

- Specification -

**Indoor**

**150W AC/DC**

**Power Supply Unit(PSU)**

**Model No. NJZ1286 series**

Input AC Voltage Range: 100 to 240 V  
Output DC Power: 150 W  
Output DC Voltage: +48 VDC  
IF Interface: N-type / F-type, Female Connector

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**Nisshinbo Micro Devices Inc.**  
**Microwave Business Headquarters**

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## Caution

1. While Nisshinbo Micro Devices Inc. (NISD) continually strives to improve the quality and reliability of our products, failures will occur in microwave products over time. For this reason, it is important that customers fulfill their responsibilities to ensure designed-in safety – including failsafe functions, redundancy, and measures to prevent malfunctions and the spread of fire – in order to avoid injuries, accidents, or social repercussions resulting from the failure of any products related to satellite communications on this website (hereinafter, “the product”). Customers must pay careful attention to ensuring the safety of their equipment.
2. The product is designed and tested to function in accordance with its specifications. Do not use under conditions that deviate from the product specifications included in the delivery specifications. NISD assume no responsibility and shall not be liable for any injuries, accidents, or social repercussions resulting from the product being in a poor or damaged state because it was used under conditions that depart from the specifications.
3. The product is covered by a warranty for one year following delivery unless otherwise stipulated in the contract or delivery conditions. In the event of a failure for which NISD are responsible occurring during the warranty period, NISD undertake to repair or replace the product free of charge. Note, however, that the warranty does not cover failures such as those listed here (see bullets below), even if they occur within the warranty period. In addition, in the case of a product being repaired or replaced by us, the starting date for the warranty period is still the original delivery date of the product.
  - Failure due to the product being used in conditions other than those stipulated in the data sheet, specification sheet, etc.
  - Failure due to modifications or repairs carried out by some entity other than our company
  - Failure determined to be the result of unsuitable maintenance or replacement of a consumable item that requires due maintenance
  - Failure due to circumstances that were unforeseeable given the scientific/technological standards at the time of shipment
  - Other failures due to external factors such as fire, earthquake, flood and power supply anomalies for which NISD are not responsible

In addition, the product warranty is limited to the provision of repair services or replacement at no cost. It does not cover secondary damage (to equipment, business opportunities, profits, etc.) or any other damage that may have resulted from failure of the product.

4. The product must be handled appropriately to ensure its continued reliability. Since it can be damaged by the intrusion of water, dust, oil, chemicals, etc., it must be given appropriate protection. Even in the case of a product with an airtight construction, avoid using it in an environment that exceeds the stated levels of waterproofing/dustproofing. Also, be sure to use connectors and waveguides properly.  
 If replacement parts such as fans are included, proper maintenance is necessary. To maintain product performance and functionality, it is necessary to conduct inspections and maintenance at appropriate intervals and exchange replacement parts when necessary. Improper inspections or maintenance may result in failure.  
 In addition, the warranty does not cover the use of the product in areas where salt damage can be expected or where there is a substantial presence of corrosive gases such as Cl<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>, and NO<sub>2</sub>. If the product is to be used in such areas, at the time of installation you must take appropriate steps to protect the product.
5. If the product is to be used with equipment/systems that must meet special quality and reliability standards (aerospace equipment, medical equipment, power generation control equipment, automotive/railway transportation equipment, safety equipment, disaster prevention and security equipment, etc.), please consult with our sales staff in advance.
6. Some products contain gallium arsenide (GaAs), classified as a harmful substance. To avoid danger, do not incinerate, crush, or chemically treat the product in such a way that gases or dust are released. When disposing of the product, comply with all applicable laws and regulations and do not treat it as general industrial waste or household waste.
7. When exporting a product or technology, observe export laws and regulations such as those governing foreign exchange and foreign trade, and obtain any necessary licenses for export, service transactions, etc.  
 NISD request that you do not use our products or the technical data published on this website for developing weapons of mass destruction or for any other military purposes or applications.
8. The product specifications in this document are subject to change without notice. If you are considering using a product, delivery specifications must first be settled.

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**Scope**

This Power Supply Unit(PSU) is intended for the satellite communication data uplink application in C-band and Ku-band.

The features of the PSU are to provide the stable +48V DC power to operate both C-band 10W and Ku-band 8W BUCs, even if the inner power supply of the modem is not capable enough to operate these BUCs.

The PSU, which is having enough power supply of 150W as well as having the bias-tee which enable to pass 10MHz reference signal and IF signal from the modem, is operated by AC Power and enable to operate these BUCs.

In addition the PSU complies with UL CERTIFICATION and EC DIRECTIVE and this housing can fit the 1U rack mount with optional kit.

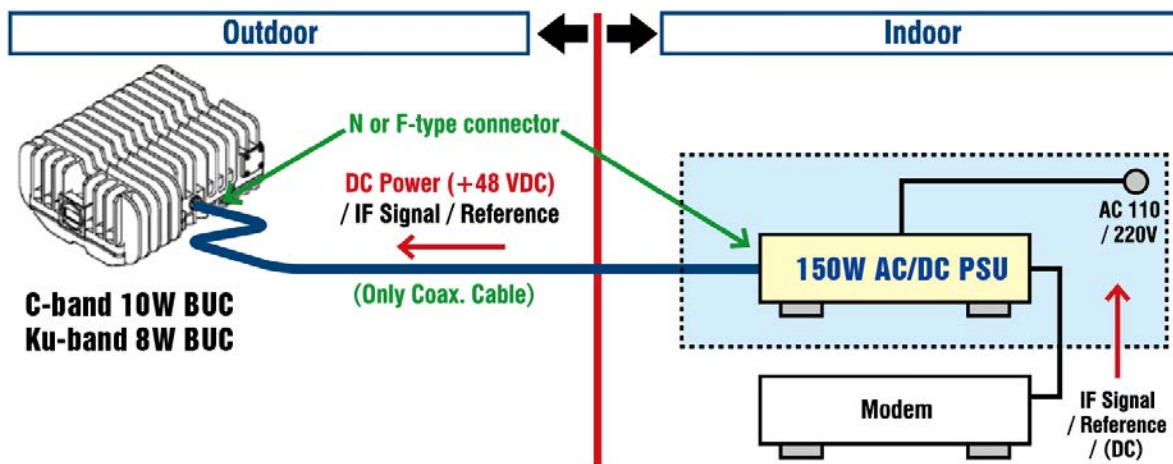


Fig.1 Connection Block Diagram

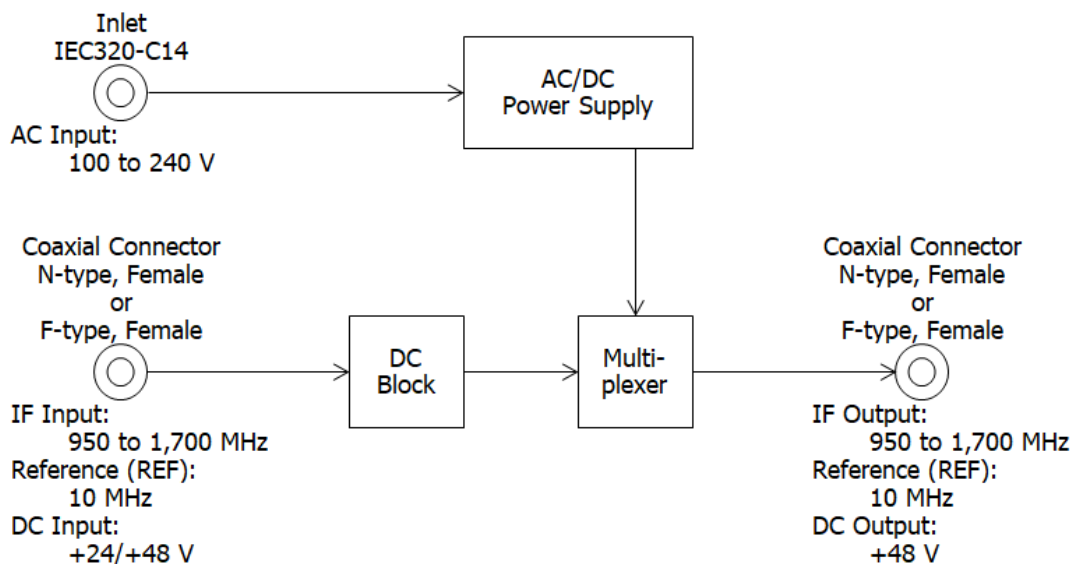


Fig.2 Functional Block Diagram

\* Above Specifications are subject to change without notice.

The features are

- Indoor power supply unit with up to 150 W and +48 V DC power output.
- Available 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 (Rack-mount option).

