



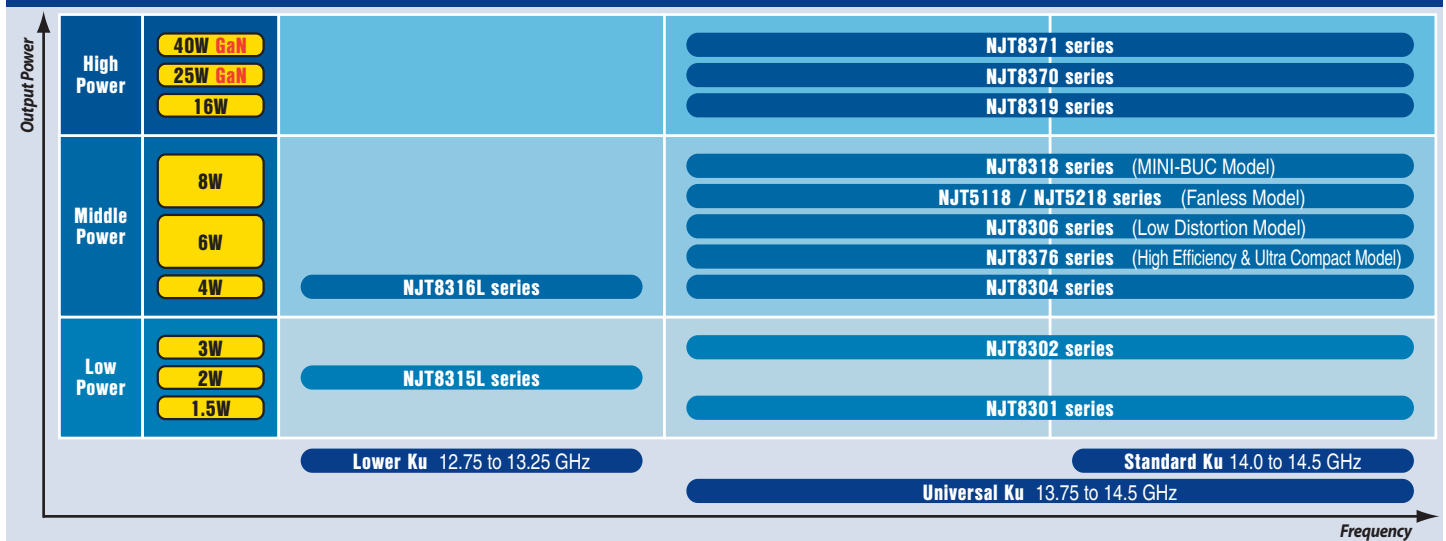
VSAT PRODUCT LINEUP 2021



New Japan Radio Co., Ltd.

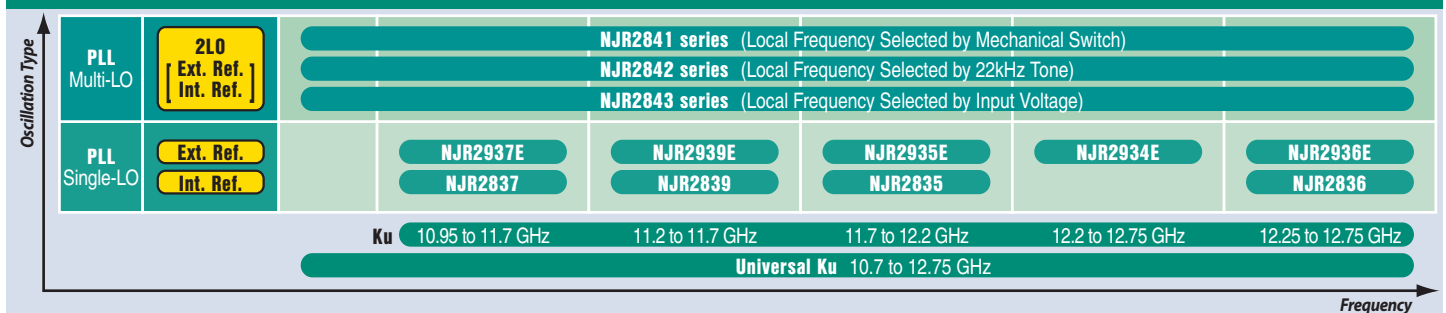
■ Ku-band BUC

P3 →



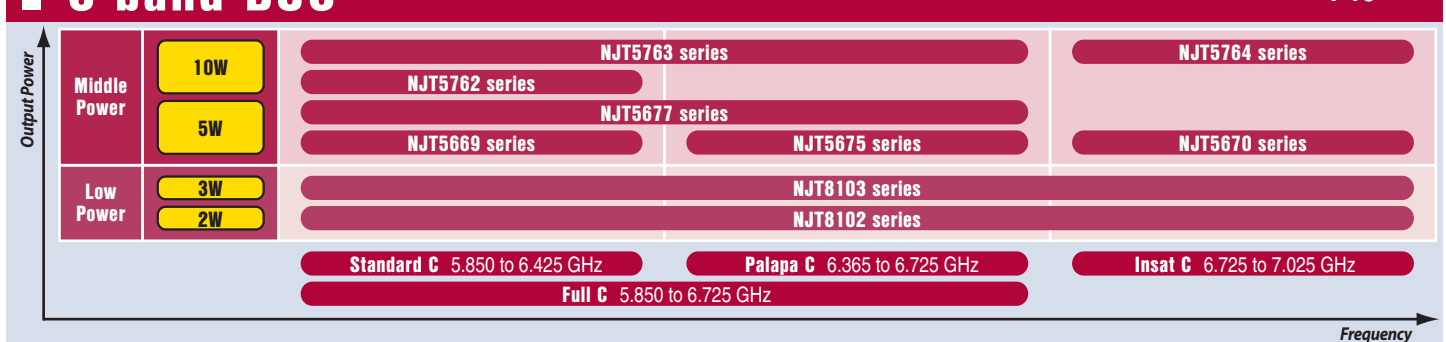
■ Ku-band LNB

P11 →



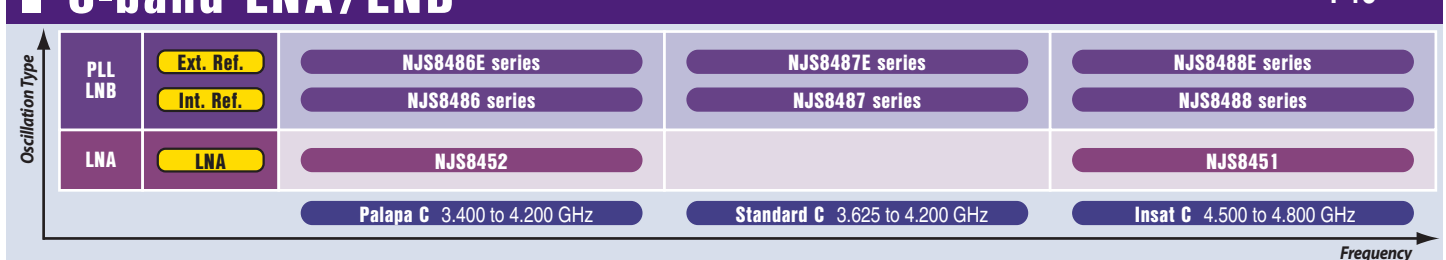
■ C-band BUC

P13 →

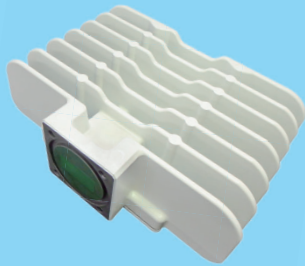


■ C-band LNA/LNB

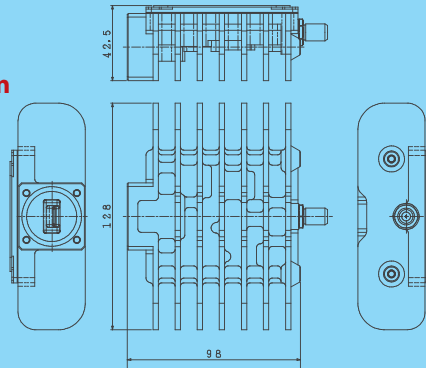
P15 →



High Efficiency & Ultra Compact Ku-band 6W BUC: NJT8376 series



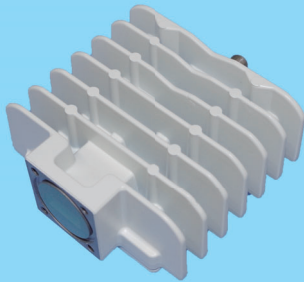
- **Good Linearity;**
Installed GaAs Based FET
Supporting Amplitude Modulation
- **High Efficiency Output Power**
P1dB: **+37.8 dBm** over Temperature
ACPR: **-26 dBc @ Pout = +37 dBm**
Power Consumption: **34 W**
- **Compact Size & Light Weight**
Dimension:
98 (L) × 128 (W) × 42.5 (H) mm
Weight: **540 g**



Datasheet



Lower Ku-band 2W & 4W BUC: NJT8315L & NJT8316L series

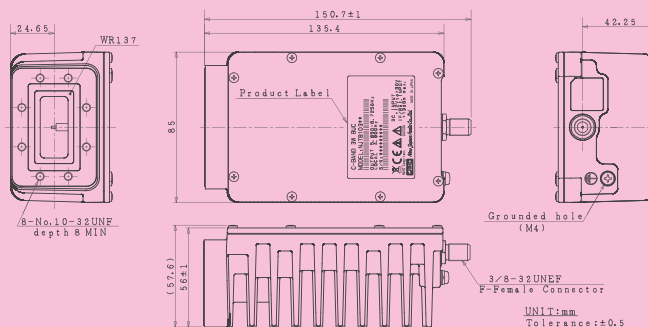
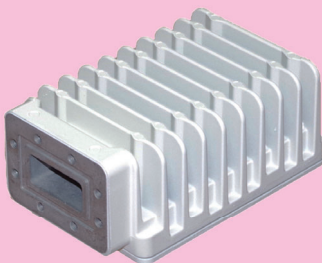


* 4W Model: NJT8316L series

- **RF Frequency: 12.75 to 13.25 GHz**
- **High Efficiency Output Power**
(4W Model: NJT8316L series)
P1dB: **+36 dBm** over Temperature
Power Consumption: **28 W**
(2W Model: NJT8315L series)
P1dB: **+33 dBm** over Temperature
Power Consumption: **18 W**
- **Small Size & Light Weight**
(4W Model: NJT8316L series)
Dimension: 98 (L) × 98 (W) × 42.5 (H) mm
Weight: **500 g**
(2W Model: NJT8315L series)
Dimension: 91.55 (L) × 68 (W) × 42.5 (H) mm
Weight: **350 g**

