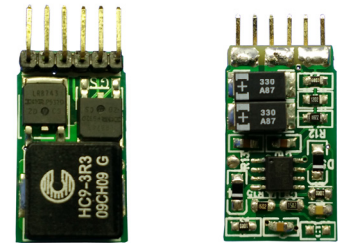




NDS12 is small size, light weight, high current output, high efficiency, low noise, easy to use open frame DC to DC power. The modules are widely used in mine exploration, metallurgy, optical control technology, medical equipment, physical and chemical experimental analysis, etc. It can be used in variety environments with 10.5V to 14.5V wide input range. It is versatile with vertical or horizontal installation.

**Input Volt.****12 VDC Standard****Output Volt.****3.3 ~ 9 VDC**

Other specifications required, please inquire us for details.

**Technical Parameters**

All the parameters below are tested at TA=25° C, nominal input voltage, rated output current.

**Input Parameters**

Volt. Range 10.5 VDC~14.5 VDC  
 Linear speed rate 0.5% (low end- high end)

**Isolation Parameters**

Rated Isolation Volt. Non-isolated

**General Parameters**

Switching Frequency 300 KHz, type.

**Environmental Parameters**

Operating Temperature - 15° C to + 50° C, Ambient  
 Operating Humidity 20 ~ 90 % RH, No Condensing  
 Storage Temperature -20° C to + 85 °C, Ambient  
 Vibration 2G, 10~500Hz, 3 axes

**Dimension**

DIP Package size NDS12: 27.5 x 15.7 x 12.8 mm

**Typical Product List:**

Model	Input Voltage	Output Voltage	Output Current (Convection)	Output Current Max. (Fan Cooling)	Ripple & Noise	Regulator Rate	Efficiency Full load	O.V.P
NDS12-3.3	10.5~14.5V	3.4V	10A	20A	10mV	1%	88% Ref.	4~4.2V
NDS12-05	10.5~14.5V	5.1V	10A	20A	10mV	1%	89% Ref.	6~6.3V

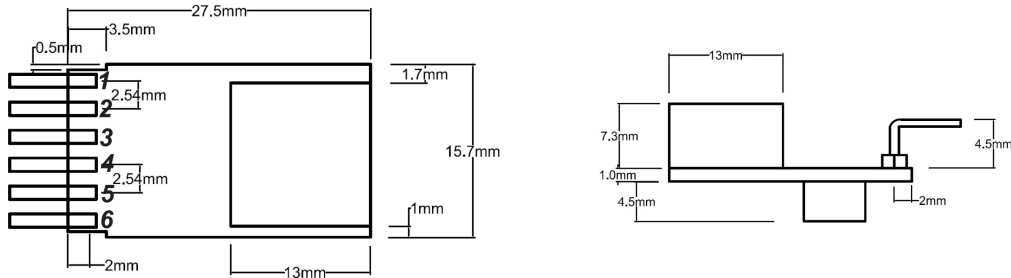
**CE Standards**

EN 55032:2015, EN 55011:2009:2009+A1:2011, EN 61000-6-3:2007+A1:2011.

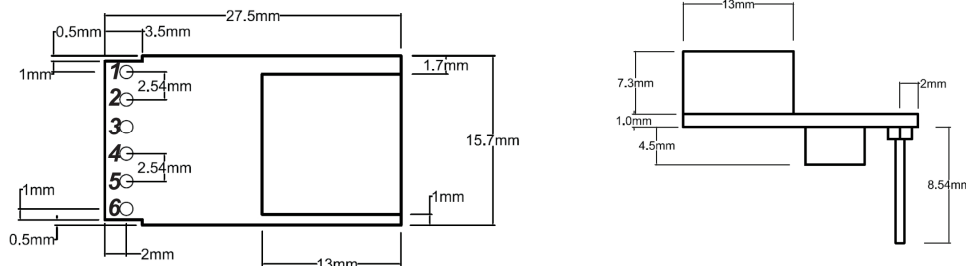
**Safety Standards**



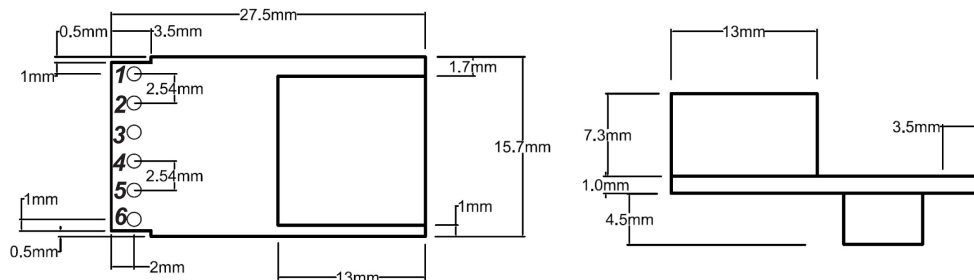
## NDS12-XXA Series Vertical Type Top View



## NDS12-XXB Series Horizontal Type Top View



## NDS12-XXC Series Slot Type Top View



Pin	Function		
1	+	Vout	Output +
2	+	Vout	Output +
3	-	Vout	Output -
4	-	Vin	Input -
5	+	Vin	Input +
6	+	Vin	Input +

## 備註 :

- Vertical type part number is NDS12-3.3A; Horizontal type part number is NDS12-3.3B.
- Each output can provide up to maximum load, but total load can not exceed rated output power.
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 20% to 100% of rated load at 12VDC input.
- Ripple & Noise are measured with 20MHz oscilloscope at 12VDC by using a 20cm long 12" twisted pair-wire with a 0.1uF/630V metal capacitor & a 47uF electrolytic capacitor parallel on the test point.
- Efficiency is measured at rated load and 12VDC input.
- Minimum DC input Cap 330uF is required.
- Reign Power reserve the right to change specifications at any time without notice.