

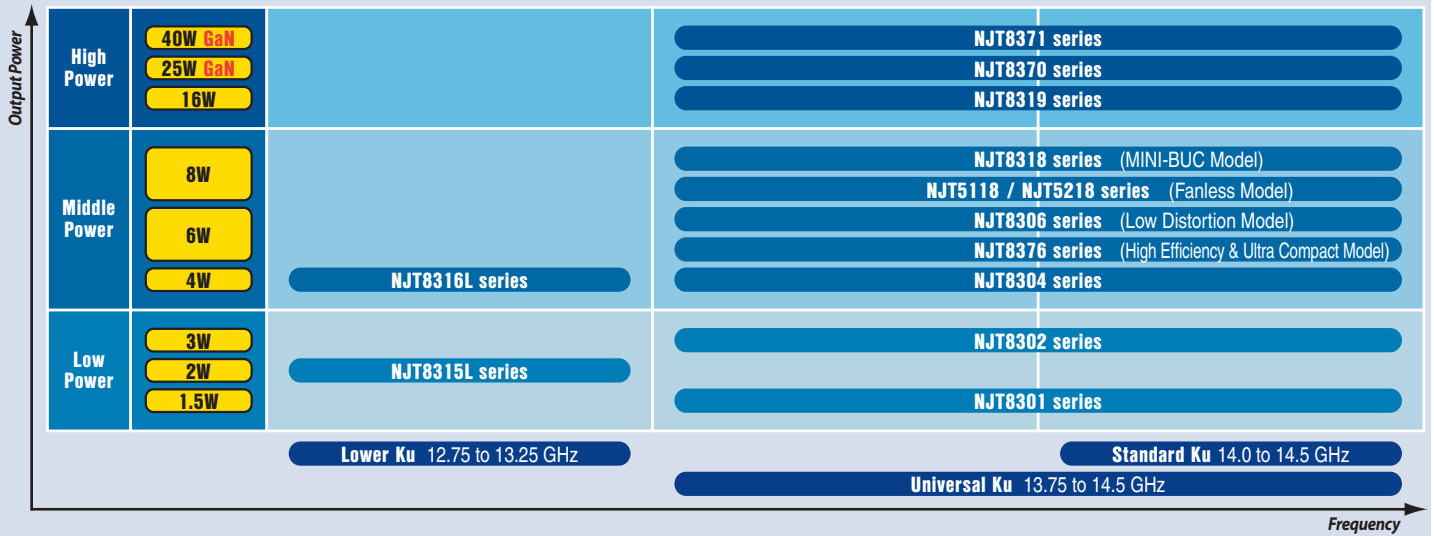
# **VSAT PRODUCT LINEUP 2022**



**NSSHINBO**

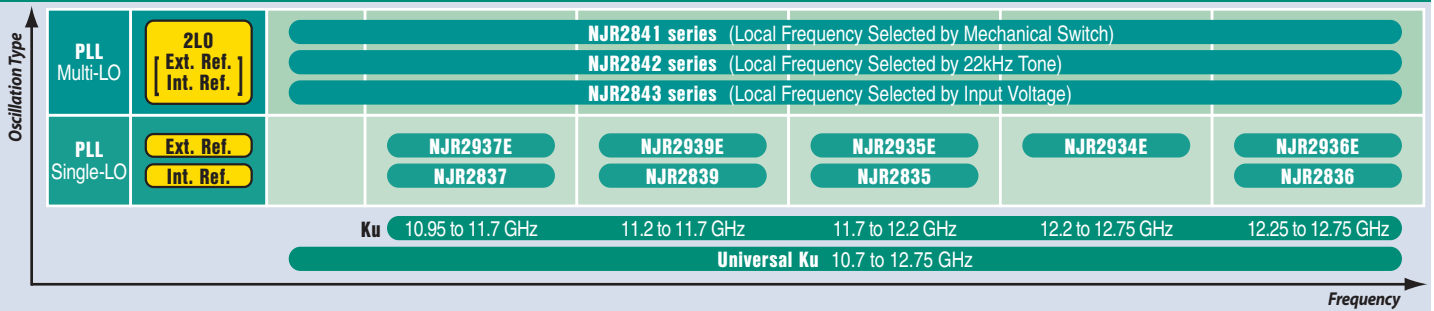
## Ku-band BUC

P3 >



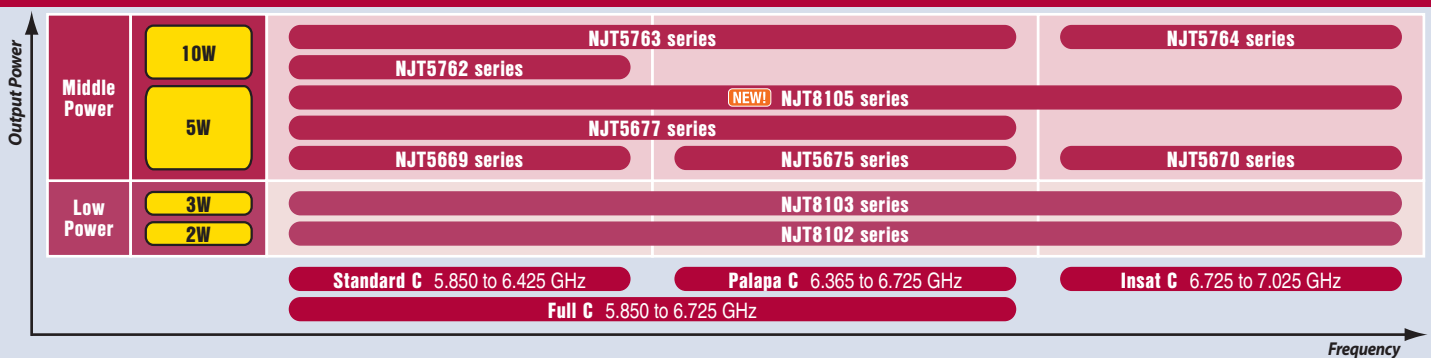
## Ku-band LNB

P11 >



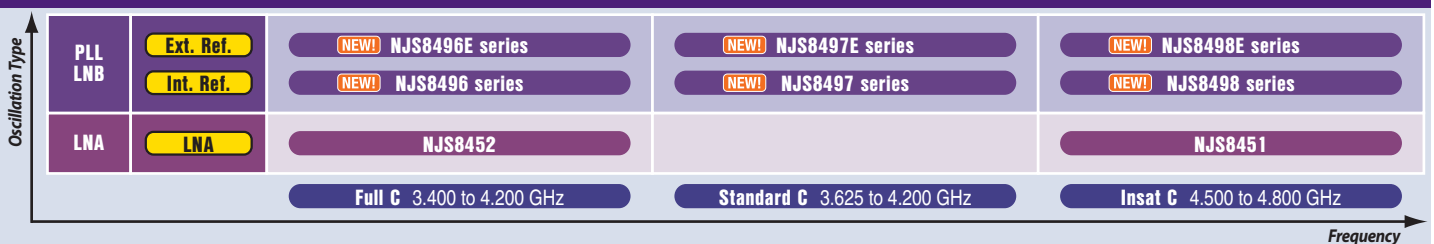
## C-band BUC

P13 >

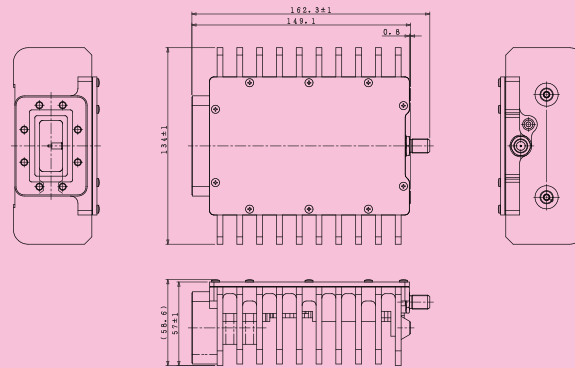


## C-band LNA/LNB

P16 >



## C-band 5W MINI-BUC: NJT8105 series



### ➤ Various C-band Frequency Band

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

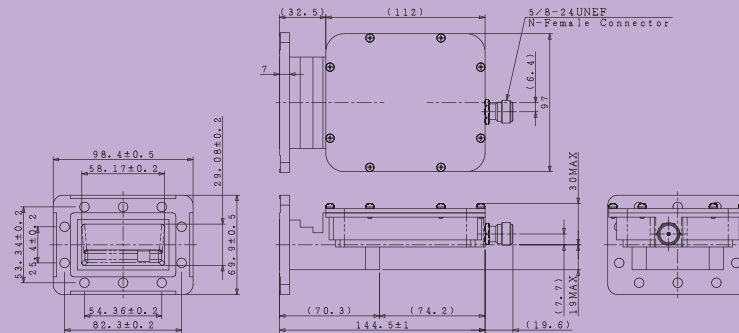
### ➤ Smaller Size & Lighter Weight

Dimension: 149.1 (L) x 134 (W) x 57 (H) mm  
 Weight: 1.37 kg

### ➤ High Efficiency Output Power

P1dB: +37 dBm min. over Temperature  
 ACPR: -26 dBc @ Pout ≤ +37 dBm  
 Power Consumption: 40 W

