



Наличие и актуальные цены на

**NSD10-48S3**

<https://www.mean-well.ru/store/NSD10-48S3/>



## ■ Features :

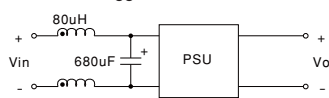
- Wide 4:1 DC input range
- Protections: Short circuit / Overload / Over voltage
- 1000VDC I/O isolation
- Built-in EMI filter
- Cooling by free air convection
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Low cost
- High reliability
- 2 years warranty

## ■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

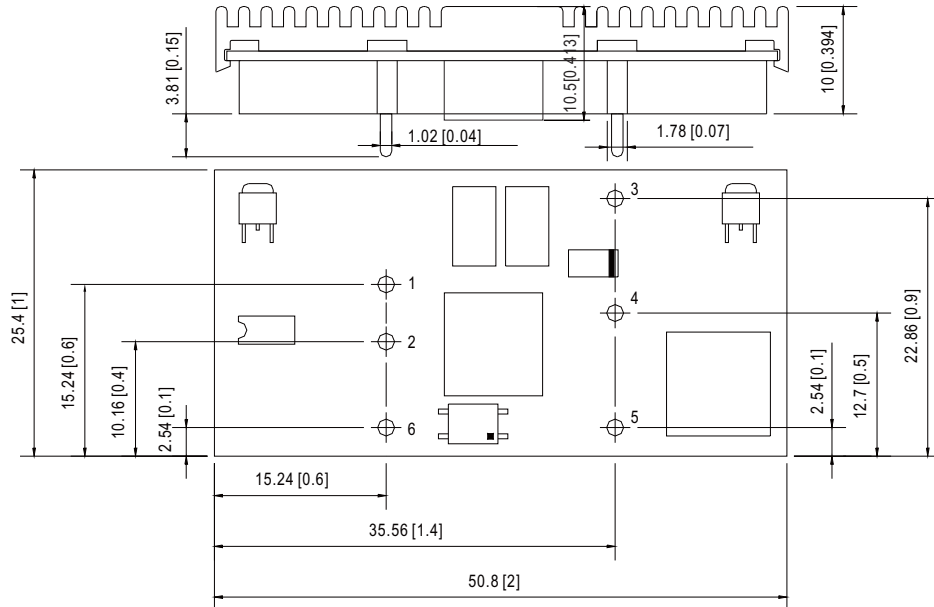


## SPECIFICATION

| MODEL                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NSD10-12S3                                                                                                                      | NSD10-12S5  | NSD10-12S9   | NSD10-12S12  | NSD10-12S15  | NSD10-48S3  | NSD10-48S5  | NSD10-48S9   | NSD10-48S12  | NSD10-48S15  |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|--------------|--------------|-------------|-------------|--------------|--------------|--------------|
| OUTPUT                | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.3V                                                                                                                            | 5V          | 9V           | 12V          | 15V          | 3.3V        | 5V          | 9V           | 12V          | 15V          |
|                       | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.5A                                                                                                                            | 2A          | 1.1A         | 0.83A        | 0.67A        | 2.5A        | 2A          | 1.1A         | 0.83A        | 0.67A        |
|                       | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.12 ~ 2.5A                                                                                                                     | 0.1 ~ 2A    | 0.05 ~ 1.1A  | 0.04 ~ 0.83A | 0.03 ~ 0.67A | 0.12 ~ 2.5A | 0.1 ~ 2A    | 0.05 ~ 1.1A  | 0.04 ~ 0.83A | 0.03 ~ 0.67A |
|                       | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8.25W                                                                                                                           | 10W         | 9.9W         | 9.96W        | 10.05W       | 8.25W       | 10W         | 9.9W         | 9.96W        | 10.05W       |
|                       | CAPACITIVE LOAD (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3300uF                                                                                                                          |             |              |              |              |             |             |              |              |              |
|                       | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 75mVp-p                                                                                                                         |             |              |              |              |             |             |              |              |              |
|                       | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ±2.0% max.                                                                                                                      |             |              |              |              |             |             |              |              |              |
|                       | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±1.0%                                                                                                                           |             |              |              |              |             |             |              |              |              |
|                       | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±2.0%                                                                                                                           | ±1.0%       | ±1.0%        | ±1.0%        | ±1.0%        | ±2.0%       | ±1.0%       | ±1.0%        | ±1.0%        | ±1.0%        |
| SETUP TIME            | 100ms/RATED DC INPUT at full Load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                 |             |              |              |              |             |             |              |              |              |
| INPUT                 | RATED DC INPUT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 12VDC                                                                                                                           |             |              |              |              | 48VDC       |             |              |              |              |
|                       | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9.8 ~ 36VDC                                                                                                                     |             |              |              |              | 22 ~ 72VDC  |             |              |              |              |
|                       | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 72%                                                                                                                             | 75%         | 78%          | 79%          | 80%          | 74%         | 77%         | 78%          | 79%          | 80%          |
|                       | DC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1.4A/12VDC                                                                                                                      |             |              |              |              | 0.4A/48VDC  |             |              |              |              |
|                       | SHUTDOWN IDLE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20mA/12VDC                                                                                                                      |             |              |              |              |             |             |              |              |              |
| PROTECTION            | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Above 105% rated output power<br>Protection type : Over power limiting, recovers automatically after fault condition is removed |             |              |              |              |             |             |              |              |              |
|                       | OVER VOLTAGE(CLAMP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3.8 ~ 4.95V                                                                                                                     | 5.75 ~ 7.5V | 10.4 ~ 13.5V | 13.8 ~ 18V   | 17.3 ~ 22.5V | 3.8 ~ 4.95V | 5.75 ~ 7.5V | 10.4 ~ 13.5V | 13.8 ~ 18V   | 17.3 ~ 22.5V |
|                       | SHORT CIRCUIT Note.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Recovers automatically after fault condition is removed                                                                         |             |              |              |              |             |             |              |              |              |
| FUNCTION              | ON/OFF CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Logic "1" OPEN: ON    logic "0" GND: OFF                                                                                        |             |              |              |              |             |             |              |              |              |
| ENVIRONMENT           | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -25 ~ +70℃                                                                                                                      |             |              |              |              |             |             |              |              |              |
|                       | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0% ~ 95% RH max.                                                                                                                |             |              |              |              |             |             |              |              |              |
|                       | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -40 ~ +85℃, 0 ~ 95% RH                                                                                                          |             |              |              |              |             |             |              |              |              |
|                       | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±0.03%/℃ (0~60℃)                                                                                                                |             |              |              |              |             |             |              |              |              |
| SAFETY & EMC (Note 5) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | UL62368-1, EAC TP TC 004 approved, Design refer to BS EN/EN62368-1                                                              |             |              |              |              |             |             |              |              |              |
|                       | ISOLATION VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | I/P-O/P:1KVDC                                                                                                                   |             |              |              |              |             |             |              |              |              |
|                       | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH                                                                                        |             |              |              |              |             |             |              |              |              |
|                       | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020                                                                    |             |              |              |              |             |             |              |              |              |
|                       | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Compliance to BS EN/EN61000-4-2,3,4,6,8; BS EN/EN55035, light industry level, EAC TP TC 020                                     |             |              |              |              |             |             |              |              |              |
| OTHERS                | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 12058.3K hrs min.    Telcordia SR-332 (Bellcore) ; 2138.0K hrs min.    MIL-HDBK-217F (25℃)                                      |             |              |              |              |             |             |              |              |              |
|                       | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50.8*25.4*10mm (2**1**0.394") (L*W*H)                                                                                           |             |              |              |              |             |             |              |              |              |
|                       | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.02Kg; 300pcs/7Kg/0.94CUFT                                                                                                     |             |              |              |              |             |             |              |              |              |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 12, 48VDC input, rated load and 25℃ of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F &amp; 47 μ F parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Short circuit not more than 60 seconds.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 230mm*230mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br/>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )</p> <p>6. To insure proper operation, a 220uF/100V electrolytic capacitor with Esr &lt;1Ω must be added to the input line.</p> <p>7. EMC filter suggestion:</p> <div></div> <p>8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |                                                                                                                                 |             |              |              |              |             |             |              |              |              |