Datasheet
NJT8316L seriesDatasheet
NJT8315L series

Insat C-band 2W & 3W BUC: NJT8102E & NJT8103E series



- **Covering Insat & Full C-band Frequency**
Insat C-band: **6.725 to 7.025 GHz**
Full C-band: **5.85 to 6.725 GHz**
Standard C-band: **5.85 to 6.425 GHz**
- **Smaller Size & Lighter Weight**
Dimension: **135.4 × 85 × 56 mm**
Weight: **800 g**
- **High Efficiency Output Power**
< 3W Model: NJT8103E series >
P1dB: **+34.5 dBm min. over Temperature**
ACPR: **-26 dBc @ Pout ≤ +34.5 dBm**
Power Consumption: **21 W**
< 2W Model: NJT8102E series >
P1dB: **+33.0 dBm min. over Temperature**
ACPR: **-26 dBc @ Pout ≤ +33.0 dBm**
Power Consumption: **18 W**

Datasheet
NJT8103 seriesDatasheet
NJT8102 series

■ GaN 40W ROBUST-BUC : NJT8371 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ Saturation	IF Connector	M&C Function	AC Power Option	Power Supply	LED Indicator
NJT8371UNMK	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+46 dBm (40W)	N-type	FSK	NA	DC Power	Equipped
NJT8371UFMK					F-type	Communications	Enclosed ^{*Note3} Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8371UNMKA					N-type	M&C ^{*Note1}		DC Power	
NJT8371UFMKA					F-type			Supplied by Outdoor AC/DC PSU	
NJT8371UNMR					N-type	RS-232C Interface	NA	DC Power	
NJT8371UFMR					F-type			Input Port: MS Connector	
NJT8371UNMRA	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	M&C ^{*Note2}	Enclosed ^{*Note3} Outdoor AC/DC PSU	DC Power	
NJT8371UFMRA					F-type			Supplied by Outdoor AC/DC PSU	
NJT8371NMK					N-type	FSK	NA	DC Power	
NJT8371FMK					F-type	Communications	Enclosed ^{*Note3} Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8371NMKA					N-type	M&C ^{*Note1}		DC Power	
NJT8371FMKA					F-type			Supplied by Outdoor AC/DC PSU	
NJT8371NMR					N-type	RS-232C Interface	NA	DC Power	
NJT8371FMR					F-type			Input Port: MS Connector	
NJT8371NMRA					N-type	M&C ^{*Note2}	Enclosed ^{*Note3} Outdoor AC/DC PSU	DC Power	
NJT8371FMRA					F-type			Supplied by Outdoor AC/DC PSU	

*Note1: The detail is shown in section of "FSK COMMUNICATIONS M&C".

*Note2: The detail is shown in section of "RS-232C INTERFACE M&C".

*Note3: The detail is shown in section of "OUTDOOR 500W AC/DC PSU".



Standard Ku 40W: NJT8371 series
Universal Ku 40W: NJT8371U series

Datasheet



■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ Saturation	+46 dBm min. @ +25 °C / +45 dBm min. over temperature
Conversion Gain	72 dB nom., 66 dB min.
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	1.5 : 1 max. @ RF Frequency
Power Requirement	+36 to +60 VDC at BUC Input Port 90 to 264 VAC at Outdoor AC/DC PSU: (AC Power Option) NJT8371NMKA / 71FMKA / 71NMRA / 71FMRA / 71UNMK / 71UFMK / 71UNMR / 71UFMR
Power Consumption	220 W typ. @ Pout=+44dBm 260 W typ., 290 W max. @ Psat
Port for Voltage Input	MS Connector : NJT8371NMK / 71FMK / 71NMR / 71FMR / 71UNMK / 71UFMK / 71UNMR / 71UFMR MS Connector supplied by Outdoor AC/DC PSU : NJT8371NMKA / 71FMKA / 71NMRA / 71FMRA / 71UNMK / 71UFMK / 71UNMR / 71UFMR
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Cooling	Forced-air-cooling by FAN
Dimension (without Interface Connector)	(L) 230 × (W) 150 × (H) 100 mm [(L) 9.07" × (W) 5.91" × (H) 3.94"]
Weight	4.2 kg [9.7 lbs]

■ Model Numbering System

N J T 8 3 7 1 U N M K A

AC Power Operating Option - Non Suffix: N/A
A: Enclosed AC/DC PSU for BUC ^{*Note4}

M&C Function Option - Non Suffix: N/A
K: FSK communications M&C Equipped
R: RS-232C Interface M&C Equipped

DC Input Connector - Non Suffix: IF Interface Connector
M: MS Connector (or IF Interface Connector) ^{*Note5}

IF Interface Connector - N: N-type (50 ohms), Female Connector
F: F-type (75 ohms), Female Connector

RF Frequency - Non Suffix: Standard Ku-band (14.0 to 14.5 GHz)
U: Universal Ku-band (13.75 to 14.5 GHz)

Output Power - 71: +46.0 dBm (40W) @ Saturation
70: +44.0 dBm (25W) @ Saturation
19: +42.0 dBm (16W) @ 1dB G.C.P.
18: +39.0 dBm (8W) @ 1dB G.C.P.

Product Series Model Number

*Note4: In case of 40W BUC: NJT8371 series, the enclosed unit is Outdoor 500W AC/DC PSU.
In case of 25W BUC: NJT8370 series, the enclosed unit is Outdoor 250W AC/DC PSU.
In case of 16W BUC: NJT8319 series, the enclosed unit is Outdoor 250W AC/DC PSU.
In case of 8W BUC: NJT8318 series, the enclosed unit is Indoor 150W AC/DC PSU.

*Note5: 40W BUC: NJT8371 series and 25W BUC: NJT8370 series can be applied DC voltage via only MS Connector.
16W BUC: NJT8319 series and 8W BUC: NJT8318 series are available to apply DC voltage via either MS Connector or IF Connector.

■ GaN 25W MINI-BUC : NJT8370 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ Saturation	IF Connector	M&C Function	AC Power Option	Power Supply	LED Indicator
NJT8370UNMK	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+44 dBm (25W)	N-type	FSK	NA	DC Power	Equipped
NJT8370UFMK					F-type	Communications	Enclosed *Note6 Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8370UNMKA					N-type	M&C *Note1		DC Power	
NJT8370UFMKA					F-type			Supplied by Outdoor AC/DC PSU	
NJT8370UNMR					N-type	RS-232C	NA	DC Power	
NJT8370UFMR					F-type	Interface	Enclosed *Note6 Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8370UNMRA	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	M&C *Note2		DC Power	
NJT8370UFMRA					F-type			Supplied by Outdoor AC/DC PSU	
NJT8370NMK					N-type	FSK	NA	DC Power	
NJT8370FMK					F-type	Communications	Enclosed *Note6 Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8370NMKA					N-type	M&C *Note1		DC Power	
NJT8370UFMKA					F-type			Supplied by Outdoor AC/DC PSU	
NJT8370NMNR					N-type	RS-232C	NA	DC Power	
NJT8370UFMR					F-type	Interface	Enclosed *Note6 Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8370NMRA					N-type	M&C *Note2		DC Power	
NJT8370FMRA					F-type			Supplied by Outdoor AC/DC PSU	

*Note1: The detail is shown in section of "FSK COMMUNICATIONS M&C".

*Note2: The detail is shown in section of "RS-232C INTERFACE M&C".

*Note6: The detail is shown in section of "OUTDOOR 250W AC/DC PSU".

UNIVERSAL KU-BAND



Standard Ku 25W: NJT8370 series
Universal Ku 25W: NJT8370U series

Datasheet



■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ Saturation	+44 dBm min. @ +25 °C / +43 dBm min. over temperature
Conversion Gain	72 dB nom., 66 dB min.
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+36 to +60 VDC at BUC Input Port 90 to 264 VAC at Outdoor AC/DC PSU: (AC Power Option) NJT8370NMKA / 70FMKA / 70NMRA / 70FMRA / 70UNMKA / 70UFMKA / 70UNMRA / 70UFMRA
Power Consumption	180 W typ. @ Pout=+42dBm 200 W typ., 230 W max. @ Psat
Port for Voltage Input	MS Connector : NJT8371NMK / 71FMK / 71NMNR / 71FMR / 71UNMK / 71UFMK / 71UNMR / 71UFMR MS Connector supplied by Outdoor AC/DC PSU : NJT8370NMKA / 70FMKA / 70NMRA / 70FMRA / 70UNMKA / 70UFMKA / 70UNMRA / 70UFMRA
Temperature Range (ambient)	Operating : (Operation Guarantee) -40 to +75 °C (Performance Guarantee) -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Cooling	Forced-air-cooling by FAN
Dimension (without Interface Connector)	(L) 180 × (W) 130 × (H) 80 mm [(L) 7.09" × (W) 5.12" × (H) 3.15"]
Weight	2.5 kg [5.5 lbs]

■ 16W MINI-BUC : NJT8319 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	M&C Function	AC Power Option	Power Supply	LED Indicator
NJT8319UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+42 dBm min. (16W)	N-type	NA	NA	DC Power	Equipped
NJT8319UF					F-type			Input Port: IF Connector	
NJT8319UNM					N-type			DC Power	
NJT8319UFM					F-type			Input Port: MS or IF Connector	
NJT8319UNMA					N-type			DC Power	
NJT8319UFMA					F-type			Enclosed *Note6 Outdoor AC/DC PSU	
NJT8319UNK					N-type	FSK Communications M&C *Note1	NA	DC Power	
NJT8319UFK					F-type			Input Port: IF Connector	
NJT8319UNMK					N-type			DC Power	
NJT8319UFMK					F-type			Input Port: MS or IF Connector	
NJT8319UNMKA					N-type			DC Power	
NJT8319UFMKA					F-type			Enclosed *Note6 Outdoor AC/DC PSU	
NJT8319UNMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power	
NJT8319UFMR					F-type			Input Port: MS or IF Connector	
NJT8319UNMRA					N-type			DC Power	
NJT8319UFMRA					F-type			Enclosed *Note6 Outdoor AC/DC PSU	
NJT8319N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	NA	NA	DC Power	
NJT8319F					F-type			Input Port: IF Connector	
NJT8319NM					N-type			DC Power	
NJT8319FM					F-type			Input Port: MS or IF Connector	
NJT8319NMA					N-type			DC Power	
NJT8319FMA					F-type			Enclosed *Note6 Outdoor AC/DC PSU	
NJT8319NK					N-type	FSK Communications M&C *Note1	NA	DC Power	
NJT8319FK					F-type			Input Port: IF Connector	
NJT8319NMK					N-type			DC Power	
NJT8319FMK					F-type			Input Port: MS or IF Connector	
NJT8319NMKA					N-type			DC Power	
NJT8319FMKA					F-type			Enclosed *Note6 Outdoor AC/DC PSU	
NJT8319NMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power	
NJT8319FMR					F-type			Input Port: MS or IF Connector	
NJT8319NMRA					N-type			DC Power	
NJT8319FMRA					F-type			Enclosed *Note6 Outdoor AC/DC PSU	

*Note1: The detail is shown in section of "FSK COMMUNICATIONS M&C".