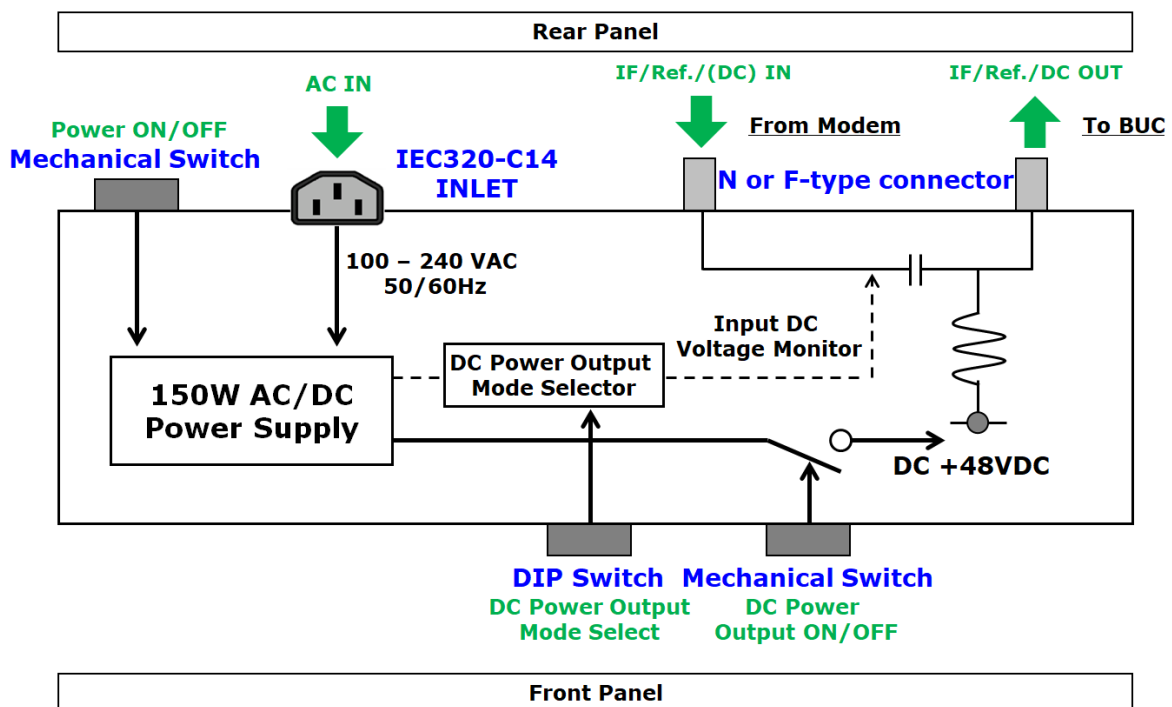
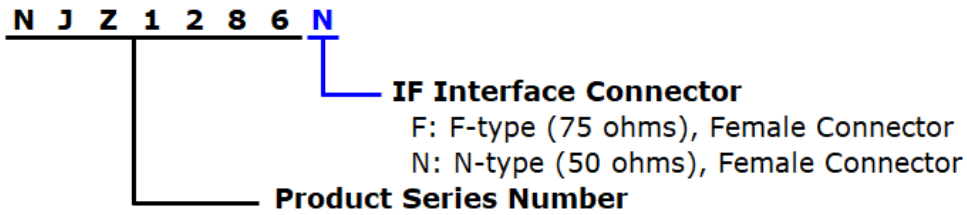


Fig.3 Interface Diagram

\* Above Specifications are subject to change without notice.

## Series Model Number

- Numbering System



- Line-up

Model No.	IF Frequency	IF Connector
<b>NJZ1286N</b>	950 to 1,700 MHz	N-type
<b>NJZ1286F</b>		F-type

\* Above Specifications are subject to change without notice.

## 1. Electrical Specifications

#	Items	Specifications
1.1.	Input AC Voltage Range [Rated Range] [Absolute Maximum Rating]	100 to 240 VAC 90 to 264 VAC
1.2.	Input AC Frequency Range	50/60 Hz
1.3.	Maximum Input AC Apparent Power	200 VA
1.4.	Output Voltage	+48 VDC
1.5.	Output Voltage Accuracy	+/- 10 %
1.6.	Output Current Range	0 to 3.2 A
1.7.	Maximum Output Power	150 W
1.8.	Standby Mode Power <Condition> No Connect BUC No Output DC Power	10 W max.
1.9.	Efficiency	80 % typ. at 120 VAC, full load
1.10.	Power Factor	0.98 typ. at 120 VAC, full load
1.11.	Output ON/OFF Control	a) Rocker Switch on the Front Panel b) Mode of DC Power Output Option 1: To keep supplying Option 2: Synchronization with input DC voltage on/off
1.12.	IF Frequency Range	950 to 1,700 MHz
1.13.	IF Input/ Output Impedance  <N-type Model>  <F-type Model>	50 ohms nom 75 ohms nom.
1.14.	IF Input/ Output VSWR	2 : 1 max.
1.15.	IF Insertion Loss	1.5 dB max.
1.16.	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.
1.17.	Protection	<ul style="list-style-type: none"> <li>● Internal Primary Current Fuse</li> <li>● Short Protection</li> </ul>
1.18.	LED Indicator  [DC Output (Power)] [Fan Alarm]	GREEN: Supply a DC Power to BUC GREEN: Normal Condition RED: Abnormal Condition and Fan must be Replaced

\* Above Specifications are subject to change without notice.

## 2. Mechanical Specifications

#	Items	Specifications
2.1.	AC Input Interface	IEC320-C14 Inlet
2.2.	IF Input Interface Connector	
	<F-type Model>	F-type Female Connector, 75 ohms
	<N-type Model>	N-type Female Connector, 50 ohms
2.3.	IF Output Interface Connector	
	<F-type Model>	F-type Female Connector, 75 ohms
	<N-type Model>	N-type Female Connector, 50 ohms
2.4.	Cooling	Forced-air-cooled by Fan
2.5.	Dimension & Housing without interface connectors and switch	290 (W) x 200 (D) x 44 (H) mm [11.42" (W) x 7.87" (D) x 1.73" (H) ]
2.6.	Weight	1.6 kg [3.5 lbs]

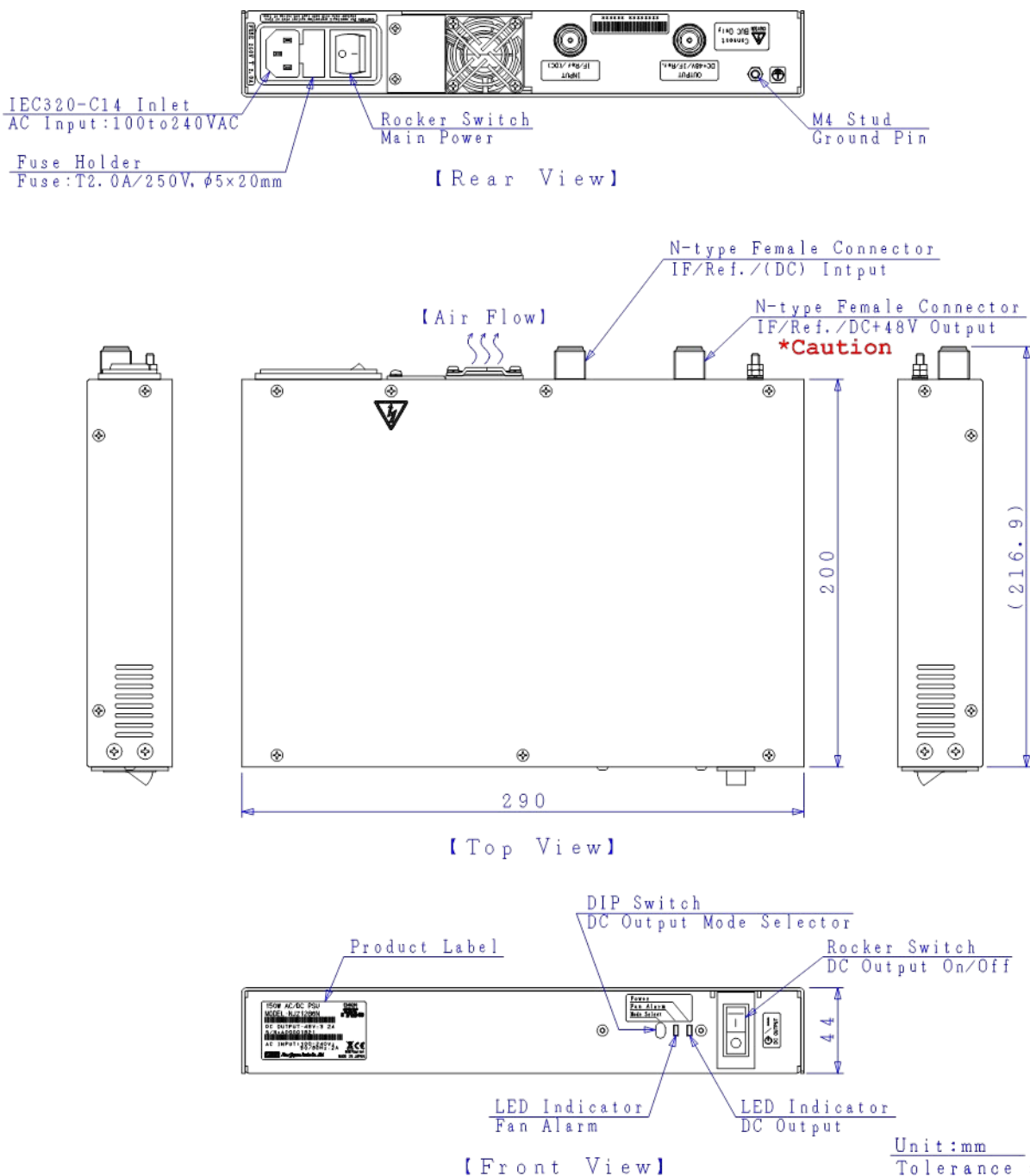
## 3. Environmental Specifications

#	Items	Specifications
3.1.	Temperature Range (Ambient)	
	[Operating]	0 to +50 °C
	[Storage]	-30 to +85 °C
3.2.	Humidity	
	[Operating]	30 to 90 %Rh non-condensing
	[Storage]	10 to 95 %Rh
3.3.	Vibration (Survival)	Non Operation 2 G [19.6 m/s <sup>2</sup> ] Constant (10 to 55 Hz, Sweep Time: 1 min., 3 axis, 1 hour)
3.4.	Shock (Survival)	20 G [196.1 m/s <sup>2</sup> ] (3 axis)
3.5.	Regulations	EU Directive (CE Marking) EMC - 2014/30/EU Low Voltage - 2014/35/EU RoHS - 2011/65/EU + (EU)2015/863 UL Certification
3.6.	Compliance Standard	EN 55022 EN 55024 EN 61000-3-2/3 EN 60950-1 / UL60950-1 EN 62311
3.7.	MTBF (by Method of Parts Count Reliability Prediction)	150,000 hours and more at +50 °C as Design Condition

\* Above Specifications are subject to change without notice.