## Mechanical Specification

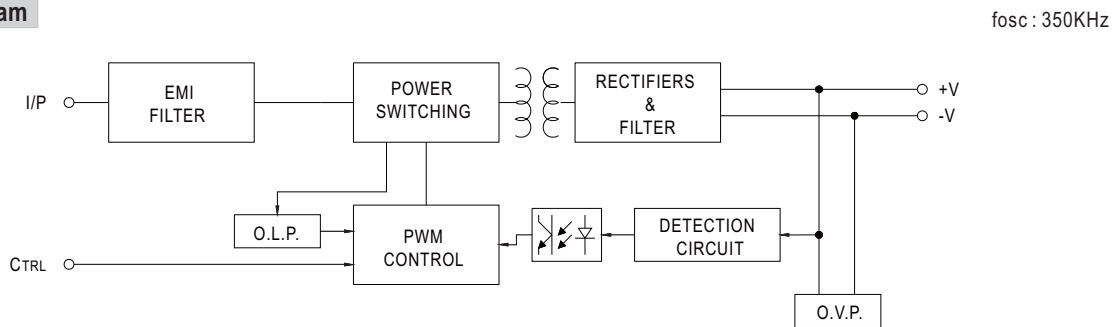
(Unit:mm[inch], Tolerance:±1[±0.04])



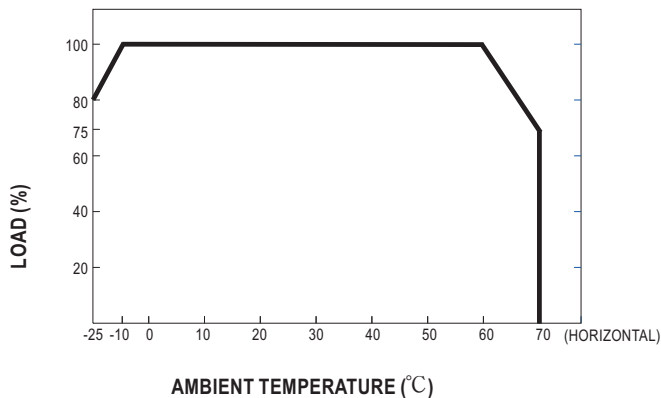
Pin. No Assignment

| Pin No. | Assignment  | Pin No. | Assignment |
|---------|-------------|---------|------------|
| 1       | +INPUT      | 4       | N/C        |
| 2       | -INPUT(GND) | 5       | -OUT       |
| 3       | +OUT        | 6       | CONTROL    |

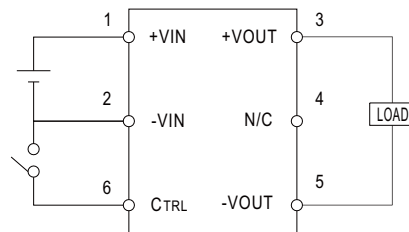
## Block Diagram



## Derating Curve



## ON/OFF Control



CONTROL INPUT.....PIN6  
CONTROL COMMON.....PIN2  
LOGIC COMPATIBILITY.....CMOS OR OPEN COLLECTOR TTL  
CONTROL VOLTAGE  
ON.....+5.5VDC min. OR OPEN CIRCUIT  
OFF.....+2.5VDC max. OR SHORT TO PIN2