

NEW JAPAN RADIO CO. LTD

#### 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.

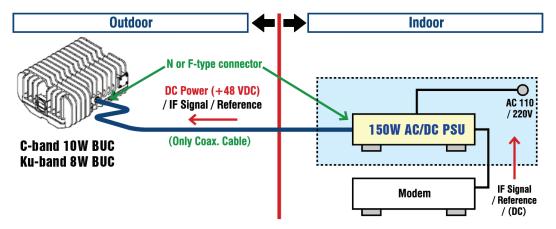


Fig.1 Connection Block Diagram

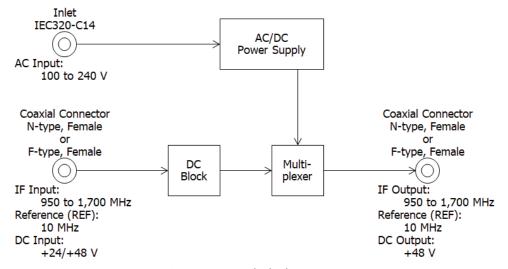


Fig.2 Functional Block Diagram



#### 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).

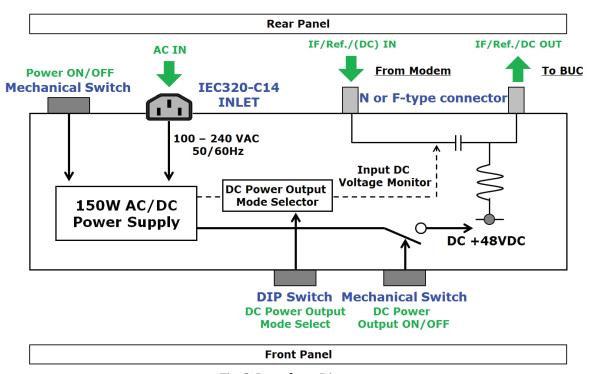
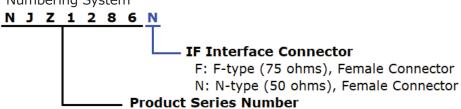


Fig.3 Interface Diagram



### **Series Model Number**

Numbering System



Line-up

Model No.	IF Frequency	IF Connector
NJZ1286N	050 to 1 700 MHz	N-type
NJZ1286F	950 to 1,700 MHz	F-type



## 1. Electrical Specifications

. Elect	rical Specifications	
#	Items	Specifications
1.1.	Input AC Voltage Range	
	[Rated Range]	100 to 240 VAC
	[Absolute Maximum Rating]	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	10 W max.
	<condition></condition>	
	No Connect BUC	
	No Output DC Power	
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=""></n-type>	50 ohms nom
	<f-type model=""></f-type>	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	+24 / +48 VDC
	at IF Input Interface	In case of option 2 in mode of DC power output,
		50mA min. is needed from modem.
1.17.	Protection	Internal Primary Current Fuse
		Short Protection
1.18.	LED Indicator	
	[DC Output (Power)]	GREEN: Supply a DC Power to BUC
	[Fan Alarm]	GREEN: Normal Condition
		RED: Abnormal Condition
		and Fan must be Replaced



A Division of Av-Comm

## 2. Mechanical Specifications

#	Items	Specifications
2.1.	AC Input Interface	IEC320-C14 Inlet
2.2.	IF Input Interface Connector	
	<f-type model=""></f-type>	F-type Female Connector, 75 ohms
	<n-type model=""></n-type>	N-type Female Connector, 50 ohms
2.3.	IF Output Interface Connector	
	<f-type model=""></f-type>	F-type Female Connector, 75 ohms
	<n-type model=""></n-type>	N-type Female Connector, 50 ohms
2.4.	Cooling	Forced-air-cooled by Fan
2.5.	Dimension & Housing	290 (W) x 200 (D) x 44 (H) mm
	without interface connectors and switch	[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/s²] 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 Citification
3.6.	Compliance Standard	EN 55022
		EN 55024
		EN 61000-3-2/3
		EN 60950-1 / UL60950-1
		EN 62311
3.7.	MTBF	150,000 hours and more at +50 °C
	(by Method of Parts Count Reliability	as Design Condition
	Prediction)	

 $<sup>\</sup>ast$  Above specifications are subject to change without notice.