*Note2: The detail is shown in section of "RS-232C INTERFACE M&C".

*Note6: The detail is shown in section of "OUTDOOR 250W AC/DC PSU".



Standard Ku 16W: NJT8319 series
Universal Ku 16W: NJT8319U series

Datasheet



■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+42 dBm min. over temperature
Conversion Gain	68 dB nom., 62 dB min
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+36 to +60 VDC at BUC Input Port 90 to 264 VAC at Indoor AC/DC PSU: (AC Power Option) NJT8319NMA / 19FMA / 19NMKA / 19FMKA / 19NMRA / 19FMRA / 19UNMA / 19UFMA / 19UNMKA / 19UFMKA / 19UNMRA / 19UFMRA
Power Consumption	160 W typ., 180 W max.
Port for Voltage Input *Note9	Same as IF Connector : NJT8319N / 19F / 19NK / 19FK / 19UN / 19UF / 19UNK / 19UFK MS Connector : NJT8319NM / 19FM / 19NMK / 19FMK / 19NMR / 19FMR / 19UNM / 19UFM / 19UNMK / 19UFMK / 19UNMR / 19UFMR IF Connector supplied by Indoor AC/DC PSU through IF Cable : NJT8319NMA / 19FMA / 19NMKA / 19FMKA / 19NMRA / 19FMRA / 19UNMA / 19UFMA / 19UNMKA / 19UFMKA / 19UNMRA / 19UFMRA
Temperature Range (ambient)	Operating : (Operation Guarantee) -40 to +75 °C (Performance Guarantee) -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Cooling	Forced-air-cooling by FAN
Dimension (without Interface Connector)	(L) 180 × (W) 130 × (H) 80 mm [(L) 7.09" × (W) 5.12" × (H) 3.15"]
Weight	2.4 kg [5.3 lbs]

*Note9: MS Connector models are available to apply DC voltage via either MS Connector or IF Connector.
DO NOT apply DC voltage via both MS Connector and IF Connector. If DC voltage is applied on both connectors, it may damage the unit or the unit may not operate properly.



■ 8W MINI-BUC : NJT8318 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	M&C Function	AC Power Option	Power Supply	LED Indicator
NJT8318UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+39 dBm min. (8W)	N-type	NA	NA	DC Power	Equipped
NJT8318UF					F-type			Input Port: IF Connector	
NJT8318UNM					N-type			DC Power	
NJT8318UFM					F-type			Input Port: MS or IF Connector	
NJT8318UNA					N-type	FSK Communications M&C *Note1	Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318UFA					F-type			Supplied by Indoor AC/DC PSU	
NJT8318UNK					N-type		NA	DC Power	
NJT8318UFK					F-type			Input Port: IF Connector	
NJT8318UNMK					N-type			DC Power	
NJT8318UFMK					F-type			Input Port: MS or IF Connector	
NJT8318UNMR					N-type	RS-232C Interface M&C *Note2	Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318UFMR					F-type			Input Port: MS or IF Connector	
NJT8318UNMRA					N-type	NA	Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318UFMRA					F-type			Supplied by Indoor AC/DC PSU	
NJT8318N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type		NA	DC Power	
NJT8318F					F-type			Input Port: IF Connector	
NJT8318NM					N-type		Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318FM					F-type			Input Port: MS or IF Connector	
NJT8318NA					N-type	FSK Communications M&C *Note1	Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318FA					F-type			Supplied by Indoor AC/DC PSU	
NJT8318NK					N-type		NA	DC Power	
NJT8318FK					F-type			Input Port: IF Connector	
NJT8318NMK					N-type			DC Power	
NJT8318FMK					F-type			Input Port: MS or IF Connector	
NJT8318NMR					N-type	RS-232C Interface M&C *Note2	Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318FMR					F-type			Input Port: MS or IF Connector	
NJT8318NMRA					N-type	NA	Enclosed *Note8 Indoor AC/DC PSU	DC Power	
NJT8318FMRA					F-type			Supplied by Indoor AC/DC PSU	

*Note1: The detail is shown in section of "FSK COMMUNICATIONS M&C".

*Note2: The detail is shown in section of "RS-232C INTERFACE M&C".

*Note8: The detail is shown in section of "INDOOR 150W AC/DC PSU".

UNIVERSAL KU-BAND



Standard Ku 8W: NJT8318 series
Universal Ku 8W: NJT8318U series

Datasheet



■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+39 dBm min. over temperature
Conversion Gain	65 dB nom., 59 dB min
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+18 to +60 VDC at BUC Input Port 90 to 264 VAC at Indoor AC/DC PSU: (AC Power Option) NJT8318NA / 18FA / 18NMRA / 18FMRA / 18UNA / 18UFA / 18UNMRA / 18UFMRA
Power Consumption	80 W typ., 90 W max.
Port for Voltage Input *Note9	Same as IF Connector : NJT8318NA / 18FA / 18NMRA / 18FMRA / 18UNA / 18UFA / 18UNMRA / 18UFMRA MS Connector : NJT8318NM / 18FM / 18NMK / 18FMK / 18NMR / 18FMR / 18UNM / 18UFM / 18UNMK / 18UFMK / 18UNMR / 18UFMR IF Connector supplied by Indoor AC/DC PSU through IF Cable : NJT8318NA / 18FA / 18NMRA / 18FMRA / 18UNA / 18UFA / 18UNMRA / 18UFMRA
Temperature Range (ambient)	Operating : (Operation Guarantee) -40 to +75 °C (Performance Guarantee) -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Cooling	Forced-air-cooling by FAN
Dimension (without Interface Connector)	(L) 180 × (W) 130 × (H) 80 mm [(L) 7.09" × (W) 5.12" × (H) 3.15"]
Weight	2.4 kg [5.3 lbs]

*Note9: MS Connector models are available to apply DC voltage via either MS Connector or IF Connector.
DO NOT apply DC voltage via both MS Connector and IF Connector. If DC voltage is applied on both connectors, it may damage the unit or the unit may not operate properly.



■ 8W BUC : NJT5118 & NJT5218 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	AC Power Option	Power Supply	LED Indicator
NJT5218N	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+39 dBm min. (8W)	N-type	NA	DC Power	Equipped
NJT5218F					F-type		Input Port: IF Connector	
NJT5218NM					N-type		DC Power	
NJT5218FM					F-type		Input Port: MS Connector	
NJT5218NA					N-type		DC Power	
NJT5218FA					F-type	Enclosed ^{*Note8} Indoor AC/DC PSU	Supplied by Indoor AC/DC PSU	
NJT5118N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	NA	DC Power	
NJT5118F					F-type		Input Port: IF Connector	
NJT5118NM					N-type		DC Power	
NJT5118FM					F-type		Input Port: MS Connector	
NJT5118NA					N-type		DC Power	
NJT5118FA					F-type	Enclosed ^{*Note8} Indoor AC/DC PSU	Supplied by Indoor AC/DC PSU	

*Note8: The detail is shown in section of "INDOOR 150W AC/DC PSU".

UNIVERSAL KU-BAND



Standard Ku 8W: NJT5118 series
Universal Ku 8W: NJT5218 series

Datasheet



■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+39 dBm min. over temperature
Conversion Gain	59 dB min
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+18 to +60 VDC at BUC Input Port 90 to 264 VAC at Indoor AC/DC PSU: (AC Power Option) NJT5118NA / 18FA, NJT5218NA / 18FA
Power Consumption	79 W typ., 90 W max. : (Standard Ku-band) NJT5118 series 79 W typ., 93 W max. : (Universal Ku-band) NJT5218 series
Port for Voltage Input	Same as IF Connector : NJT5118N / 18F, NJT5218N / 18F MS Connector : NJT5118NM / 18FM, NJT5218NM / 18FM IF Connector supplied by Indoor AC/DC PSU through IF Cable : NJT5118NA / 18FA, NJT5218NA / 18FA
Temperature Range (ambient)	Operating : -40 to +55 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 219.5 x (W) 175 x (H) 99 mm [(L) 8.64" x (W) 6.89" x (H) 3.90"]
Weight	3.2 kg [7.0 lbs]

■ 6W BUC : NJT8306 series / Low Distortion Model

UNIVERSAL KU-BAND



Standard Ku 6W: NJT8306 series
Universal Ku 6W: NJT8306U series

Datasheet



Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8306UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+37.8 dBm min. (6W)	N-type	Equipped
NJT8306UF					F-type	
NJT8306N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	
NJT8306F					F-type	

■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+37.8 dBm min. over temperature
Conversion Gain	62 dB nom., 56 dB min.
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	1.3 : 1 max. for Recommendation of Output Load V.S.W.R.
Power Requirement	+12 to +30 VDC
Power Consumption	40 W typ., 48 W max.
Temperature Range (ambient)	Operating : (Operation Guarantee) -40 to +65 °C (Performance Guarantee) -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 174.9 x (W) 84 x (H) 59.2 mm [(L) 6.89" x (W) 3.31" x (H) 2.33"]
Weight	1.2 kg [2.6 lbs]

■ 6W BUC : NJT8376 series / High Efficiency & Ultra Compact Model

UNIVERSAL KU-BAND



Standard Ku 6W: NJT8376 series
Universal Ku 6W: NJT8376U series

Datasheet



Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator	
NJT8376UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+37.8 dBm min. (6W)	N-type	NA	
NJT8376UF					F-type		
NJT8376N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type		
NJT8376F					F-type		

■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+37.8 dBm min. over temperature
Conversion Gain	62 dB nom., 56 dB min.
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+12 to +30 VDC
Power Consumption	34 W typ., 38 W max.
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension	(L) 98 x (W) 128 x (H) 42.5 mm
(without Interface Connector)	[(L) 3.86" x (W) 5.04" x (H) 1.67"]
Weight	540 g [1.2 lbs]

■ 4W BUC : NJT8304 & NJT8316L series

UNIVERSAL KU-BAND



Lower Ku 4W: NJT8316L series
Standard Ku 4W: NJT8304 series
Universal Ku 4W: NJT8304U series

Datasheet

NJT8316L series



Datasheet

NJT8304 series



Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8316LN	12.75 to 13.25 GHz	11.80 GHz	950 to 1,450 MHz	+36 dBm min. (4W)	N-type	NA
NJT8316LF	(Lower Ku-band)				F-type	
NJT8304UN	13.75 to 14.50 GHz	12.80 GHz	950 to 1,700 MHz		N-type	
NJT8304UF	(Universal Ku-band)				F-type	
NJT8304N	14.00 to 14.50 GHz	13.05 GHz	950 to 1,450 MHz		N-type	
NJT8304F	(Standard Ku-band)				F-type	