## 4. Outline Drawing

N-type Model / NJZ1286N

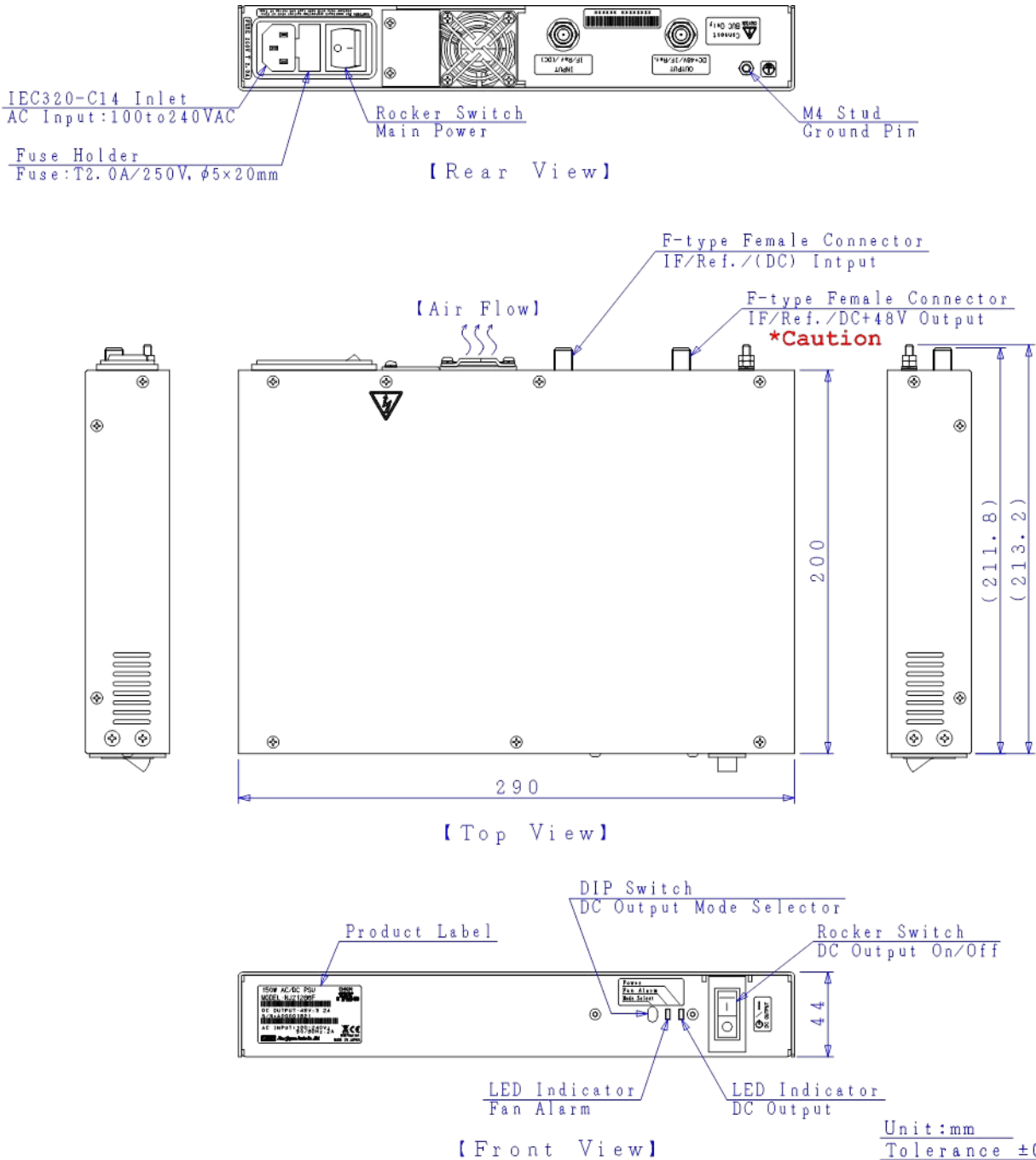


### CAUTION

Items	Description
Connector Connection	DC power of +48 V voltage will output at IF output interface connector. <u>Do not</u> connect the other than cable connected from specified BUC. The connected equipment may be damaged when cable connecting modem, the BUC other than the specified BUC, or other equipment.

\* Above Specifications are subject to change without notice.

## 4.1. F-type Model / NJZ1286F



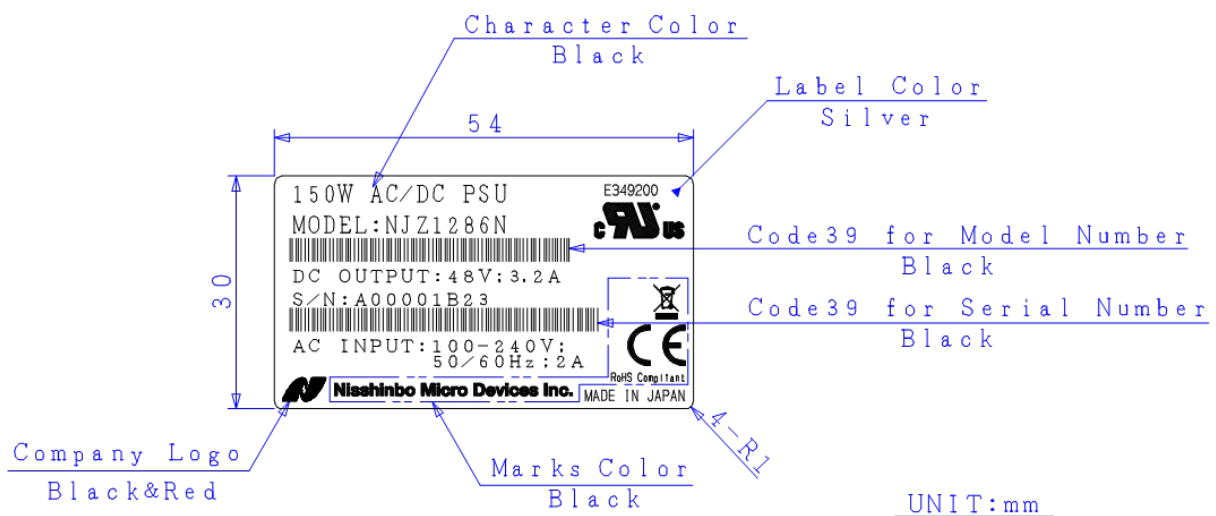
### CAUTION

Items	Description
Connector Connection	DC power of +48 V voltage will output at IF output interface connector. <u>Do not</u> connect the other than cable connected from specified BUC. The connected equipment may be damaged when cable connecting modem, the BUC other than the specified BUC, or other equipment.

\* Above Specifications are subject to change without notice.

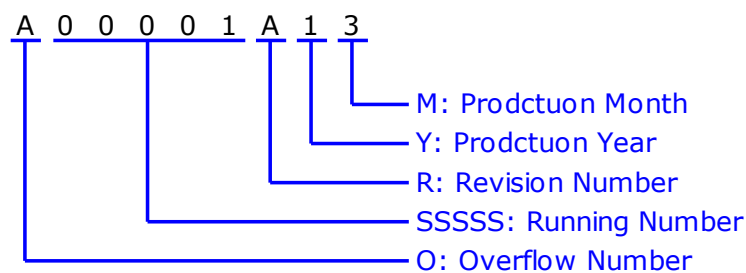
## 5. Label

### 5.1. Label Outline (e.g. NJZ1286N)



### 5.2. Definitions

Serial Number (OSSSSSRYM) - ALPHANUMERIC (9 characters)



O: Overflow Number - ALPHABET (1 character)

"A" to "T" except "I" and "O", e.g.: A9999 ⇒ B00001

"V" to "Z": Specified Numbers

SSSS: Running Number - NUMBER (5 digits)

"00001" to "99999"

R: Revision Number - ALPHABET (1 character)

"A" to "Z" except "I", "O", and "U"

Y: Production Year - NUMBER (1 digits)

"0" to "9", Last Digit of Calendar Number

e.g.: 2021:"1", 2022:"2", 2023:"3".....

