



## Features:

- Seamless switching between main and backup power
- TTL singals for status detection
- Protections: Short circuit, Overload, Battery reverse polarity
- 120% peak power capability
- Accurate charge and discharge management
- Forced UPS mode for battery maintenance
- Isolate 5V output

## Application:

- Fire alarm controller, electrical fire monitoring equipment
- Combustible gas alarm controller, Gaseous fire suppression system
- Security monitoring system
- distributed temperature sensor
- Fire equipment power monitoring system

Specification	n			
MODEL		SNE-80-27		
INPUT	VOLTAGE RANGE	187~253VAC		
	FREQUENCY RANGE	47~63Hz		
	Backup power voltage	18–28VDC		
	EFFICIENCY(Typ.)	88%		
	AC CURRENT(Typ.)	0.8A/230VAC		
	INRUSH CURRENT(Typ.)	40A/230VAC (cold start)		
	LEAKAGE CURRENT	<0.3mA/240VAC		
	DC VOLTAGE	27.5V		
	CURRENT RANGE	0-2A(Isolation 5V no-load, maximum output current 3A)		
	RATED POWER	55W (With charging channel, without 5/3A isolation)		
OUTPUT1	RIPPLE&NOISE(max.)	300mVp-p		
	VOLTAGE TOLERANCE	±2.0%		
	LINE REGULATION	±1%		
	LOAD REGULATION	±2.0%		
	OVER SHOOT (max.)	5%Vout		
	SETUP TIME (max)	3\$		
	CAPACITIVE LOAD (min)	3000uF		
	CONVERSION TIME	0mS		
OUTPUT2	DC VOLTAGE	5V/Range:5.0-5.3VDC		
	CURRENT RANGE	0–3A		
	RIPPLE&NOISE(max.)	100mVp-p		
PROTECTION	OVER LOAD	120%~150% rated output power/Self-recovery		
	SHORT CIRCUIT Note6	HICCUP mode, recovers after fault condition is removed; When the backup power is working, the output is short circuited and the backup power fuse is burned out. After replacement, it will resume normal operation		
	BATTERY REVERSE POLARITY	no damage,recovers after fault condition is removed		
BACKUP POWER MANAGEMENT	CHARGING CURRENT	0.35A/Range:0.3-0.4A		
	FIOAT CHARGING VOLTAGE	27.2VDC/Range:26.4–28VDC		
	BATTERY LOW	22VDC/Range:21–23VDC		
	DISCHARGE	21VDC/Range:20-22VDC output shutdown, Buzzer alarm 2 hours.During this period, the output is normal after the main power is restored		
FUNCION SIGNALS	BACKUP POWER STATUS	When the backup power is normal, the signal output is at a low level; When the backup power fails to provide output to undervoltage, short circuit, power outage, etc. during the main power operation, or when the backup power voltage lower than the backup power undervoltage point during the backup power operation, the signal output is high level.		
	AC STATUS	When the main power is working normally, the signal output is at a low level; When the AC input voltage is below 170 ± 15VAC, power outage, etc., and AC power cannot be provided, the signal output is at a high level.		
ENVIRONIMENT	WORKING TEMP, HUMIDITY	-10~+50°C, 20~90%RH non-condensing		
	STORAGE TEMP, HUMIDITY	-40~+60°C, 10~95%RH		
	ALTITUDE	≤3000m		
	Heat dissipation mode	Cooling by free air convection		
Safety and	Safety standards	GB4717-2005、GB14287.1-2014 and other standards for the power part of the requirements		
electromagnetic	Withstand voltage	I/P-O/P 3KVAC,I/P-FG 1.5KVAC,FG-O/P 0.5KVAC		
compatibility	Isolation resistance	I/P-O/P,I/P-FG,FG-O/P :100M Ohms/500VDC/25°C/70% RH		



Specification							
	Electromagnetic compatibility emissionemission	Parameter	Standard	Test Level / Note			
		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B),CNS13438,GB17625.1EAC TP TC 020,MSIP KN32	Class A			
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B),CNS13438,GB17625.1EAC TP TC 020,MSIP KN32	Class A			
		Harmonic current	BS EN/EN61000-3-2,GB9254	Class A			
El		Voltage flicker	BS EN/EN61000-3-3				
Electromagnetic	Electromagnetic compatibility immunity	BS EN/EN55035					
compatibility immunity		Parameter	Standard	Test Level /Note			
Illinumity		ESD	BS EN/EN61000-4-2	Level 4, 8KV /15KV			
		RF field susceptibility	BS EN/EN61000-4-3	Level 4			
		EFT bursts	BS EN/EN61000-4-4	Level 3, 2KV			
		Surge susceptibility	BS EN/EN61000-4-5	Level 3, 1KV			
		Conducted susceptibility	BS EN/EN61000-4-6	Level 4			
		Magnetic field immunity	BS EN/EN61000-4-8	Level 4			
		Voltage dips , interruption	BS EN/EN61000-4-11				
OTHERS	DIMENSION	146*80*48mm					
OTHERS	Warranty	18 months					
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>Line regulation ,voltage must be measured from the output terminal.</li> <li>Efficiency needs to be measured when the backup power is in a floating charge state.</li> <li>The specification of the backup power fuse is 7.5A automotive fuse.</li> </ol>						



## State signal output function:

The power supply has two working state output signals, signal output and isolation 5V common ground, TLL level output, high level  $4.0 \sim 5.3 \text{ V}$ , low level  $\leq 0.8 \text{ V}$ , port maximum input and output current 1mA.

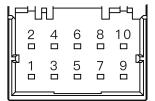
The pins are arranged as shown in the following figure

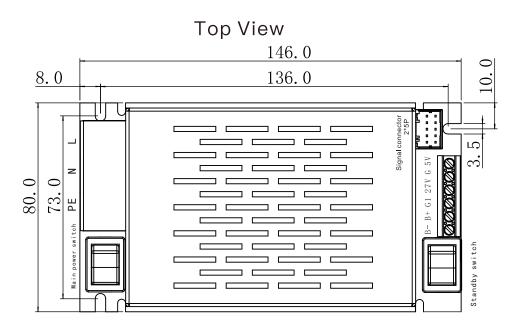
PIN function:

PIN1: FG

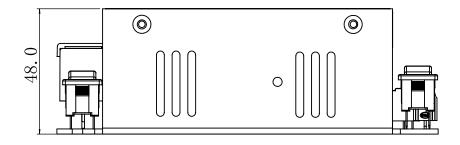
PIN3: Standby power fault signal

PIN4: Main power fault signal





## Installation size diagram, unit: mm



Front View