■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+36 dBm min. over temperature
Conversion Gain	62 dB nom., 56 dB min.
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+12 to +30 VDC
Power Consumption	28 W typ., 32 W max.
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension	(L) 98 x (W) 98 x (H) 42.5 mm
(without Interface Connector)	[(L) 3.86" x (W) 3.86" x (H) 1.67"]
Weight	500 g [1.1 lbs]

■ 3W / 2W / 1.5W BUC : NJT8301, NJT8302 & NJT8315L series

UNIVERSAL KU-BAND



Standard Ku 3W: NJT8302 series
 Universal Ku 3W: NJT8302U series
 Lower Ku 2W: NJT8315L series
 Standard Ku 1.5W: NJT8301 series
 Universal Ku 1.5W: NJT8301U series

Datasheet
 NJT8302 series



Datasheet
 NJT8315L series



Datasheet
 NJT8301 series



● 3W BUC: NJT8302 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8302UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+34 dBm min. (3W)	N-type	NA
NJT8302UF					F-type	
NJT8302N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	
NJT8302F					F-type	

● 2W BUC: NJT8315L series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8315LN	12.75 to 13.25 GHz (Lower Ku-band)	11.80 GHz	950 to 1,450 MHz	+33 dBm min. (2W)	N-type	NA
NJT8315LF					F-type	

● 1.5W BUC: NJT8301 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8301UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+31 dBm min. (1.5W)	N-type	NA
NJT8301UF					F-type	
NJT8301N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	
NJT8301F					F-type	

■ Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+34.0 dBm min. over temperature : (3W) NJT8302 series +33.0 dBm min. over temperature : (2W) NJT8315L series +31.0 dBm min. over temperature : (1.5W) NJT8301 series
Conversion Gain	58 dB typ., 51 dB min. : (3W) NJT8302 series 59 dB nom., 53 dB min. : (2W) NJT8315L series 55 dB typ., 48 dB min. : (1.5W) NJT8301 series
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+12 to +30 VDC
Power Consumption	18 W typ., 23 W max. : (3W) NJT8302 series 18 W typ., 22 W max. : (2W) NJT8315L series 12 W typ., 14 W max. : (1.5W) NJT8301 series
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +75 °C : NJT8315L series Operating : -40 to +55 °C Storage : -40 to +75 °C : NJT8302 / NJT8301 series
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 91.55 x (W) 68 x (H) 42.5 mm [(L) 3.6" x (W) 2.68" x (H) 1.67"]
Weight	350 g [0.77 lbs]

■ Model Numbering System

N J T 8 3 7 6 U N

IF Interface Connector - N: N-type (50 ohms), Female Connector
 F: F-type (75 ohms), Female Connector

RF Frequency - Non Suffix: Standard Ku-band (14.0 to 14.5 GHz)
 U: Universal Ku-band (13.75 to 14.5 GHz)
 L: Lower Ku-band (12.75 to 13.25 GHz)

Output Power - 76: +37.8 dBm (6W) @ 1dB G.C.P., High Efficiency & Ultra Compact Model
 06: +37.8 dBm (6W) @ 1dB G.C.P., Low Distortion Model
 04: +36.0 dBm (4W) @ 1dB G.C.P.
 16: +36.0 dBm (4W) @ 1dB G.C.P., ONLY for Lower Ku-band
 02: +34.0 dBm (3W) @ 1dB G.C.P.
 15: +33.0 dBm (2W) @ 1dB G.C.P., ONLY for Lower Ku-band
 01: +31.0 dBm (1.5W) @ 1dB G.C.P.

Product Series Model Number

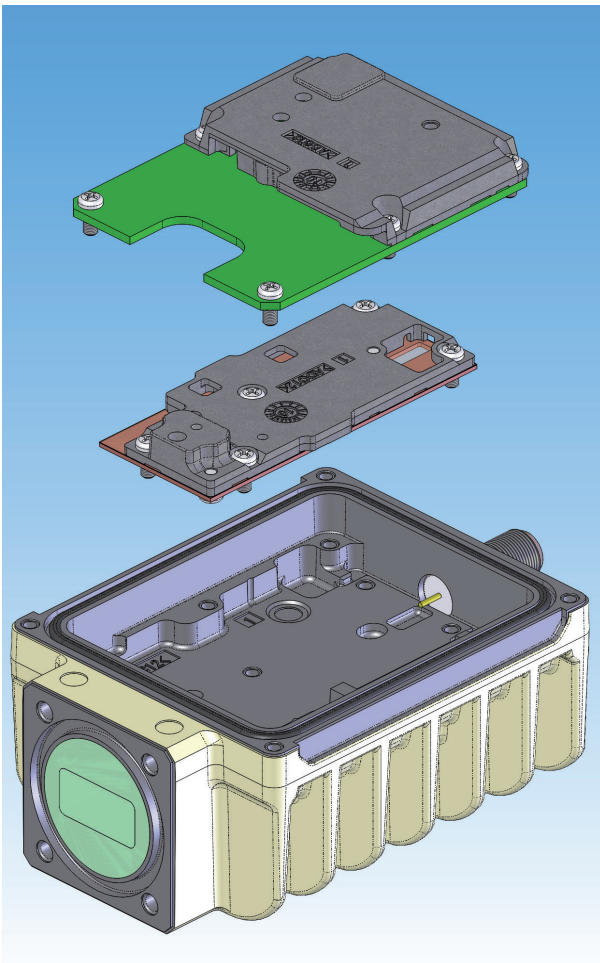
Ku-band Bare-Die-Module BUC

Feature

Miniaturization and stable characteristics by the following advantage technologies

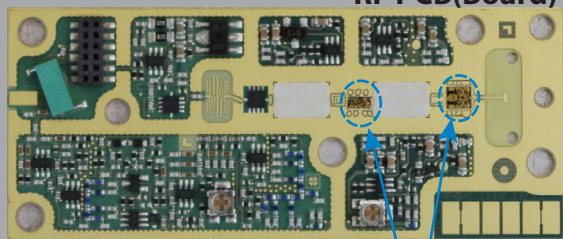
Advantage

- Wide band and good repeatability by **RF-PA Bare-Die assembly technology**
- Excellent thermal management by **Copper base PCB and Laser Cavity technology**
- Excellent spurious suppression by **Sub-harmonic mixer technology** and **Alumina filter technology**
- Stacked structure



Bare-Die-Module

RF PCB(Board)



RF-PA Bare-Die assembly



GaN 40W BUC



GaN 25W BUC



16W/8W BUC



6W BUC



4W BUC



3W/1.5W BUC

■ GaN 40W ROBUST-BUC : NJT8371

- **High Efficiency Output Power**
Saturation Output Power: +46.0 dBm
ACPR: -30 dBc @ Pout = +44 dBm
Power Consumption: 260 W
- **Compact Size & Light Weight**
Dimension: 230 x 150 x 100 mm
Weight: 4.2 kg

■ GaN 25W MINI-BUC : NJT8370

- **High Temperature Operating**
Operation Temp. Range: -40 to +75 °C
- **High Efficiency Output Power**
Saturation Output Power: +44.0 dBm
ACPR: -30 dBc @ Pout = +42 dBm
Power Consumption: 200 W
- **Miniature Size & Light Weight**
Weight: 2.5 kg

■ 16W MINI-BUC : NJT8319

8W MINI-BUC : NJT8318

- **High Temperature Operating**
Operation Temp. Range: -40 to +75 °C
- **High Efficiency & Low Distortion**
<16W Model>
P1dB: +42.0 dBm over Temp.
ACPR: -28 dBc @ Pout = +41 dBm
Power Consumption: 160 W
<8W Model>
P1dB: +39.0 dBm over Temp.
ACPR: -28 dBc @ Pout = +38 dBm
Power Consumption: 80 W
- **Miniature Size & Light Weight**
Weight: 2.4 kg

■ 6W SLIM-SIZE BUC : NJT8306

- **High Temperature Operating**
Operation Temp. Range: -40 to +65 °C
- **High Efficiency & Low Distortion**
P1dB: +37.8 dBm over Temp.
ACPR: -26 dBc @ Pout = +37.8 dBm
Power Consumption: 45 W
- **Compact Size & Light Weight**
Weight: 1.2 kg

■ 4W COMPACT-BUC : NJT8304

- **Super High Efficiency & Low Distortion**
P1dB: +36 dBm over Temp.
ACPR: -26 dBc @ Pout = +35.5 dBm
Power Consumption: 28 W
- **Compact Size & Light Weight**
Weight: 500 g

■ 3W BUC : NJT8302 / 1.5W BUC : NJT8301

- **Super High Efficiency & Low Distortion**
<3W Model>
P1dB: +34 dBm over Temp.
Power Consumption: 18 W
<1.5W Model>
P1dB: +31 dBm over Temp.
Power Consumption: 12 W
- **Smallest Size & Lightest Weight**
Weight: 350 g

Switchable 2LO PLL LNB [Internal & External Reference Type] : NJR2841, NJR2842 & NJR2843 series

UNIVERSAL KU-BAND



Universal Ku 2LO PLL (Int. & Ext.):
NJR2841 series
NJR2842 series
NJR2843 series

Datasheet



Internal Reference Type

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Frequency Selected by *Note9	Local Stability [-40 to +60 °C]	IF Connector
NJR2841L	Low Band: 10.70 to 11.70 GHz	Low Band: 9.75 GHz	Low Band: 950 to 1,950 MHz	Mechanical Switch	+/- 50 ppm	F-type
NJR2841LN					(+/- 500 kHz typ.)	N-type
NJR2841H	High Band: 11.70 to 12.75 GHz (Universal Ku-band)	High Band: 10.60 GHz	High Band: 1,100 to 2,150 MHz		+/- 10 ppm	F-type
NJR2841HN					(+/- 100 kHz typ.)	N-type
NJR2841S					+/- 3 ppm	F-type
NJR2841SN					(+/- 30 kHz typ.)	N-type
NJR2842L				22kHz Tone	+/- 50 ppm	F-type
NJR2842LN					(+/- 500 kHz typ.)	N-type
NJR2842H					+/- 10 ppm	F-type
NJR2842HN					(+/- 100 kHz typ.)	N-type
NJR2842S					+/- 3 ppm	F-type
NJR2842SN					(+/- 30 kHz typ.)	N-type
NJR2843L				Input Voltage	+/- 50 ppm	F-type
NJR2843LN					(+/- 500 kHz typ.)	N-type
NJR2843H					+/- 10 ppm	F-type
NJR2843HN					(+/- 100 kHz typ.)	N-type
NJR2843S					+/- 3 ppm	F-type
NJR2843SN					(+/- 30 kHz typ.)	N-type

External Reference Type

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Frequency Selected by *Note9	Local Stability [-40 to +60 °C]	IF Connector
NJR2841E	Low Band:	Low Band:	Low Band:	Mechanical Switch	Depends on External Reference	F-type
NJR2841EN	10.70 to 11.70 GHz	9.75 GHz	950 to 1,950 MHz	22kHz Tone		N-type
NJR2842E	High Band:	High Band:	High Band:			Input Voltage
NJR2842EN	11.70 to 12.75 GHz	10.60 GHz	1,100 to 2,150 MHz	N-type		
NJR2843E	(Universal Ku-band)			F-type		
NJR2843EN				N-type		

*Note9: The detail is shown in section of "LOCAL FREQUENCY SELECTION".