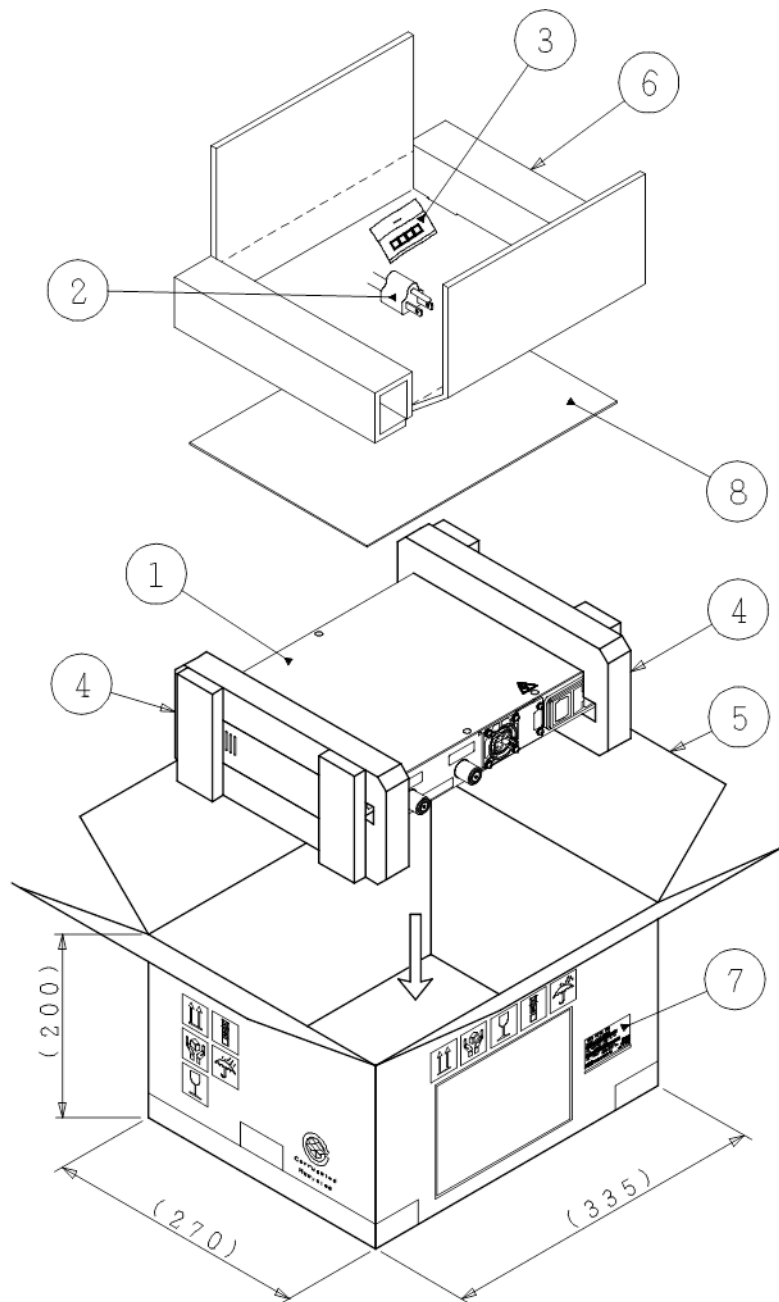
M: Production Month - ALPHANUMERIC (9 characters)

"1" to "9", "X" as October, "Y" as November, "Z" as December

\* Above Specifications are subject to change without notice.

## 6. Package

### 6.1. Shipping Package



UNIT:mm

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 2m

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

\*Above Specifications are subject to change without notice.

## 6.2. Enclosed Accessories

- AC Power Cable, Qty (1), Length: 2 m, IEC320-C13 Socket and American Plug assembled.
- Cushioning Pad, Qty (4), Rubber Foot (3M™ Bumpon™)
- Instruction Manual, Qty (1)

\* Above Specifications are subject to change without notice.

## 7. Handling Precautions

### 7.1. DANGER



This statement indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

Items	Description
Input Voltage	Only input an AC voltage within the range indicated in specifications. <u>Do</u> operate with the input voltage range between 100 and 240 V AC power with 50/60 Hz of AC frequency. When applying higher voltage than specifications (264 V as absolute maximum rating), it will not only cause this unit failure, but it may also result in <u>electric shock</u> and <u>fire</u> .
Disassembling	<u>Do not</u> disassemble the unit. Disassembling will not only cause this unit failure, but it may also result in <u>electric shock</u> .

### 7.2. CAUTION



This statement indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. The statement may also be used to indicate other unsafe practices or risks of property damage.

Items	Description
Fan Rotation	<u>Do not</u> insert finger into the fan in every case and time to avoid injury also <u>do not</u> insert any objects into the fan. Keep any objects away from the fan. Incorrect usage may cause injury to self or others.
Connector Connection	DC power of +48 V voltage will output at IF output interface connector. <u>Do not</u> connect the other than cable connected from specified BUC. The connected equipment may be damaged when cable connecting modem, the BUC other than the specified BUC, or other equipment.

### 7.3. NOTE



This statement is used to notify of installation, operation, or maintenance information that is important, but not hazard-related.

Items	Description
Grounding	To reduce the risk of damage or broken by lightning surge and the risk of electric shock, the unit should be grounded by connecting the ground wire.

\* Above Specifications are subject to change without notice.

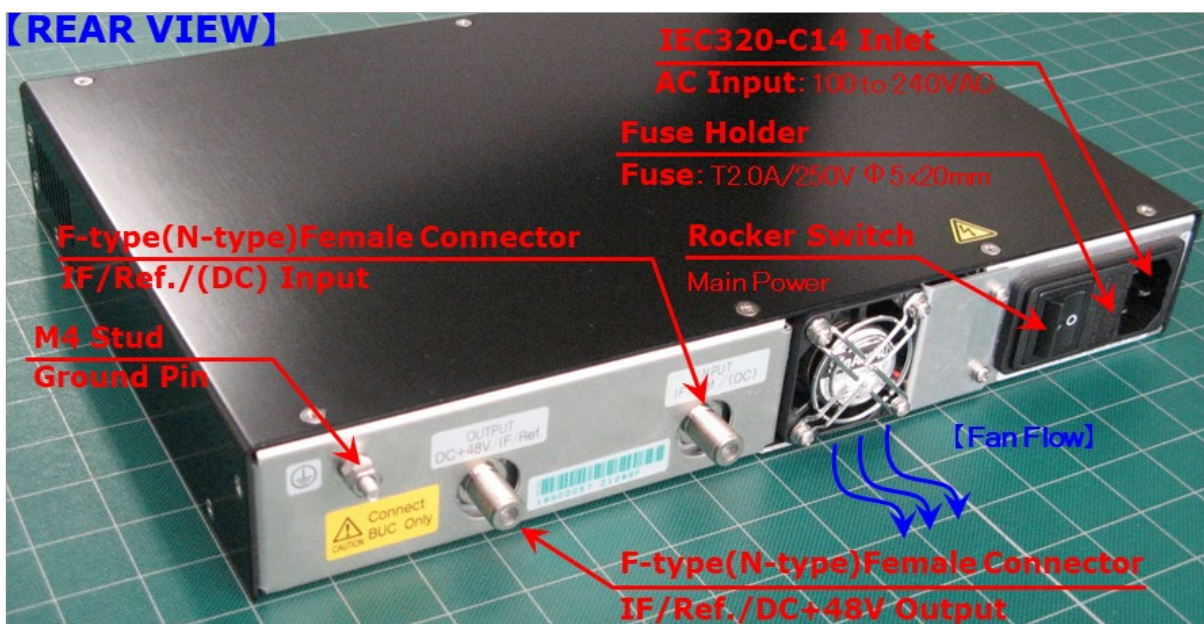
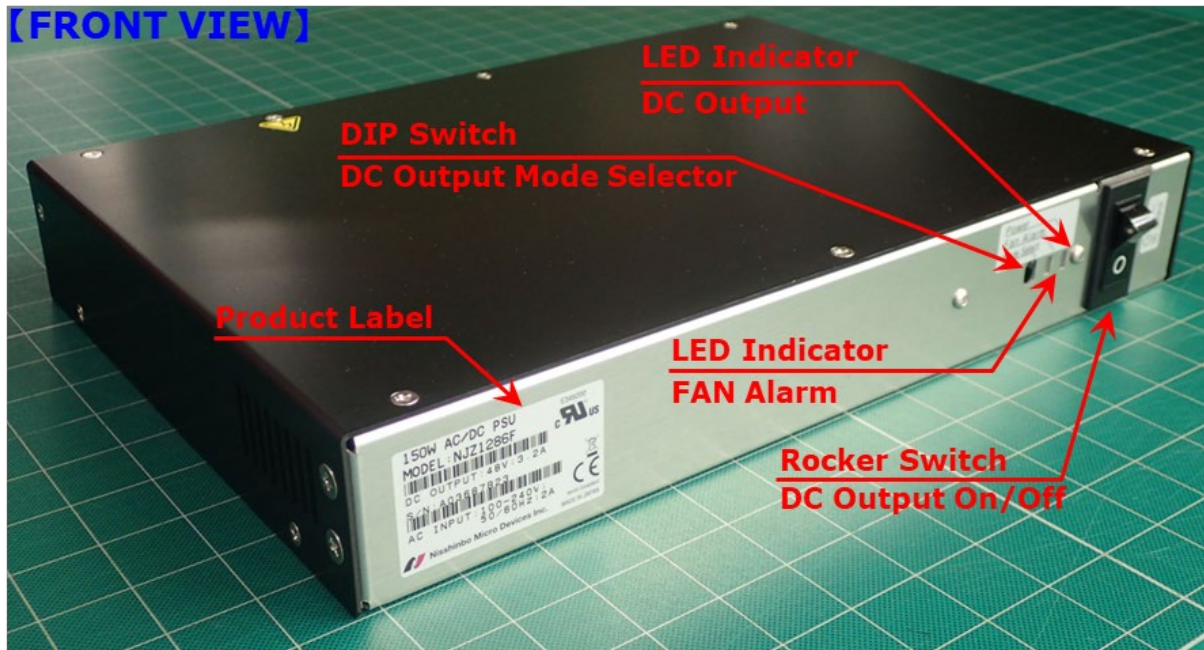
Items	Description
Torque Management	<p><u>Do not</u> tighten with excessive torque when attaching connectors.</p> <p>The following value as tighten torque is recommended.</p> <ul style="list-style-type: none"> <li>■ IF Connector (N-type / F-type): 0.68 to 1.13 N·m</li> </ul>
Input Voltage	<p><u>Do</u> operate with the input voltage range between +100 and +240 V AC power.</p> <p>Avoid applying more than the maximum voltage in this range under any conditions.</p>
Input IF/10MHz Signal Power	<p><u>Do not</u> supply both IF and 10 MHz reference input signal of more than +13 dBm.</p>
High Temperature Operation	<p>It may cause damage and/or degradation of reliability / lifetime to operate the unit in a condition where the ambient temperature exceeds the maximum value, <u>+50 °C</u>, at operating temperature described in the specifications.</p>
Vibration / Shock	<p>When vibration and/or shock impact exceeding the conditions described in the specifications is applied, internal parts may be damaged.</p>
Fan Maintenance	<p>The fan has its lifetime. The fan is to be replaced with a new one at appropriate interval.</p> <p>The recommendation interval of replacement is five(5) years.</p>
Warranty	<p>The unit is covered by a warranty for one(1) year following delivery unless otherwise stipulated in the contract or delivery conditions.</p> <p>Repairs may be possible under payment of charge even for the unit whose warranty period has expired.</p> <p>Opening, removing, disassembling and modifying any parts and components (including the product label, sealing tape and screws) without fan equipment will immediately void the warranty.</p> <p>In any case, the unit of invalid warranty cannot be repaired.</p>

