

# SPECIFICATION

## Universal AC Input 18W 12VDC 1.5A Output Switching Desktop Adapter

**P/N: A120015EN1**

**\*\*Specification Approval\*\***

This specification (total 7 pages including cover page) is approved in it's entirety by:

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080210V.A22

## 1. General Description

This specification describes a switching mode universal input power supply, operating at input voltage 90VAC to 264VAC and output voltage of 12VDC with 1.5A max. load.

## 2. Electric Characteristics

### 2.1 Input

No	ITEM	SPECIFICATION
1.	Rated Input Voltage	100-240VAC
	Input Voltage Tolerance	90V-264VAC
2.	Rated Frequency	50-60Hz
	Frequency Tolerance	47-63Hz
3.	Rated Input Current	500mA RMS Max
	Inrush Current	40A Max. at 115VAC cold start
		80A Max. at 230VAC cold start
4.	Leakage current	<0.25mA
5.	Efficiency	>80.2% avg. (Level V)
6.	Zero Load Input Power	≤0.3W (Level V)

## 2.2 Output:

No	ITEM	SPECIFICATION
1.	Output Voltage	12VDC
2.	Output Current (Max.)	1.5A
3.	Output Current (Min.)	0A
4.	Line Regulation	±1%
5.	Output Voltage Tolerance	±5%
6.	Over Voltage Protection	The output voltage shall be clamped by internal protection zener
7.	Short Sircuit Protection	Output shut down and auto restart
8.	Ripple Voltage	100mV (p-p) (100V-240VAC at full load)

Measuring is done by 20MHz bandwidth oscilloscope and terminated each output with a 10uF aluminum electrolytic capacitor and 0.1uF ceramic capacitor.

## 2.3 Hi-Pot:

Input to output : 1500VAC or 2121VDC 10mA 1 minute.

## 2.4 Insulation Resistance:

Input to output: 500VDC to test the input to output resistance (shall be over 100M ohm).

