Indoor 150W AC/DC Power Supply Unit (PSU) for Ku-8W/C-8W/C-10W BUCs

AC Input: 100 to 240 V / 2 A
Output Power: 150 W, Output Voltage: +48 VDC

Model No. NJZ1286N
IF / Ref. (10MHz) / DC Power Output: N-type Female Connector

Model No. NJZ1286F
IF / Ref. (10MHz) / DC Power Output: F-type Female Connector

Specifications
Rev.08  February 6, 2015

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New Japan Radio Co., Ltd.
Microwave Components Division

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2. To ensure the highest levels of reliability, NJRC products must always be properly handled. The introduction of external contaminants (e.g. dust, oil or cosmetics) can result in failures of microwave components.

3. NJRC offers a variety of microwave components intended for particular applications. It is important that you select the proper component for your intended application. You may contact NJRC’s sales office or sales representatives, if you are uncertain about the products listed in the catalog and the specification sheets.

4. Special care is required in designing devices, machinery or equipment, which demand high levels of reliability. This is particularly important when designing critical components or systems whose foreseeable failure can result in situations that could adversely affect health or safety. In designing such critical devices, equipment or machinery, careful consideration should be given to, amongst other things, their safety design, fail-safe design, back-up and redundancy systems, and diffusion design.

5. The products listed in the catalog and specification sheets may not be appropriate for use in certain equipment where reliability is critical or where the products may be subjected to extreme conditions. You should consult our sales office or sales representatives before using the products in any of the following types of equipment.
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   * Equipment Used in the Deep Sea
   * Power Generator Control Equipment (nuclear, steam, hydraulic)
   * Life Maintenance Medical Equipment
   * Fire Alarm/Intruder Detector
   * Vehicle Control Equipment (automobile, airplane, railroad, ship, etc.)
   * Various Safety Equipment

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1. Overview

The power supply unit (PSU) provides a DC power to operate NJRC’s Ku-band 8W BUCs (NJT5118 and NJT5218 series), C-band 8W BUCs (NJT5760 and NJT5761 series), and C-band 10W BUCs (NJT5672 and NJT55763 and NJT5764 series) via a coaxial cable.

The features are
- Indoor power supply unit with up to 150 W and +48 V DC power output.
- Regardless of Any Types of Modem.
- DC power output can be turned on/off by mechanical switch on the front panel.
- The mode of DC power output can be selected out of in the following mode options by DIP switch on the front panel.
  - Option 1: To keep supplying DC power regardless of modem output status
  - Option 2: To control power DC output on/off by synchronization of input DC voltage on/off from modem
- Directly connect the coaxial cable for IF signal, 10 MHz reference and DC power from modem.
- One Coaxial Cable Solution.
- Compatible with 1U rack-mount.

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## 2. Electrical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
</table>
| **2-1. Input AC Voltage Range** | [Rated Range] 100 to 240 VAC  
| | [Absolute Maximum Rating] 90 to 264 VAC |
| **2-2. Input AC Frequency Range** | 50/60 Hz |
| **2-3. Maximum Input AC Apparent Power** | 200 VA |
| **2-4. Output Voltage** | +48 VDC |
| **2-5. Output Voltage Accuracy** | +/- 10% |
| **2-6. Output Current Range** | 0 to 3.2 A |
| **2-7. Maximum Output Power** | 150 W |
| **2-8. Standby Mode Power** | 10 W max.  
| | - No Connect BUC  
| | - Non DC Power Output |
| **2-9. Efficiency** | 80% typ. at 120 VAC, full load |
| **2-10. Power Factor** | 0.98 typ. at 120 VAC, full load |
| **2-11. Output ON/OFF Control** | Rocker Switch on the Front Panel  
| | Mode of DC Power Output  
| | Option 1: To keep supplying  
| | Option 2: Synchronization with input DC voltage on/off |
| **2-12. IF Frequency Range** | 950 to 1,700 MHz |
| **2-13. IF Input/Output Impedance** | <NJZ1286N> 50 ohms nom.  
| | <NJZ1286F> 75 ohms nom. |
| **2-14. IF Input/Output VSWR** | 2 : 1 max. |
| **2-15. IF Insertion Loss** | 1.5 dB max. |
| **2-16. Input DC Voltage Range at IF Input Interface** | +24 / +48 VDC  
| | In case of option 2 in mode of DC power output, 50mA min. is needed from modem. |
| **2-17. Protection** | Internal Primary Current Fuse  
| | Short Protection |
| **2-18. LED Indicator** | GREEN: Supply a DC Power to BUC  
| | GREEN: Normal Condition  
| | RED: Abnormal Condition and must be Replacement |