\* Above Specifications are subject to change without notice.

## 8. Instructions Manual

### 8.1. Descriptions

This section describes the information of Connectors, Switches, and LEDs.



\* Above Specifications are subject to change without notice.

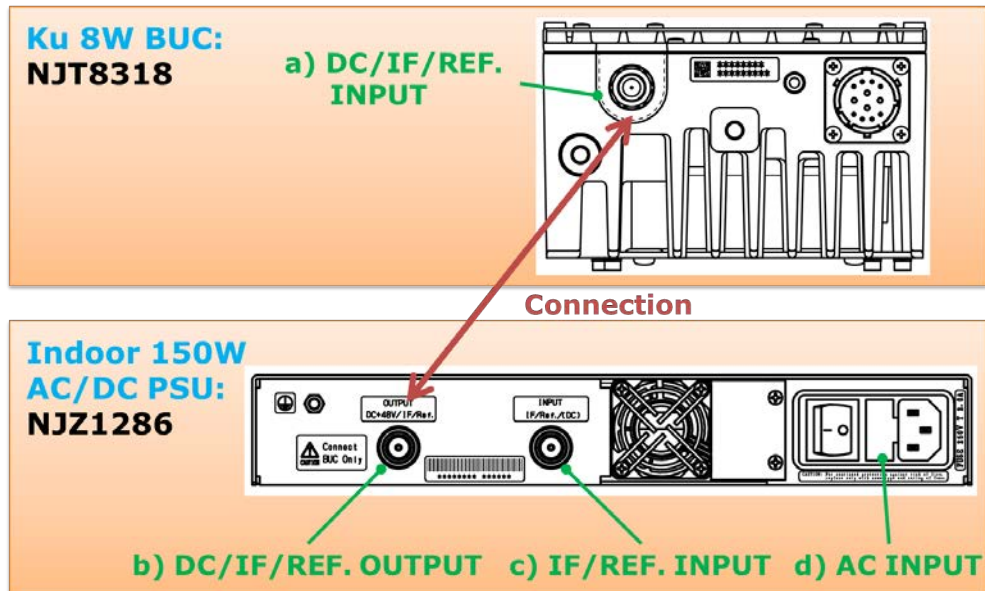
Items	Description	Purpose
AC Input	IEC320-C14 Inlet	100 to 240 V AC power input.
Main Power	Rocker Switch	Input AC power on/off set.
Fuse	Fuse Holder	The PSU is fitted with two fuse - one for AC line connection, and other one for replacement. Fuse Type: T2.0A/250V, φ5 x 20 mm
IF/Ref./(DC) Input	N-type Female Connector OR F-type Female Connector	Transmit signal (IF signal and 10 MHz reference) from modem or IDU. Possible directly to connect the coaxial cable with +24 / +48 V DC power from modem.
IF/Ref./DC Output	N-type Female Connector OR F-type Female Connector	Transmit signal (IF signal and 10 MHz reference) and supply +48 V DC power to BUC.
Ground Pin	M4 Stud	Common chassis ground.
DC Output On/Off	Rocker Switch	Internal output DC power on/off set. Possible to protect the PSU from short damage of DC output on the circuit protection in this switch.
DC Output	LED Indicator	Green: DC power output from AC/DC power supply No lighting: No DC power output from AC/DC power supply
Fan Alarm	LED Indicator	Green: Fan rotation Red: No fan rotation, the fan should be replaced.
DC Output Mode Selector	DIP Switch	The mode of DC power output can be selected by customer in following two mode options by DIP switch on front panel. Option 1 (default setting): To keep supplying DC power regardless of modem output status. Option 2: To control DC power output on/off by synchronization of input DC voltage on/off from modem.

\* Above Specifications are subject to change without notice.

## 8.2. Basic Connection Overview

e.g.) for Ku 8W BUC: NJT8318 series

### 8.2.1. Connection Overview between BUC and PSU



## 8.3. Connection and Installation

This section describes basic installation for the PSU.

### 8.3.1. Setting

Two setting ways:

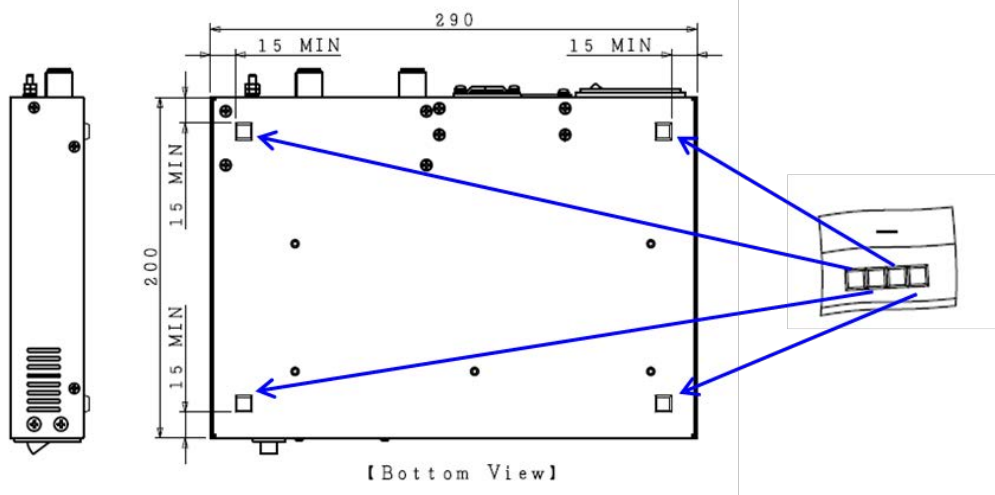
- Desktop / Shelf mount
- Rack-mount (optional rack-mount kit is available)

#### 1) Guidelines for Desktop / Shelf Mount

When installing the PSU, the following guidelines should be complied:

- ✓ Check the site location for factors such as accessibility, power, signal, and cable connections for modem / BUC, and future expansion.
- ✓ Plan for access to both front and rear of the PSU.
- ✓ Ensure the room where the PSU operates has adequate ventilation around the fan on rear panel and the slit on both sides. Ambient air temperature may not cool the PSU to acceptable operating temperatures without adequate ventilation.
- ✓ If the PSU is mounted in an enclosed shelf, ensure that the shelf has adequate ventilation. An enclosed shelf should have air opening on rear panel and both sides and to provide natural convection air movement.
- ✓ Attach four pieces of the enclosed rubber foot (3M™ Bumpon™) to four corners on bottom of the PSU as shown in below.