## 2.5 Agency Approvals: UL/CUL,GS,CE,FCC,PSE

## 2.6 EMI Approvals: FCC Class B, CE, VCCI-II

## 2.7 PB-free Standard: RoHS Compliant.

### **3. Mechanical Characteristics**

#### **3.1 AC Plug: IEC320/C14**

#### **3.2 DC Cord:**

**3.2.1 Bending Test: Life 1000 times; Swings 120 from left to right; loading weight 200g, 40 cycle/minute.**

**3.2.2 Pull test: DC cord and plug, weight 6kg for 1 minute.**

#### **3.3 Weight: 105g**

#### **3.4 Case Size: (L)80.6 x (W)50 x (H)31mm**

#### **3.5 Temperature and Humidity**

##### **3.5.1 Temperature**

**Operating: 0°C to 40°C**

**Storage: -10°C to 70°C**

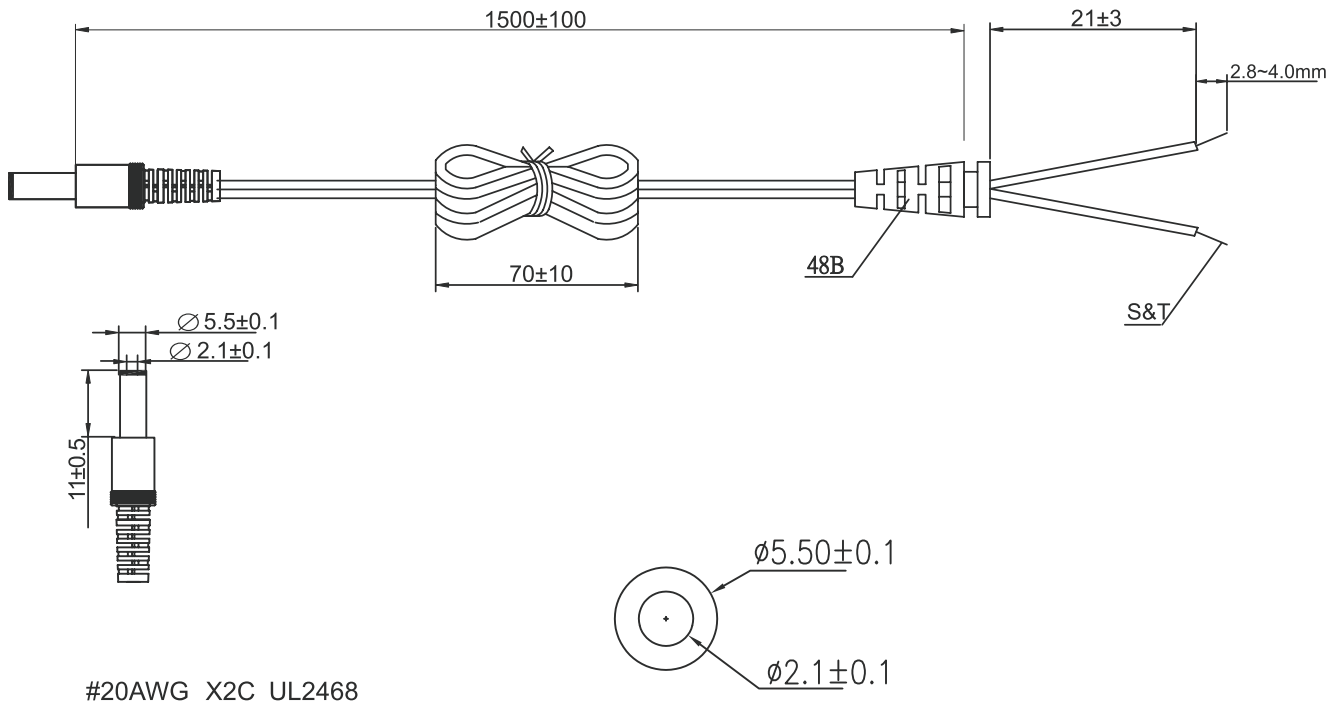
##### **3.5.2 Humidity**

**Operating: 20% to 80%**

**Storage: 10% to 90%**

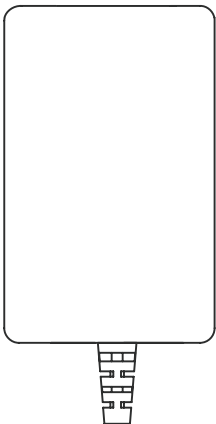
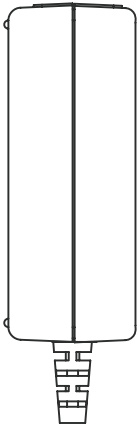
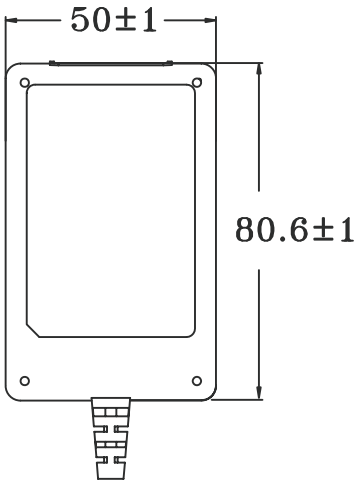
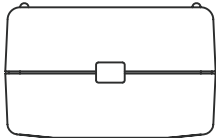
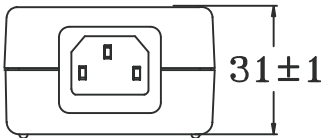
### 4. Packing

UNIT: mm



5. Mechanical Drawing

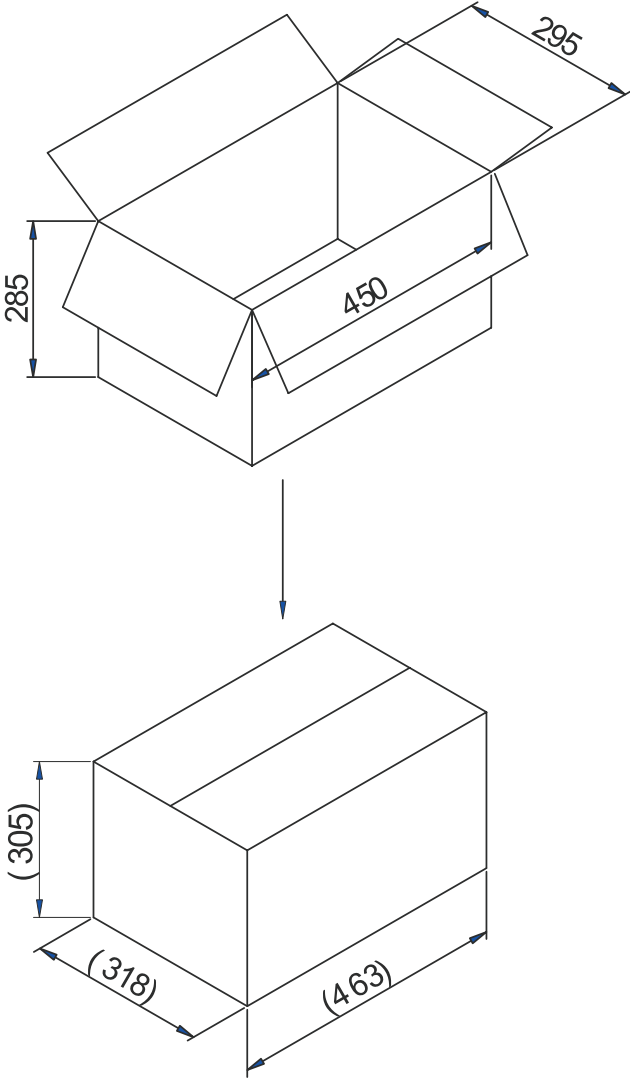
UNIT: mm



**6. Packing**

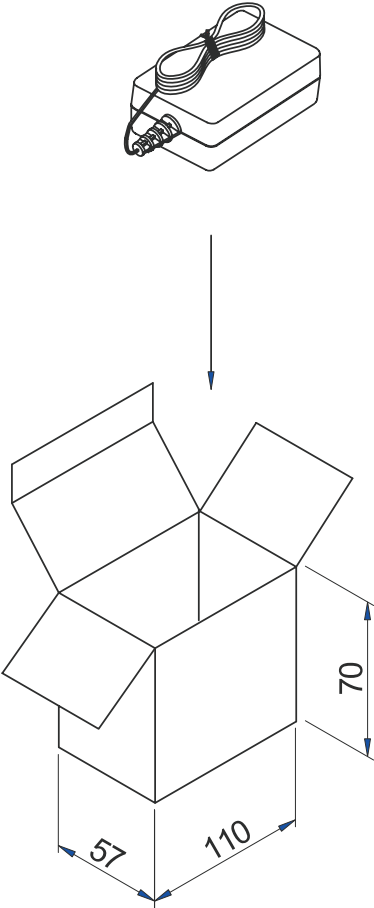
**6.1 External Packing**

UNIT: mm



### 6.2 Internal Packing

UNIT: mm





### 7. Label

UNIT: mm

