             |             |                           |             |                          |              |
|                            | 120V      | 4.2A                                                                                                                                                                         | 8.4A        | 16.8A       | 25A         | 42A                       | 84A         | 125A                     | 166A         |
|                            | 240V      | 2.1A                                                                                                                                                                         | 4.2A        | 8.4A        | 12.5A       | 21A                       | 42A         | 62.5A                    | 83A          |
| Current                    |           |                                                                                                                                                                              |             |             |             |                           |             |                          |              |
| Output Frequency           |           | 45Hz ~ 400Hz, Resolution : 0.1Hz, Fixed frequency output : 50Hz, 60Hz, 400Hz                                                                                                 |             |             |             |                           |             | 45Hz ~ 65Hz              |              |
| Frequency Stability        |           | ≤0.1%                                                                                                                                                                        |             |             |             |                           |             |                          |              |
| Voltage Stability          |           | ≤1%                                                                                                                                                                          |             |             |             |                           |             |                          |              |
| Voltage Distortion         |           | Linear load : THD <2%                                                                                                                                                        |             |             |             |                           |             |                          |              |
| Crest Factor               |           | 1.41 ±0.01                                                                                                                                                                   |             |             |             |                           |             |                          |              |
| Source Voltage Effect      |           | ≤1%                                                                                                                                                                          |             |             |             |                           |             |                          |              |
| Load Effect                |           | ≤1%                                                                                                                                                                          |             |             |             |                           |             |                          |              |
| Efficiency                 |           | ≥86                                                                                                                                                                          |             |             |             |                           |             |                          |              |
| Measurement Display        |           |                                                                                                                                                                              |             |             |             |                           |             |                          |              |
| Frequency Display          |           | Four-Digit LCD, resolution : 0.1Hz, accuracy : 0.05%                                                                                                                         |             |             |             |                           |             |                          |              |
| Voltage Display            |           | Four-Digit LCD, resolution : 0.1V, accuracy : 0.5%FS ±0.5                                                                                                                    |             |             |             |                           |             |                          |              |
| Current Display            |           | Four-Digit LCD, resolution : 0.01A/0.1A, accuracy : 0.5%FS ±0.005/0.05                                                                                                       |             |             |             |                           |             |                          |              |
| Power Display              |           | Four-Digit LCD, resolution : 0.01W/0.1W, accuracy : 0.5%FS ±0.05/0.5                                                                                                         |             |             |             |                           |             |                          |              |
| Power Factor Display       |           | Four-Digit LCD, resolution : 0.01                                                                                                                                            |             |             |             |                           |             |                          |              |
| Function & Features        |           |                                                                                                                                                                              |             |             |             |                           |             |                          |              |
| Overload Capacity          |           | 105% < Output ≤ 110% shut down output for 15 seconds                                                                                                                         |             |             |             |                           |             |                          |              |
|                            |           | 110% < Output ≤ 200% shut down output for 5 seconds                                                                                                                          |             |             |             |                           |             |                          |              |
|                            |           | 200% < Output the output will be shut off immediately                                                                                                                        |             |             |             |                           |             |                          |              |
| Protective Device          |           | IGBT overheat, IGBT overcurrent, Transformer overheat, Input overvoltage, Input undervoltage, Output overvoltage, Output undervoltage, Output overload, Output short circuit |             |             |             |                           |             |                          |              |
| Interface                  |           | RS-232 (standard), RS-485 & Analog control port (Optional)                                                                                                                   |             |             |             |                           |             |                          |              |
| Online Adjustment Function |           | Output voltage and output frequency can be adjusted online (45.0 ~ 65.0Hz)                                                                                                   |             |             |             |                           |             |                          |              |
| Memory Function            |           | Power off memory function, can memorie the last output mode and pamameters                                                                                                   |             |             |             |                           |             |                          |              |
| Machine Case Structure     |           | Desk-top                                                                                                                                                                     |             |             |             | Cabinet-type with casters |             |                          |              |
| Work Environment           |           | Temperature : 10 °C ~ + 40 °C, Relative humidity : 10% ~ 90% (40 °C)                                                                                                         |             |             |             |                           |             |                          |              |
| Dimension (WxHxD) mm.      |           | 430x160x435                                                                                                                                                                  | 430x192x500 | 430x235x500 | 430x192x500 | 430x600x500               | 430x700x520 | 480x800x600              | 520x1000x820 |
| Weight (kg.)               |           | 23                                                                                                                                                                           | 25          | 37          | 45          | 70                        | 120         | 180                      | 270          |