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## 2) Guidelines for Rack-mount

The PSU can only be flush-mounted in the 19 inch rack using the optional rack-mount kit. The PSU can be mounted with the front of the chassis panel facing outward toward the aisle.

When installing the PSU, the following guidelines should be complied:

- ✓ The PSU with the optional rack-mount kit requires a minimum of 1U (44 mm) of vertical rack spaces. The proposed rack location should be measured before mounting the chassis.
- ✓ Check the site location for factors such as accessibility, power, signal, and cable connections for modem / BUC, and future expansion.
- ✓ Plan for access to both front and rear of the PSU.
- ✓ Ensure the room where the PSU operates has adequate ventilation around the fan on rear panel and the slit on both sides. Ambient air temperature may not cool the PSU to acceptable operating temperatures without adequate ventilation.
- ✓ If the PSU is mounted in an enclosed shelf, ensure that the shelf has adequate ventilation. An enclosed shelf should have air opening on rear panel and both sides and to provide natural convection air movement.

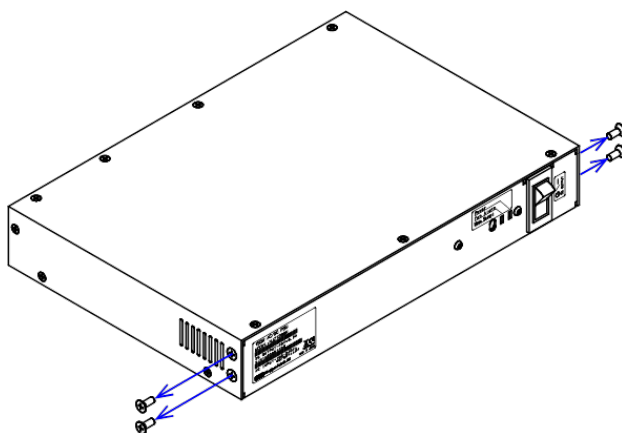
The flush-mounting the PSU in the 19 inch rack should be complied with the following steps:

Tools Required: #2 Phillips screwdriver

Parts Required: Rack-mount Kit - P/N: NJZ1286RM (Rack-mount plate, 2 pcs)

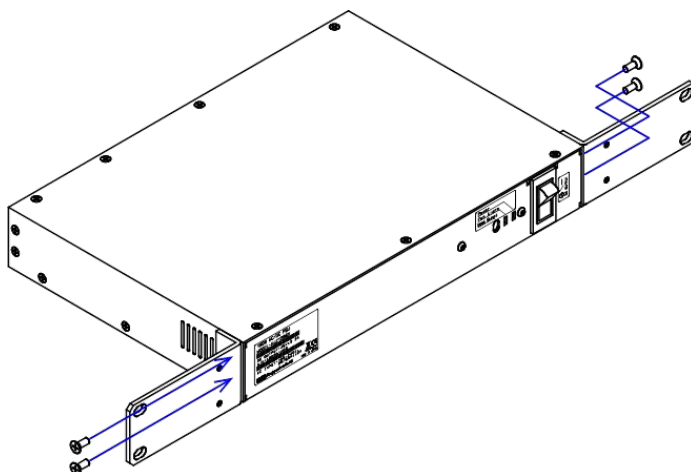
\* Above Specifications are subject to change without notice.

Step 1: Using #2 Phillips screwdriver, remove and save four M4 flat head screws at both sides around front panel of the PSU as shown in below.



Step 2: Position the rack-mount plate (Rack-mount Kit) both sides of the PSU as shown in below.

Reassembly four removed M4 x 10 mm flat head screws to the plates and the PSU.



### 8.3.2. Connection

Three cables and one wire:

- AC Power Cable
- Coaxial Cable from Modem or IDU to the PSU
- Coaxial Cable from the PSU to BUC
- Wire for Common Chassis Ground

#### 1) AC Power Cable

The PSU is directly powered by AC power source (100-240V). Low noise / low transient AC power source is recommended.

The connection of AC power cable should be complied with the following steps:

\* Above Specifications are subject to change without notice.

- Step 1: Check that the rocker switch of "Main Power" on the rear panel and the "DC Output On/Off" on the front panel are to be turned off.
- Step 2: Connect the AC power cable (3 pins American plug) to IEC320-C14 inlet on the rear panel. In case of a different type of outlet from 3 pins American plug, employ a conversion plug suitable to the outlet instead.

## NOTE

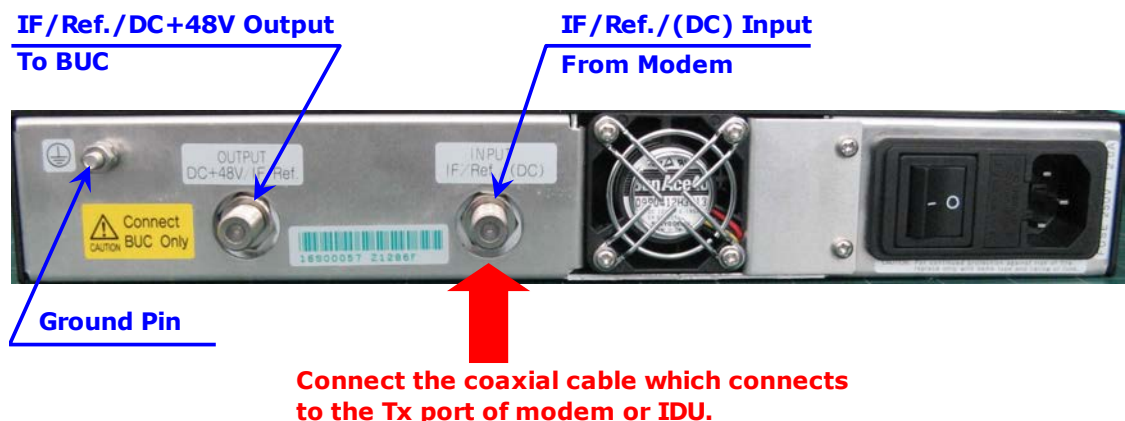
- ✓ Note that the socket-outlet shall be installed near the equipment and shall be easily accessible.

### 2) Coaxial Cable from Modem or IDU to the PSU

10 MHz reference and IF signal (L-band: 950 – 1,700 MHz) are input from Modem to BUC by way of the PSU.

The connection of the coaxial cable between modem and the PSU should be complied with the following steps:

- Step 1: Connect a coaxial cable with N-type or F-type male connectors to the IF/Ref./(DC) input port on the rear panel of the PSU as shown in the diagram of subsequent page.



- Step 2: Connect the cable to TX port of modem or IDU.

## CAUTION

- ✓ In order to prevent the electrical damage of the PSU, avoid to apply a voltage of +60 V and more on the IF/Ref./(DC) input port.

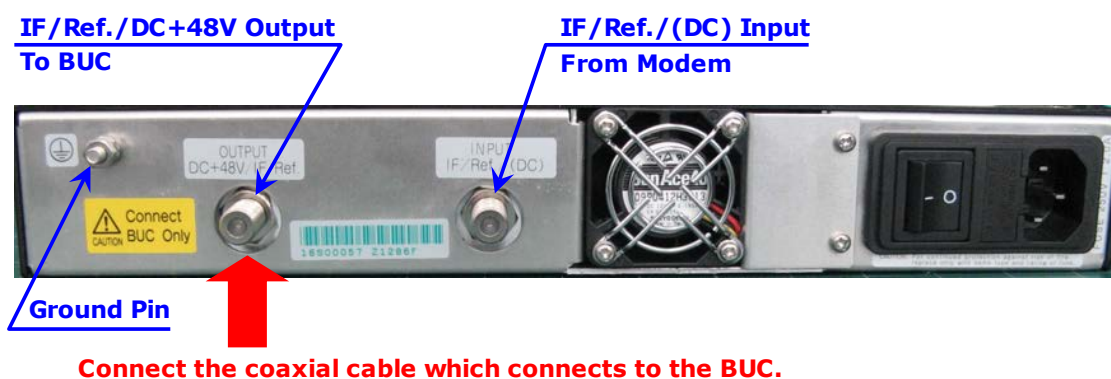
\* Above Specifications are subject to change without notice.

### 3) Coaxial Cable from the PSU to BUC

The PSU can be supply +48 V DC power of the internal AC/DC power supply to BUC, and passed through 10 MHz reference, an IF signal (L-band: 950 - 1450 MHz or 950 - 1750 MHz) from modem or IDU to BUC.

The connection of the coaxial cable between the PSU and BUC should be complied with the following steps:

Step 1: Connect a coaxial cable with N-type or F-type male connector to the IF/Ref./DC+48V output port on rear panel as shown in below.



Step 2: Connect the cable to BUC.

**CAUTION**

✓ DO NOT connect the coaxial cable which is output from the Tx port of modem or IDU to the IF/Ref./DC+48V output port, as this can result to break down the modem or IDU.

### 4) Wire for Common Chassis Ground

The PSU can be had the chassis ground of the other equipment (e.g. modem) in common. Connecting wire for common chassis ground from the chassis ground of the other equipment should be complied with the following step:

Step: Connect the wire from ground on the other equipment to the ground pin stud on rear panel.