Specifications

Item	Specifications
Input Interface	Waveguide, WR 75 with Groove
Output Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Noise Figure (at +25 °C)	0.8 dB
Conversion Gain (at +25 °C)	62 dB max., 48 dB min.
Requirement External Reference Signal (Only External Reference Type is specified)	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -10 to 0 dBm Phase Noise: -135 dBc/Hz @100Hz -143 dBc/Hz @1kHz -145 dBc/Hz @10kHz
Phase Noise (SSB)	(Internal Reference Type) : -70 dBc/Hz @1kHz -75 dBc/Hz @10kHz -85 dBc/Hz @100kHz (External Reference Type) : -70 dBc/Hz @1kHz -75 dBc/Hz @10kHz -85 dBc/Hz @100kHz * Depends on Phase Noise of External Reference
Power Requirement	+10 to +24 VDC
Operating Current	170 mA max. : (Internal Reference Type) 200 mA max. : (External Reference Type)
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +80 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension	(L) 83.2 x (W) 42 x (H) 42 mm [(L) 3.28" x (W) 1.65" x (H) 1.65"] : NJR2841 series
(without Interface Connector & Mechanical Switch)	(L) 82.2 x (W) 40 x (H) 40 mm [(L) 3.24" x (W) 1.57" x (H) 1.57"] : NJR2842 / NJR2843 series
Weight	210 g [0.46 lbs] : (F-type IF Connector) / 240 g [0.53 lbs] : (N-type IF Connector)

LOCAL FREQUENCY SELECTION

In case of the products of Switchable 2LO PLL LNB, the following three methods to switch local frequency can be chosen by the customer

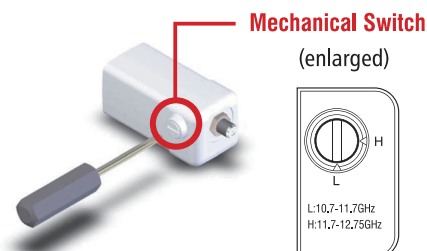
- Mechanical Switch
- 22kHz Tone On/Off
- Input Voltage High/Low

Specification of Local Switch

	RF Frequency	
	Low Band (10.7 to 11.7 GHz)	High Band (11.7 to 12.75 GHz)
Mechanical Switch	Initial Set	
22kHz Tone On/Off	Tone Level: 0 to 0.2 Vp-p	Tone Level: 0.4 to 0.8 Vp-p
Input Voltage High/Low	Voltage: +10 to +14 VDC	Voltage: +15.5 to +24 VDC

Applicable Models: NJR2841, NJR2842 and NJR2843 series

Image of Mechanical Switch



■ PLL LNB [Internal & External Reference Type] : NJR2835 & NJR2935E series



Ku PLL (Int): NJR2835 series
Ku PLL (Ext): NJR2935E series

Datasheet
NJR2835 series



Datasheet
NJR2935E series



● Internal Reference Type: NJR2835 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 °C]	IF Connector
NJR2837H	10.95 to 11.70 GHz	10.00 GHz	950 to 1,700 MHz	+/- 10 ppm	F-type
NJR2837HN				(+/- 100 kHz typ.)	N-type
NJR2837S				+/- 3 ppm	F-type
NJR2837SN				(+/- 30 kHz typ.)	N-type
NJR2837U				+/- 1 ppm	F-type
NJR2837UN	11.20 to 11.70 GHz	10.25 GHz	950 to 1,450 MHz	(+/- 10 kHz typ.)	N-type
NJR2839H				+/- 10 ppm	F-type
NJR2839HN				(+/- 100 kHz typ.)	N-type
NJR2839S				+/- 3 ppm	F-type
NJR2839SN				(+/- 30 kHz typ.)	N-type
NJR2839U	11.70 to 12.20 GHz	10.75 GHz	950 to 1,450 MHz	+/- 1 ppm	F-type
NJR2839UN				(+/- 10 kHz typ.)	N-type
NJR2835H				+/- 10 ppm	F-type
NJR2835HN				(+/- 100 kHz typ.)	N-type
NJR2835S				+/- 3 ppm	F-type
NJR2835SN	12.25 to 12.75 GHz	11.30 GHz	950 to 1,450 MHz	(+/- 30 kHz typ.)	N-type
NJR2835U				+/- 1 ppm	F-type
NJR2835UN				(+/- 10 kHz typ.)	N-type
NJR2836H				+/- 10 ppm	F-type
NJR2836HN				(+/- 100 kHz typ.)	N-type
NJR2836S				+/- 3 ppm	F-type
NJR2836SN				(+/- 30 kHz typ.)	N-type
NJR2836U				+/- 1 ppm	F-type
NJR2836UN				(+/- 10 kHz typ.)	N-type

● External Reference Type: NJR2935E series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 °C]	IF Connector
NJR2937E	10.95 to 11.70 GHz	10.00 GHz	950 to 1,700 MHz	Depends on External Reference	F-type
NJR2937EN					N-type
NJR2939E	11.20 to 11.70 GHz	10.25 GHz	950 to 1,450 MHz		F-type
NJR2939EN					N-type
NJR2935E	11.70 to 12.20 GHz	10.75 GHz	950 to 1,450 MHz		F-type
NJR2935EN					N-type
NJR2934E	12.20 to 12.75 GHz	11.25 GHz	950 to 1,500 MHz		F-type
NJR2934EN					N-type
NJR2936E	12.25 to 12.75 GHz	11.30 GHz	950 to 1,450 MHz		F-type
NJR2936EN					N-type

■ Specifications

Item	Specifications
Input Interface	Waveguide, WR 75 with Groove
Output Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Noise Figure (at +25 °C)	0.8 dB
Conversion Gain (at +25 °C)	60 dB typ.
Requirement External Reference Signal (Only NJR2935E series are specified)	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -10 to 0 dBm Phase Noise: -135 dBc/Hz @100Hz -143 dBc/Hz @1kHz -145 dBc/Hz @10kHz
Phase Noise (SSB)	(Internal Reference Type) NJR2835 series : -70 dBc/Hz @100Hz -80 dBc/Hz @1kHz (External Reference Type) NJR2935E series : -75 dBc/Hz @100Hz -80 dBc/Hz @1kHz -85 dBc/Hz @10kHz * Depends on Phase Noise of External Reference
Power Requirement	+12 to +24 VDC
Operating Current	250 mA max.
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +80 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L)100.5 x (W) 40 x (H) 40 mm [(L) 3.96" x (W) 1.57" x (H) 1.57"]
Weight	260 g [0.57 lbs]

10W BUC : NJT5762 series

10W BUC: NJT5762, NJT5763 & NJT5764 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	AC Power Option	Power Supply	M&C Function	LED Indicator
NJT5763N	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz	+40 dBm min. (10W)	N-type	NA	DC Power	NA	Equipped
NJT5763F					F-type		Input Port: IF Connector		
NJT5763NM					N-type		DC Power		
NJT5763FM					F-type		Input Port: MS Connector		
NJT5763NMD					N-type		Floating DC Power: -48/+48V		
NJT5763FMD					F-type		Input Port: MS Connector		
NJT5763NA					N-type		DC Power		
NJT5763FA					F-type	Enclosed *Note8 Indoor AC/DC PSU	Input Port: MS Connector		
NJT5762N	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	NA	DC Power		
NJT5762F					F-type		Input Port: IF Connector		
NJT5762NM					N-type		DC Power		
NJT5762FM					F-type		Input Port: MS Connector		
NJT5762NMD					N-type		Floating DC Power: -48/+48V		
NJT5762FMD					F-type		Input Port: MS Connector		
NJT5762NA					N-type		DC Power		
NJT5762FA					F-type	Enclosed *Note8 Indoor AC/DC PSU	Supplied by Indoor AC/DC PSU		
NJT5762KN					N-type	NA	DC Power	FSK Communications M&C *Note1	
NJT5762KF					F-type		Input Port: IF Connector		
NJT5762KNM					N-type		DC Power		
NJT5762KFM					F-type		Input Port: MS Connector		
NJT5764N	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type		DC Power	NA	
NJT5764F					F-type		Input Port: IF Connector		
NJT5764NM					N-type		DC Power		
NJT5764FM					F-type		Input Port: MS Connector		
NJT5764NMD					N-type		Floating DC Power: -48/+48V		
NJT5764FMD					F-type		Input Port: MS Connector		
NJT5764NA					N-type		DC Power		
NJT5764FA					F-type	Enclosed *Note8 Indoor AC/DC PSU	Supplied by Indoor AC/DC PSU		

*Note1: The detail is shown in section of "FSK COMMUNICATIONS M&C".

*Note8: The detail is shown in section of "INDOOR 150W AC/DC PSU".