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3. **Mechanical Specifications**

<table>
<thead>
<tr>
<th>3-1.</th>
<th>AC Input Interface</th>
<th>IEC320-C14 inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-2.</td>
<td>IF Input Interface</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;NJZ1286N&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;NJZ1286F&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N-type, female (50 ohms)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F-type, female (75 ohms)</td>
</tr>
<tr>
<td>3-3.</td>
<td>IF Output Interface</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;NJZ1286N&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td>F-type, female (75 ohms)</td>
</tr>
<tr>
<td>3-4.</td>
<td>Cooling</td>
<td>Forced Air by Fan</td>
</tr>
<tr>
<td>3-5.</td>
<td>Dimension &amp; Housing without Interface and Switch</td>
<td>(W) 290 x (D) 200 x (H) 44 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>((W) 11.42” x (D) 7.87” x (H) 1.73”)</td>
</tr>
<tr>
<td>3-6.</td>
<td>Weight</td>
<td>1.6 kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[3.5 lbs]</td>
</tr>
</tbody>
</table>

4. **Environmental Specifications**

| 4-1. | Temperature Range (ambient) |                         |
|      | [Operating] | [Storage] | 0 to +50 C | -30 to +85 C |
| 4-2. | Humidity | [Operating] | [Storage] | 30 to 90% Rh non-condensing | 10 to 95% Rh |
| 4-3. | Vibration | | Non Operation 19.6 m/s² Constant (10 to 55 Hz, Sweep time: 1 min, 3 axis, 1 hr) |
| 4-4. | Shock | | 20 G [196.1 m/s²] (3 axis) |
| 4-5. | Compliance Standard | | EN55022 | EN55024 |
|      | | | EN61000-3-2/3 | EN60950-1 / UL60950-1 |
|      | | | EN62311 |
| 4-6. | Regulations | | EU Directive (CE Marking) |
|      | | | EMC (2004/108/EC) |
|      | | | Low Voltage (2006/95/EC) |
|      | | | UL Certification |
| 4-7. | Comply with RoHS (Restricting the use of Hazardous Substances) directives | |

5. **Accessories**

- AC power cable of 2 m (with 3 pins American plug)
- Coaxial cable of 1 m (Option)
- 1U rack-mount kit (Option)

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6. Outline Drawing

- N-type Model

**[Rear View]**
- IEC320-C14 Inlet
- AC Input: 100 to 240VAC
- Main Power
- M4 Stud Ground Fin
- Fuse Holder
  - Fuse: 12.0A/250V, φ5×20mm

**[Air Flow]**
- N-type Female Connector
  - IF/Ref./DC Input

**[Top View]**
- N-type Female Connector
  - IF/Ref./DC+48V Output

**[Front View]**
- DIP Switch
  - DC Output Mode Selector
- Rocker Switch
  - DC Output On/Off
- LED Indicator
  - Fan Alarm
- LED Indicator
  - DC Output

UNIT: mm

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F-type Model

Above Specifications are subject to change without notice.
7. Label

Product Label

Definition of Serial Number

Serial Number (OSSSSSSRYM) - ALPHANUMERIC (9 characters)

A 0 0 0 0 0 1 A 9 1

M: Production Month
Y: Production Year
R: Revision Number
SSSSS: Running Number
O: Overflow Number

O: Overflow Number - ALPHABET (1 character)
"A" to "Z", e.g.: A99999 ⇒ B00001

SSSSS: Running Number - NUMBER (5 digits)
"00001" to "99999"

R: Revision Number - ALPHABET (1 character)
"A" to "Z"

Y: Production Year - NUMBER (1 digit)
Calendar Number, e.g.: 2009:9, 2010:0, 2011:1, 2012:2 ···

M: Production Month - ALPHANUMERIC (1 character)
"1" to "9", "X" as October, "Y" as November, "Z" as December

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8. Package
Package for PSU

Pictorial Marking for handling of Goods

THIS WAY UP
HANDLE WITH CARE
FRAGILE
LAYERS LIMIT: 5
KEEP DRY

1: 150W AC/DC PSU
2: Accessory
   - AC power cable of 2 m
3: Accessory
   - Cushioning pad (4 pieces)
4: Polyethylene Foam For Package Cushioning
5: Corrugated Fiberboard (Double Wall)
6: Corrugated Fiberboard (Single Wall)
7: Label
8: User’s Manual

UNIT: mm

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