### 8.3.3. Configuring the Mode of DC Power Output

The mode of DC power output can be selected by customer in following two mode options:

- Option 1 (default setting): 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.

\* Above Specifications are subject to change without notice.


In case of outputting DC power with mode of option 1, the factory default setting of DIP switch on front panel not need be configured. However if the PSU outputting DC power with mode of option 2, DIP switch on front panel need be changed from top side to bottom side by a pointed jig (e.g. needle) as shown in below.

【TOP】

**DIP Switch**  
**DC Output Mode Selector**



DIP Switch

 : Bottom side, Option 1  
(Default Setting)

 : Top side, Option 2

【BOTTOM】



## CAUTION

- ✓ When changing setting of DIP switch, turn off the main power by rocker switch on rear panel and do not use tweezers. If changing setting of DIP switch with the PSU operated or by tweezers this can result to break down the PSU.

### 8.3.4. Start-up

Start-up the PSU should be complied with the following steps:

- Step 1: Turn on the rocker switch of the main power on rear panel, then the fan on rear panel starts to circle and LED indicator of the fan alarm on front panel lights green.
- Step 2: Turn on the rocker switch of DC output on/off on front panel, then LED indicator of the DC output on front panel lights green and DC power is output under the DC power output mode.

### 8.3.5. Recommendation Coaxial Cable from the PSU to BUC

Type and length of the coaxial cable from the PSU to BUC need to be chosen to satisfy that the PSU output less than 150 W DC power, and an input voltage of BUC is more than 18 V. In addition it is needed to consider RF insertion loss between the PSU and BUC in accordance with modem or IDU Instruction.

In terms of satisfying that the PSU outputs less than 150 W DC power, and an input voltage of BUC is more than 18 V. The following cables which total resistance\* is 5 ohms or less are recommended

- ✓ RG-6 (Total Resistance: around 30 ohms/km)
- ✓ RG-11 (Total Resistance: around 13 ohms/km)

If total resistance of your chosen cable is less than 30 ohms/km, the cable of up to 130 m (430 feet) can be installed between the PSU and BUC.

(\*Note: Total resistance means sum number of both conductor and outer shield resistance.)

\*Above Specifications are subject to change without notice.



## 8.4. Maintenance

This section describes basic maintenance for the PSU.

### 8.4.1. Dust Removal

Regular dusting / dust removal will ensure the PSU to operate within operational specification.

- ✓ Use a slightly damp cloth with excess moisture wringed out (not saturated, wet or dripping cloth) to wipe away the dust that collects on the outside of the enclosure
- ✓ A high, dusty environment will require frequent maintenance of vacuuming the dust off the enclosure vents and circuit board.

### 8.4.2. Fan Field Replacement

The PSU requires to flow forced-air by the installed fan on rear panel for cooling.

The PSU indicates the fan alarm by LED indicator on front panel with red color, it is needed to replace to a new fan by customer in field. And the fan is to be replaced with a new one at five years interval.

#### **! N O T E**

- ✓ The fan has its lifetime. The fan is to be replaced with a new one at appropriate interval. The recommendation interval of replacement is 5 years.

The replacement of fan should be complied with the following steps:

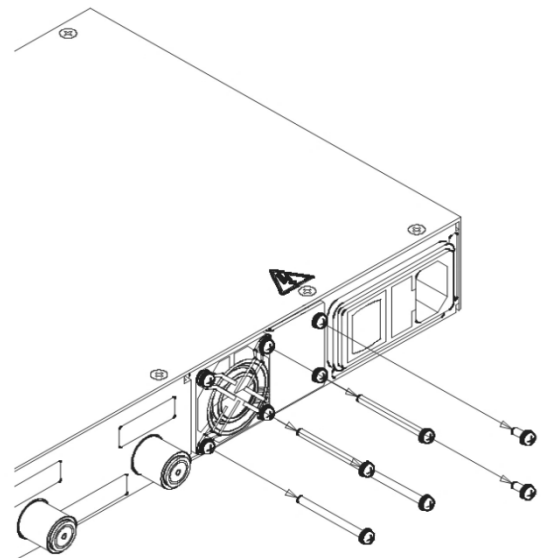
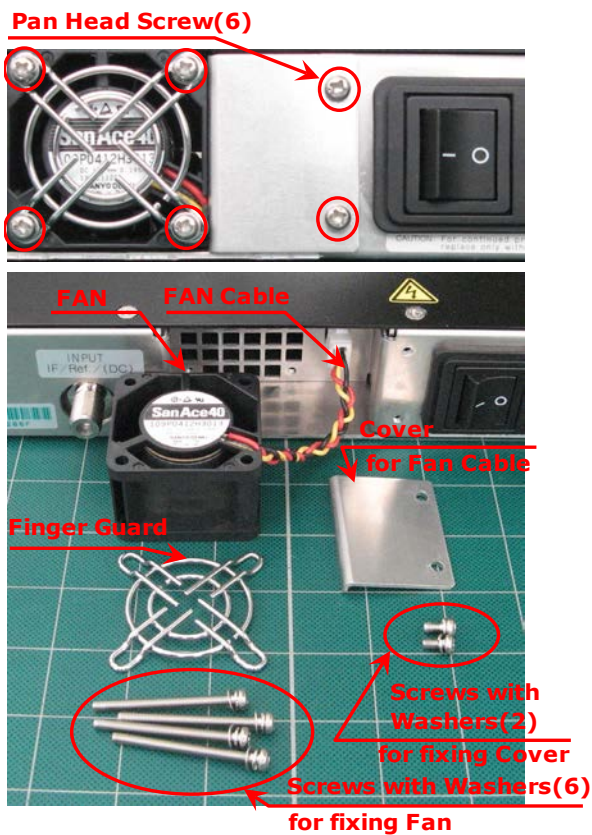
Tools Required: #2 Phillips screwdriver

Parts Required: Replacement Fan - P/N: NJZ1286FK

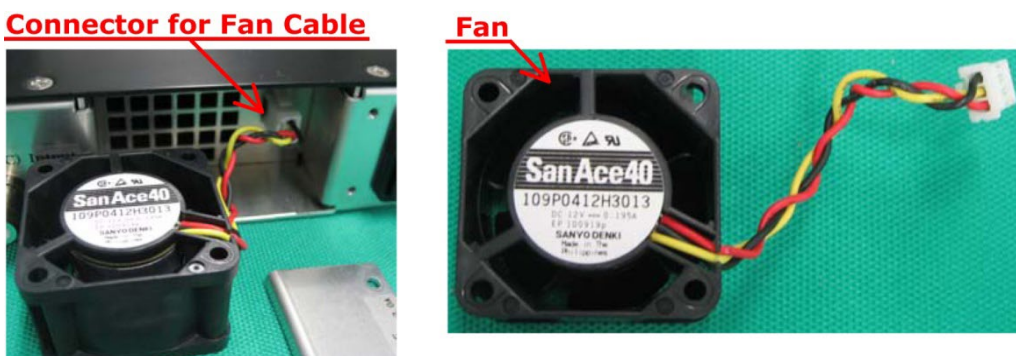
Step 1: Turn off the rocker switch of the main power on rear panel, and disconnect the AC power cable from the PSU.

\* Above Specifications are subject to change without notice.

Step 2: Using #2 Philips screwdriver, remove 6 pan head screws with washers, and save the screws, a finger guard over fan, and a cover over fan cable as shown in below.



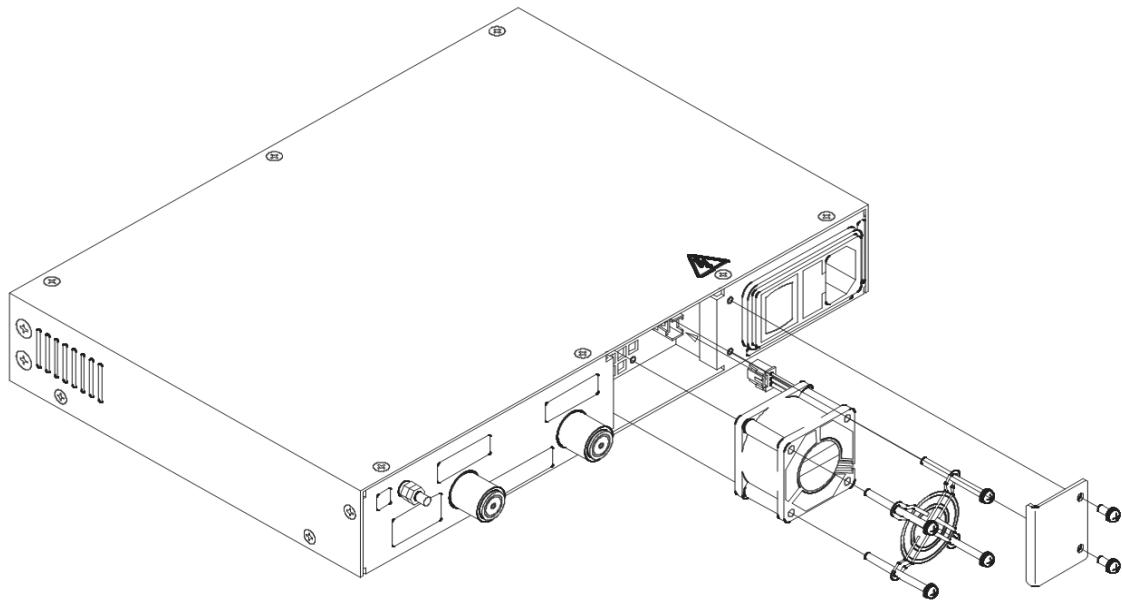
Step 3: Disconnect the fan cable with the original fan that are connected to the PSU as shown in below, and remove the fan from the PSU.