Standard C 10W: NJT5762 series
Full C 10W: NJT5763 series
Insat C 10W: NJT5764 series

Datasheet



Specifications

Item	Specifications
Output Interface	Waveguide, CPR 137 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+40 dBm min. over temperature
Conversion Gain	64 dB nom., 58 dB min.
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -125 dBc/Hz @100Hz -135 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. @ RF Frequency
Power Requirement	+18 to +60 VDC at BUC Input Port (Floating DC Power Option) +48 / -48 VDC (38 to 55 VDC) (AC Power Option) 90 to 264 VAC at Indoor AC/DC PSU
Power Consumption	69 W typ., 75 W max. : (Standard C-band) NJT5762 series 75 W typ., 85 W max. : (Full C-band) NJT5763 series 73 W typ., 80 W max. : (Insat C-band) NJT5764 series
Port for Voltage Input	Same as IF Connector : NJT5762N / 62F / 62KN / 62KF / 63N / 63F / 64N / 64F MS Connector : NJT5762NM / 62FM / 62KNM / 62KFM / 63NM / 63FM / 64NM / 64FM IF Connector supplied by Indoor AC/DC PSU through IF Cable : NJT5762NA / 62FA / 63NA / 63FA / 64NA / 64FA
Temperature Range (ambient)	Operating : -40 to +55 °C Storage : -40 to +75 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 219.5 x (W) 175 x (H) 99 mm [(L) 8.64" x (W) 6.89" x (H) 3.90"]
Weight	3.2 kg [7.0 lbs]

■ 5W BUC : NJT5669 series

FULL C-BAND



Standard C 5W: NJT5669 series

Full C 5W: NJT5677 series

Palapa C 5W: NJT5675 series

Insat C 5W: NJT5670 series

Datasheet



● 5W BUC: NJT5669, NJT5670, NJT5675 & NJT5677 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT5677N	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz	+37 dBm min. (5W)	N-type	Equipped
NJT5677F					F-type	
NJT5669	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	
NJT5669F					F-type	
NJT5675N	6.365 to 6.725 GHz (Palapa C-band)	5.30 GHz	1,065 to 1,425 MHz		N-type	
NJT5675F					F-type	
NJT5670	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type	
NJT5670F					F-type	

■ 3W / 2W BUC : NJT8102 & NJT8103 series

FULL C-BAND



Full C 3W: NJT8103W series

Standard C 3W: NJT8103 series

Insat C 3W: NJT8103E series

Full C 2W: NJT8102W series

Standard C 2W: NJT8102 series

Insat C 2W: NJT8102E series

Datasheet

NJT8103 series



Datasheet

NJT8102 series



● 3W BUC: NJT8103 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8103WN	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz	+34.5 dBm min. (3W)	N-type	N/A
NJT8103WF					F-type	
NJT8103N	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	
NJT8103F					F-type	
NJT8103EN	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type	
NJT8103EF					F-type	

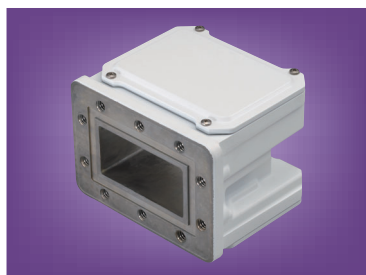
● 2W BUC: NJT8102 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8102WN	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz	+33 dBm min. (2W)	N-type	N/A
NJT8102WF					F-type	
NJT8102N	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	
NJT8102F					F-type	
NJT8102EN	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type	
NJT8102EF					F-type	

■ Specifications

Item	Specifications
Output Interface	Waveguide, CPR 137 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+37.0 dBm min. over temperature : (5W) NJT5669 / NJT5670 / NJT5675 / NJT5677 series +34.5 dBm min. over temperature : (3W) NJT8103 series +33.0 dBm min. over temperature : (2W) NJT8102 series
Conversion Gain	61 dB nom. : (5W) NJT5669 / NJT5670 / NJT5675 / NJT5677 series 59 dB nom., 53 dB min. : (3W) NJT8103 series 58 dB nom., 52 dB min. : (2W) NJT8102 series
Requirement External Reference Signal	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -5 to +5 dBm Phase Noise: -120 dBc/Hz @100Hz -130 dBc/Hz @1kHz -140 dBc/Hz @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz @1kHz -80 dBc/Hz @10kHz -90 dBc/Hz @100kHz -100 dBc/Hz @1MHz
Input / Output V.S.W.R.	2.0 : 1 max. @ IF Frequency 2.0 : 1 max. @ RF Frequency
Power Requirement	+12 to +30 VDC : NJT8103 / NJT8102 series +15 to +30 VDC : NJT5668 / NJT5669 / NJT5670 / NJT5675 / NJT5677 series
Power Consumption	48 W max. : (5W) NJT5669 / NJT5675 / NJT5677 series 50 W max. : (5W) NJT5670 series 21 W typ., 25 W max. : (3W) NJT8103 series 18 W typ., 22 W max. : (2W) NJT8102 series
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +75 °C : NJT8103 / NJT8102 series Operating : -40 to +55 °C Storage : -40 to +75 °C : NJT5669 / 70 / 75 / 77 series
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 135.4 x (W) 85 x (H) 56 mm [(L) 5.31" x (W) 3.35" x (H) 2.20"] : NJT8103 / NJT8102 series (L) 190.6 x (W) 160 x (H) 59 mm [(L) 7.50" x (W) 6.30" x (H) 2.32"] : NJT5669 / 70 / 75 / 77 series
Weight	800 g [1.8 lbs] : NJT8103 / NJT8102 series 1.9 kg [4.2 lbs] : NJT5669 / NJT5670 / NJT5675 / NJT5677 series

■ PLL LNB [Internal & External Reference Type] : NJS8486 & NJS8486E series



C PLL (Int): NJS8486 series
C PLL (Ext): NJS8486E series

Datasheet



● Internal Reference Type: NJS8486 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 °C]	IF Connector
NJS8486H	3.400 to 4.200 GHz (Palapa C-band)	5.15 GHz	950 to 1,750 MHz	+/- 10 ppm	F-type
NJS8486HN				(+/- 50 kHz typ.)	N-type
NJS8486S				+/- 3 ppm	F-type
NJS8486SN				(+/- 15 kHz typ.)	N-type
NJS8486U				+/- 1 ppm	F-type
NJS8486UN	3.625 to 4.200 GHz (Standard C-band)	5.15 GHz	950 to 1,525 MHz	(+/- 5 kHz typ.)	N-type
NJS8487H				+/- 10 ppm	F-type
NJS8487HN				(+/- 50 kHz typ.)	N-type
NJS8487S				+/- 3 ppm	F-type
NJS8487SN				(+/- 15 kHz typ.)	N-type
NJS8487U	4.500 to 4.800 GHz (Insat C-band)	5.76 GHz	960 to 1,260 MHz	+/- 1 ppm	F-type
NJS8487UN				(+/- 5 kHz typ.)	N-type
NJS8488H				+/- 10 ppm	F-type
NJS8488HN				(+/- 50 kHz typ.)	N-type
NJS8488S				+/- 3 ppm	F-type
NJS8488SN				(+/- 15 kHz typ.)	N-type
NJS8488U				+/- 1 ppm	F-type
NJS8488UN				(+/- 5 kHz typ.)	N-type

● External Reference Type: NJS8486E series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 °C]	IF Connector
NJS8486E	3.400 to 4.200 GHz (Palapa C-band)	5.15 GHz	950 to 1,750 MHz	Depend on External Reference	F-type
NJS8486EN					N-type
NJS8487E	3.625 to 4.200 GHz (Standard C-band)	5.15 GHz	950 to 1,525 MHz		F-type
NJS8487EN					N-type
NJS8488E	4.500 to 4.800 GHz (Insat C-band)	5.76 GHz	960 to 1,260 MHz		F-type
NJS8488EN					N-type

■ Specifications

Item	Specifications
Input Interface	Waveguide, CPR 229 (with Groove)
Output Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Noise Temperature (at +25 °C)	15 K
Conversion Gain (at +25 °C)	59 dB min.
Requirement External Reference Signal (Only NJS8486E series is specified)	Input Port: IF Connector (combine reference with IF signal) Frequency: 10 MHz (sine-wave) Input Power: -10 to 0 dBm Phase Noise: -135 dBc/Hz @100Hz -143 dBc/Hz @1kHz -145 dBc/Hz @10kHz
Phase Noise (SSB)	(Internal Reference Type) NJS8486 series -70 dBc/Hz @100Hz -80 dBc/Hz @1kHz -85 dBc/Hz @10kHz -90 dBc/Hz @ 100 kHz (External Reference Type) NJS8486E series -70 dBc/Hz @100Hz -80 dBc/Hz @1kHz -85 dBc/Hz @10kHz -90 dBc/Hz @ 100 kHz * Depends on Phase Noise of External Reference
Power Requirement	+12 to +24 VDC
Operating Current	350 mA : (Internal Reference type) NJS8486 series 400 mA : (External Reference type) NJS8486E series
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +80 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 80.8 x (W) 99.6 x (H) 76 mm [(L) 3.18" x (W) 3.92" x (H) 2.99"]
Weight	800 g [1.76 lbs]

■ LNA : NJS8451 & NJS8452



LNA: NJS8451 & NJS8452

Datasheet

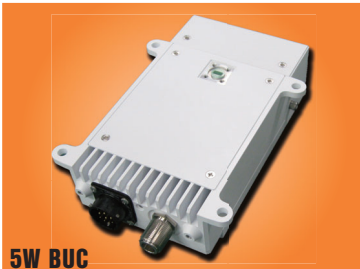


Model No.	RF Frequency
NJS8452	3.400 to 4.200 GHz (Palapa C-band)
NJS8451	4.500 to 4.800 GHz (Insat C-band)

■ Specifications

Item	Specifications
Input Interface	Waveguide, CPR 229 (with Groove)
Output Interface	Coax. Connector, N-type female (50 ohm)
Noise Temperature (at +25 °C)	15 K
Gain (at +25 °C)	48 dB min., 55 dB max. : (Palapa C-band) NJS8452 55 dB min., 62 dB max. : (Insat C-band) NJS8451
Input V.S.W.R.	3.0 : 1 @ RF Frequency
Output V.S.W.R.	2.0 : 1 @ RF Frequency
Power Requirement	+12 to +28 VDC
Operating Current	125 mA typ., 160 mA max.
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +80 °C
Waterproof / Dustproof (IP Code)	IP 67
Dimension (without Interface Connector)	(L) 80.8 x (W) 99.6 x (H) 76 mm [(L) 3.18" x (W) 3.92" x (H) 2.99"]
Weight	800 g [1.76 lbs]

Global Xpress® Ka-band 5W BUC & K-band PLL LNB



5W BUC

■ 5W BUC : NJT5830

- **Global Xpress® Compliance**
RF Frequency: 29.0 to 30.0 GHz
Local Frequency: 28.05 GHz
IF Frequency: 950 to 1,950 MHz
- **High Efficiency Output Power**
Output Power: +37 dBm (5W Linear)
ACPR: -20 dBc max. @ MOP
Power Consumption: 88 W max.

- **High Temperature Operating**
Temperature Range: -40 to +73 °C
- **Reliable All-weather Performance**
- **Small Size & Light Weight**
Weight: 1.6 kg
Dimension: 180 x 100 x 50 mm



PLL LNB

■ PLL LNB : NJR2825

- **Global Xpress® Compliance**
RF Frequency: 19.2 to 20.2 GHz
Local Frequency: 18.25 GHz
IF Frequency: 950 to 1,950 MHz
- **High Local Stability**
Local Stability: +/- 3.0 ppm
- **Low Noise Figure**
Noise Figure: 1.3 dB

- **High Temperature Operating**
Temperature Range: -40 to +73 °C
- **Reliable All-weather Performance**
- **Small Size & Light Weight**
Weight: 400 g
Dimension: 85 x 68 x 34 mm

Detailed Info.