Step 4: Connect the fan cable with new fan to the PSU.  
Re-install the 4 pan head screws with washers and the finger guard that were removed.

\* Above Specifications are subject to change without notice.

Step 5: Re-install the 2 pan head screws with washers and the cover that were removed as shown.



## CAUTION

- ✓ Be very careful when replacing a fan to avoid being shocked or damaging the circuit. The following safety precautions will protect from the equipment failure and electric shock.
  - ◆ Turn the power off, disconnect the AC power cable, and discharge the circuit before removing a fan.
  - ◆ When you remove a fan and fit in a new one, be careful to avoid shocks and short circuits.

### 8.4.3. Fuse Field Replacement

The PSU is fitted with a fuse for AC line connection. The fuse is contained within the holder of the AC power inlet connector, behind a small plastic flap. The PSU has one other use for replacement.

Fuse Type: T2.0A/250V,  $\phi 5 \times 20$  mm

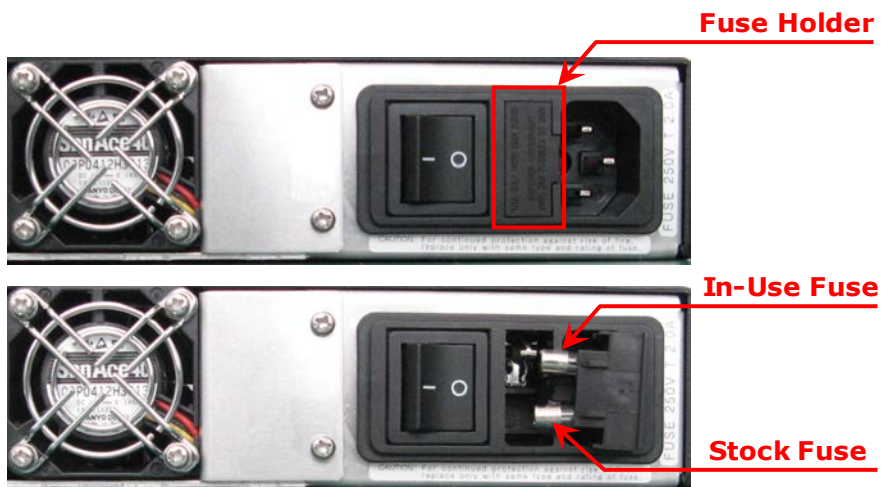
If the PSU is overloaded and the fuse is blown, it is needed to replace a new fuse by customer in field in order to operate normally.

The replacement of fuse should be complied with the following steps:

Step 1: Turn off the rocker switch of the main power on rear panel, and disconnect the AC power cable from the PSU.

\* Above Specifications are subject to change without notice.

Step 2: Open the fuse holder next to the IEC320-C14 inlet, and replace in-use fuse (blown fuse) with stock fuse or new one. See figure below.



Step 3: Close the fuse holder, connect the AC power cable to the PSU, and turn on the rocker switch

## CAUTION

- ✓ Be very careful when replacing a fuse to avoid being shocked or damaging the circuit. The following safety precautions will protect from the equipment failure and electric shock.
  - ◆ Turn the power off, disconnect the AC power cable, and discharge the circuit before removing a fuse.
  - ◆ When you remove a fuse and fit in a new one, be careful to avoid shocks and short circuits.

\* Above Specifications are subject to change without notice.

## 9. Option Parts

Contact to following email address, when option parts are needed.

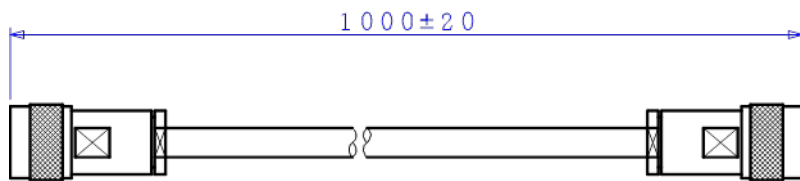
Email: [nisd\\_mcsales@nisshinbo.co.jp](mailto:nisd_mcsales@nisshinbo.co.jp)

### 9.1. Coaxial Cable

#### 9.1.1. N-type Coaxial Cable - P/N: NJZ1290AC2

Connection Cable between Modem and NJZ1286N (150W AC/DC PSU)

- ✓ Length: 1m
- ✓ Two(2) N-type male connectors assembled
- ✓ Insertion Loss: 1.5 dB max. @ 1,700MHz

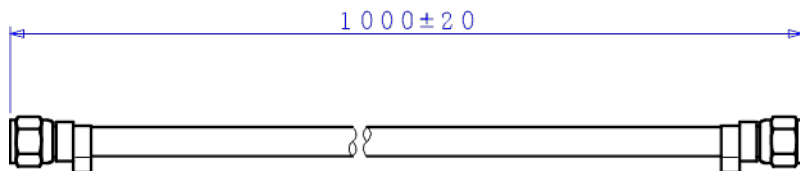


Unit:mm

#### 9.1.2. F-type Coaxial Cable - P/N: NJZ1290AC3

Connection Cable between Modem and NJZ1286F (150W AC/DC PSU)

- ✓ Length: 1m
- ✓ Two(2) F-type male connectors assembled
- ✓ Insertion Loss: 1.5 dB max. @ 1,700MHz

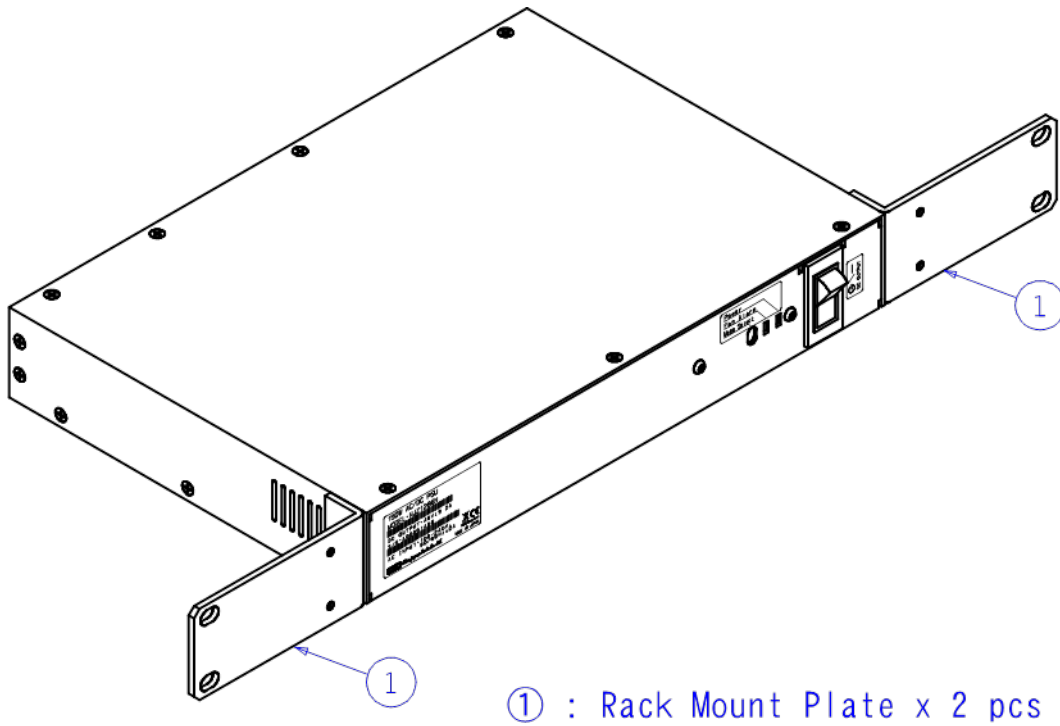


Unit:mm

\* Above Specifications are subject to change without notice.

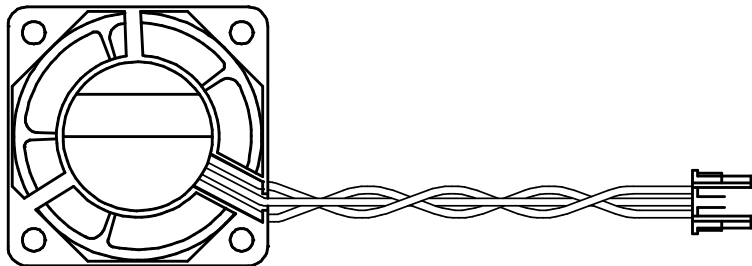
## 9.2. Rack-mount Kit - P/N: NJZ1286RM

This option part is to mount the PSU to the 19-inch rack.



## 9.3. Replacement Fan - P/N: NJZ1286FK

This option part is to replace the cooling fan on the rear panel.



\* Above Specifications are subject to change without notice.