03b Networks Ka-band 10W/5W BUCs & K-band PLL LNBs



10W / 5W BUC

■ 10W / 5W BUC : NJT5836 & NJT5835 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power	IF Connector
NJT5836L	27.652 to 28.388 GHz	26.600 GHz	1,052 to 1,788 MHz	+40 dBm Saturation (10W)	N-type
NJT5836H	28.172 to 29.071 GHz	27.200 GHz	972 to 1,871 MHz		
NJT5835L	27.652 to 28.388 GHz	26.600 GHz	1,052 to 1,788 MHz	+37 dBm Saturation (5W)	
NJT5835H	28.172 to 29.071 GHz	27.200 GHz	972 to 1,871 MHz		

- **High Efficiency Output Power**
(10W Model)
Saturation Output Power: +40 dBm (10W)
Power Consumption: 170 W max.
(5W Model)
Saturation Output Power: +37 dBm (5W)
Power Consumption: 88 W max.

- **Ethernet M&C Function Equipped**
Gain Control: 15 dB range, 1 dB step
Power Monitor: 12 dBm dynamic range
- **Reliable All-weather Performance**
- **Small Size & Light Weight**
Weight: 4.5 kg
Dimension: 160 x 149.6 x 90 mm



PLL LNB

■ PLL LNB : NJR2828 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-20 to +50 °C]	IF Connector
NJR2828L	17.852 to 18.588 GHz	16.800 GHz	1,052 to 1,788 MHz	+/- 1.5 ppm	N-type
NJR2828H	18.372 to 19.300 GHz	17.400 GHz	972 to 1,900 MHz	(+/- 25 kHz typ.)	

- **Low Noise Temperature**
Noise Temperature: 101 K typ., 120 K max.
- **High LO Stability**
Local Stability: +/- 1.5 ppm

- **Reliable All-weather Performance**
- **Small Size & Light Weight**
Weight: 500 g
Dimension: 150 x 80 x 30 mm

Detailed Info.



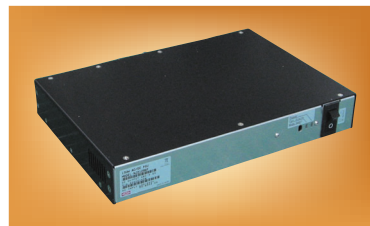
INDOOR 150W AC/DC PSU

The features of Indoor 150W AC/DC Power Supply Unit (PSU) are to provide the stable +48V DC power to operate both C-band 8W/10W and Ku-band 8W BUCs, even if inner power supply of the modem is not capable enough to operate these BUCs.

The indoor AC/DC 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 indoor 150W AC/DC PSU complies with **UL CERTIFICATION** and **EC DIRECTIVE** and this housing can fit the 1U rack mount with optional kit.

Detailed Info.



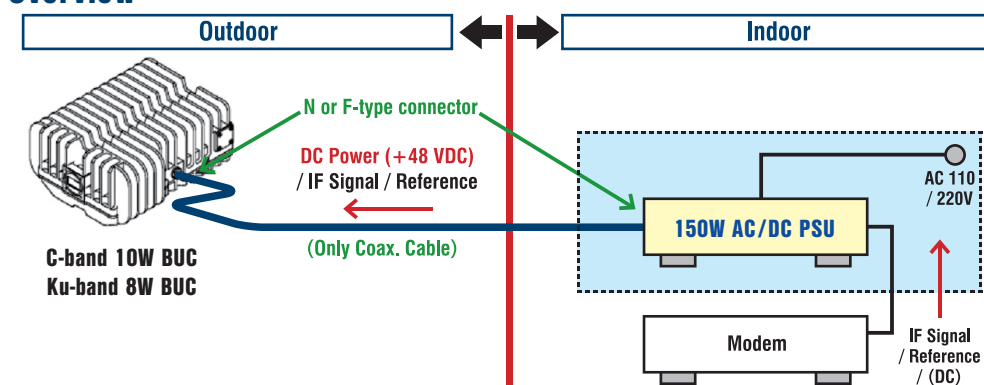
Indoor 150W AC/DC PSU



Applicable Models:

NJT5118, NJT5218, NJT5762, NJT5763, NJT5764, and NJT8318 series

Overview



OUTDOOR 250W AC/DC PSU

The features of Outdoor 250W AC/DC Power Supply Unit (PSU) are to provide the stable +48V DC power to operate Ku-band 16W/25W BUC, even if power supply of the equipment is not capable enough to operate the BUC.

This unit employs the aluminum housing with corrosion-proof treatment on the surface and has air-sealing structure in order to use perfectly as the outdoor unit.

In addition, the outdoor 250W AC/DC PSU complies with **EC DIRECTIVE**.

Detailed Info.



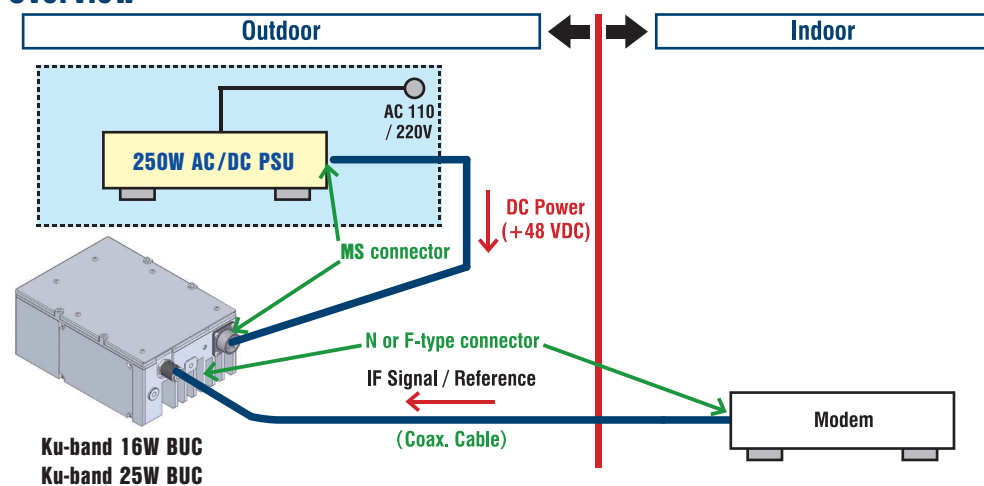
Outdoor 250W AC/DC PSU



Applicable Models:

NJT8319 and NJT8370 series

Overview



OUTDOOR 500W AC/DC PSU

The features of Outdoor 500W AC/DC Power Supply Unit (PSU) are to provide the stable +51V DC power to operate Ku-band 40W BUC, even if power supply of the equipment is not capable enough to operate the BUC.

This unit employs the aluminum housing with corrosion-proof treatment on the surface and has air-sealing structure in order to use perfectly as the outdoor unit.

In addition, the outdoor 500W AC/DC PSU complies with **EC DIRECTIVE**.



Outdoor 500W AC/DC PSU

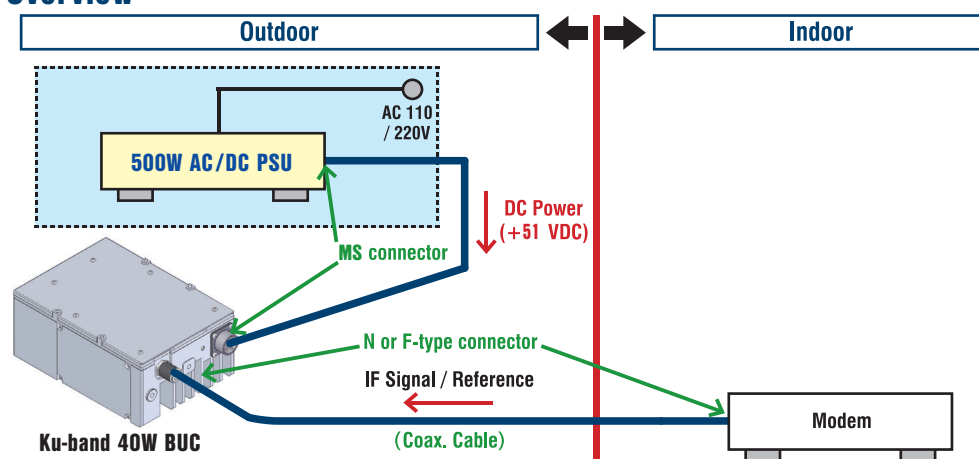


Applicable Models:
NJT8371 series

Detailed Info.



Overview



ACCESSORIES

The following mount brackets and cables are prepared as generic options.

Mount Bracket Option

Model No.	Description
NJZ1290D01	Mount Bracket for NJT8318 [Ku-band 8W BUC]
	Mount Bracket for NJT8319 [Ku-band 16W BUC]
	Mount Bracket for NJT8370 [Ku-band GaN 25W BUC]
NJZ1290D05	Mount Bracket for NJT8371 [Ku-band GaN 40W BUC]
NJZ1290D02	Mount Bracket for NJZ1289 [Outdoor 250W AC/DC PSU]
NJZ1290D04	Mount Bracket for NJZ1295 [Outdoor 500W AC/DC PSU]

Detailed Info.



Cable Option

Model No.	Description
NJZ1290A01	AC Power Cable of 3 m length for NJZ1289 [Outdoor 250W AC/DC PSU] Connecting between NJZ1289 and AC outlet
NJZ1290A02	DC Power Cable of 5 m length for NJZ1289 [Outdoor 250W AC/DC PSU] Connecting between NJZ1289 and BUC
NJZ1290A03	AC Power Cable of 3 m length for NJZ1295 [Outdoor 500W AC/DC PSU] Connecting between NJZ1295 and AC outlet
NJZ1290A04	DC Power Cable of 5 m length for NJZ1295 [Outdoor 500W AC/DC PSU] Connecting between NJZ1295 and BUC

Detailed Info.



GENERAL PRECAUTIONS

Use the following safety instructions and guidelines and to help protect the products from potential damage and to help ensure your own personal safety.

BUCs Instructions:

CAUTION Sealing Film

DO NOT remove the film on the waveguide when the unit has it. If the film is removed, it may lose the performance of waterproof.

CAUTION Cover

DO NOT open the cover. Although the unit is completely waterproof, if the cover is opened, the warranty will become invalid.

CAUTION Product Label

DO NOT remove the label. This is for our QA traceability

CAUTION Connector

Connect the IF cable with 0.68 to 1.13 N·m torques.

CAUTION WG Filter

DO NOT touch the filter in the waveguide. The filter is used for Rx-band rejection. If the filter is damaged or dirty, it may not reject a sufficient quantity of false Rx-bands and could damage BUC internals.

CAUTION Input Voltage

Apply DC voltage within the range indicated on product label. BUCs are operated at the input voltage of +12 to +30VDC, +15 to +24VDC, +15 to +30VDC, +18 to +60VDC, or +36 to +60VDC.

CAUTION Input IF Level

DO NOT supply IF signal over the maximum level indicated on product label of +10 or +13 dBm.

WARNING Fins

Warning: DO NOT touch the body, especially fins, when the product is running. It is hot. DO NOT block the fins. Normally the BUC should be mounted with fins face up.

CAUTION 10MHz Reference

Supply 10MHz reference signal within the range of -5 to +5 dBm.

LNBs Instructions:

CAUTION Sealing Film

DO NOT remove the film on the waveguide when the unit has it. If the film is removed, it may lose the performance of waterproof.

CAUTION Cover

DO NOT open the cover. Although the unit is completely waterproof, if the cover is opened, the warranty will become invalid.

CAUTION Product Label

DO NOT remove the label. This is for our QA traceability

CAUTION Connector

Connect the IF cable with 0.68 to 1.13 N·m torques.

CAUTION Input RF Level

DO NOT supply RF signal over the absolute maximum rating of -10 dBm @ CW or +10 dBm @ Pulse.

CAUTION Input Voltage

Apply DC voltage within the range indicated on product label. LNBs are operated at the input voltage of +10 to +24VDC, +12 to +24VDC, or +12 to +28VDC.

PRODUCT LABEL

The common product label with following format is employed for both of all LNBs and BUCs manufactured by New Japan Radio Co., Ltd.

Label Format:

Product Name
Model Number
Model Number Bar-code [CODE 39]

WEEE Logo
RoHS Compliant
CE Marking

(for Example as Ku-band BUC)

RF Frequency
Local Frequency

Serial Number
Serial Number Bar-code [CODE 39]

DANGER:
* High Temperature
CAUTION:
* DC Input Voltage Range
* Maximum IF/Ref. Input Level

Applicable Models: All models of LNB and BUC

DECLARATION OF EC DIRECTIVE

New Japan Radio Co., Ltd. declare that all of the BUCs and LNBs are in compliance with the regulations which standard are required for EMC directive 2014/30/EU and Reduction of Hazardous Substance (RoHS) directive 2011/65/EU, (EU)2015/863.



MUTE FUNCTION

Mute function which shut off the HPA function due to local unlocked or no 10MHz reference signal is equipped for all BUCs.

Applicable Models: All models of BUC

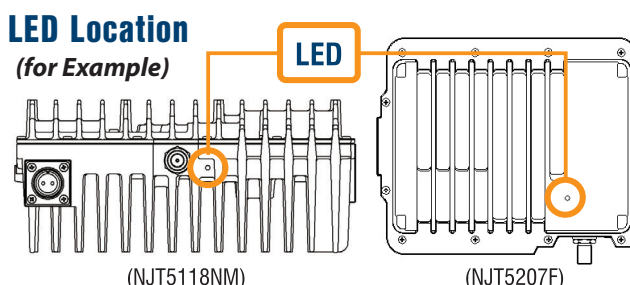
LED INDICATOR

BUC products integrated with LED Indicator show normal or abnormal conditions.

Status Chart

DC Power	OFF	ON	ON
10 MHz Reference Signal	OFF	OFF or LO unlocked	ON "Normal"

LED Location (for Example)



Applicable Models: Specified BUCs

FSK COMMUNICATIONS M&C

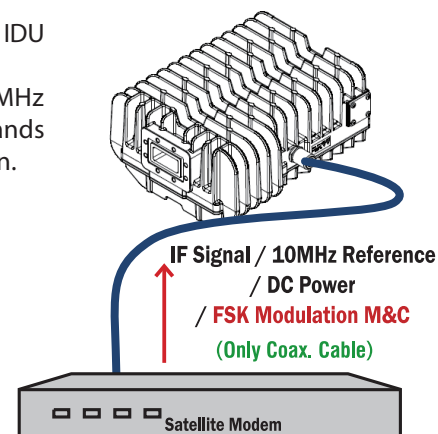
The BUC equipped FSK communications M&C includes capability to communicate with a IDU (e.g. satellite modem or M&C controller).

The signal of the M&C is multiplexed onto the IF coaxial cable with the IF signal, 10 MHz reference, and DC power between the BUC and the IDU. The M&C implements commands to control BUC functions and to query the BUC for configuration or status information.

Functions

CONTROL	MONITOR
● Request Status ● Set Transmit On/Off Control	● Output Power Monitor * Detector Range: 20 dB (up to P1dB) * Accuracy: +/- 1.0 dB ● Temperature Monitor etc

Applicable Models: NJT5762, NJT8318, NJT8319, NJT8370 and NJT8371 series



RS-232C INTERFACE M&C

The BUC equipped RS-232C interface M&C includes capability to communicate with a IDU (e.g. M&C controller or personal computer). The signal of the M&C is compliance with RS-232C and the M&C implements commands to control BUC functions and to query the BUC for configuration or status information.

Applicable Models: NJT8318, NJT8319, NJT8370 and NJT8371 series

Functions

CONTROL	MONITOR
● Request Status ● Transmit On/Off Control ● Step Attenuator Setting * Attenuator Range: 0 to 15.5 dB * Attenuator Step: 0.5 dB	● Output Power Monitor * Detector Range: 15 dB (up to P1dB/Psat) * Accuracy: +/- 1.0 dB ● Temperature Monitor ● Status * Temperature Out-of-Range * PLL Out-of-Lock * Tx Status - etc

CSR VISION

New Japan Radio group's corporate social responsibility is "To realize the corporate mission while continuing to contribute to the healthy development of society." To this end, we are committed to:

- Being aware that we are a part of society.
- Considering at all times what can be done to make society develop and to create better lifestyles for people by providing optimum components based on the two "μ" technologies.
- Striving to develop relationships of trust, and meeting the expectations of the community and stakeholders.
- Contributing to the realization of a sustainable society



QUALITY & ENVIRONMENTAL MANAGEMENT

The New Japan Radio group strives to contribute to quality and the environment by maintaining and improving two management systems which are positioned as part of quality management and environmental management. In order to facilitate quality management and environmental management, we declare the Quality and Environmental Vision as the superior guidelines for the New Japan Radio group. Moreover, basic quality/environmental policies are also set at each company where activities focusing on the improvement and management of quality and the environment are being carried out.

QUALITY VISION

The New Japan Radio Group provides products and services meeting quality expectations of society and customers by ingenious technologies and originality of all the members.

ENVIRONMENTAL VISION

The New Japan Radio Group recognizes that protecting the global environment is a significant universal subject to ensure sustainable growth and is corporate social responsibility, and we act based on considering the environmental protection in all of corporate activity.

QUALITY & ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATION

ISO 9001 : 2015

Registration Date: November 25, 1994
 Last Renewal Date: January 10, 2018
 Expiry Date: January 9, 2021
 Certification Number: JQA-0686
 Certification Organization: JQA (*)

(*) JQA: Japan Quality Assurance Organization

ISO 14001 : 2015

Registration Date: December 17, 2004
 Last Renewal Date: January 13, 2018
 Expiry Date: January 12, 2021
 Certification Number: JQA-EM4431
 Certification Organization: JQA



GENERAL CAUTION

1. While New Japan Radio, Ltd.(NJR) continually strives to improve the quality and reliability of any products, failures would 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 product related to satellite communications on this document (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 specifications. NJR assumes 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 NJR are responsible occurring during the warranty period, NJR 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 NJR 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 Cl₂, H₂S, SO₂, and NO₂. 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. This product contains 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. NJR request that you do not use our products or the technical data published on this document for developing weapons of mass destruction or for any other military purposes or applications.
8. The product specifications on this document are subject to change without notice. If you are considering using a product, delivery specifications must first be settled.

New Japan Radio Co., Ltd. (NJR) was founded in 1959, as the progeny of Japan Radio Co., Ltd., and has emerged as pioneer in microwave and semiconductor technologies in Japan.

Since then, NJR has devoted their own technologies to develop the products.

Now, under the concept of " μ & μ " development which means the convergence of "Microelectronics" and "Microwave" to expand their technology, NJR sets to meet demands of the ubiquitous age.

NJR has three business segments:

- Semiconductor devices
- Microwave application products
- Microwave tubes and radar components

Creating a future through the convergence of "Microelectronics" and "Microwave" (μ & μ)



Semiconductor Devices

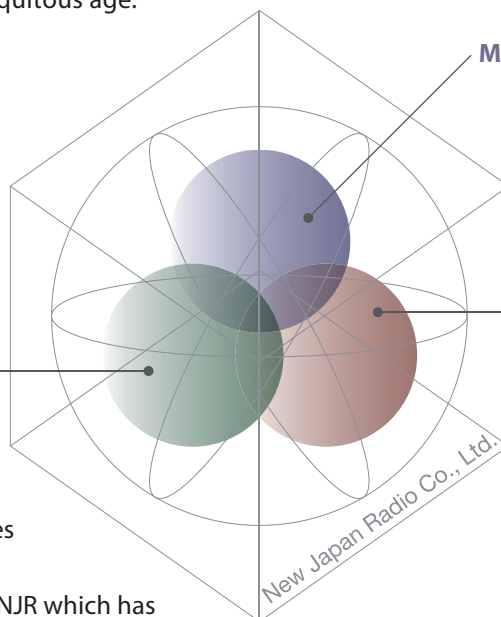
- ◆ MOS ICs
- ◆ Bipolar ICs
- ◆ GaAs ICs
- ◆ SAW Devices
- ◆ Optoelectronic Devices
- ◆ MEMS

Microwave Tubes and Radar Components

- ◆ Electron tubes and peripheral devices
- ◆ Electron guns and cathodes

Microwave Application Products

- ◆ Components for Satellite Communications
- ◆ Sensor components



Microwave Division is one of divisions engaged in NJR which has kept supplying reliable components, created through the concept of " μ & μ ", in microwave fields.

Components which Microwave Division has been supplying are as shown below.

Microwave Division will keep complying with any requirements to be brought from the market.



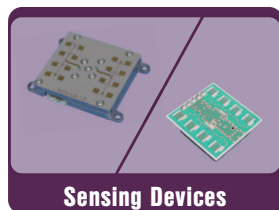
LNBs for VSAT



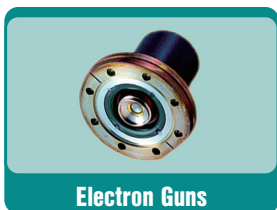
BUCs for VSAT



RF units for FWA/BWA



Sensing Devices



Electron Guns



Electron Tubes

Catalog URL



*Note: The contents of this catalogue are subject to change without notice.



New Japan Radio Co., Ltd.

Microwave Division

1-1, Fukuoka 2-chome, Fujimino-city
SAITAMA, 356-8510 JAPAN
Phone: +81-49-278-1270
Fax: +81-49-278-1234
email: mcsales@njr.co.jp

<http://www.njr.com/micro>