## C-band PLL LNB: NJS8496 series



### ➤ Various C-band Frequency Band

3.4 to 4.2 GHz / 3.625 to 4.2 GHz / 4.5 to 4.8 GHz

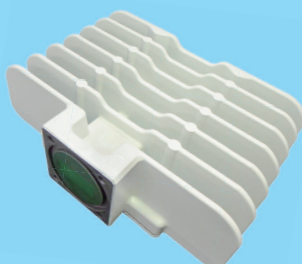
### ➤ Low Noise Performance

Noise Temperature(NT): 15 K typ., 30 K max.

### ➤ Small Size & Light Weight

Dimension: 144.5 (L) x 98.4 (W) x 69.9 (H) mm  
 Weight: 670 g

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



### ➤ Good Linearity;

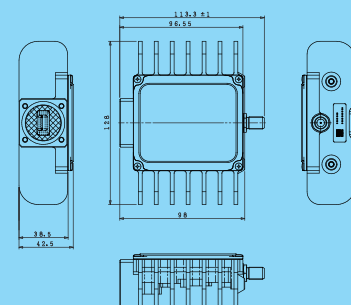
**Installed GaAs Based FET**  
**Supporting Amplitude Modulation**

### ➤ 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) x 128 (W) x 42.5 (H) mm  
 Weight: 540 g



## 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		DC Power					
NJT8371UFMKA					F-type	*Note1	Supplied by Outdoor AC/DC PSU						
NJT8371UNMR					N-type	RS-232C	NA	DC Power					
NJT8371UFMR					F-type	Interface	Input Port: MS Connector						
NJT8371UNMRA					N-type	M&C	Enclosed *Note3 Outdoor AC/DC PSU	DC Power					
NJT8371UFMRA					F-type	*Note2	Supplied by Outdoor AC/DC PSU						
NJT8371NMK					14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz	+46 dBm (40W)		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	DC Power										
NJT8371FMKA	F-type	*Note1	Supplied by Outdoor AC/DC PSU										
NJT8371NMR	N-type	RS-232C	NA	DC Power									
NJT8371FMR	F-type	Interface	Input Port: MS Connector										
NJT8371NMRA	N-type	M&C	Enclosed *Note3 Outdoor AC/DC PSU	DC Power									
NJT8371FMRA	F-type	*Note2	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 "ACCESSORIES".

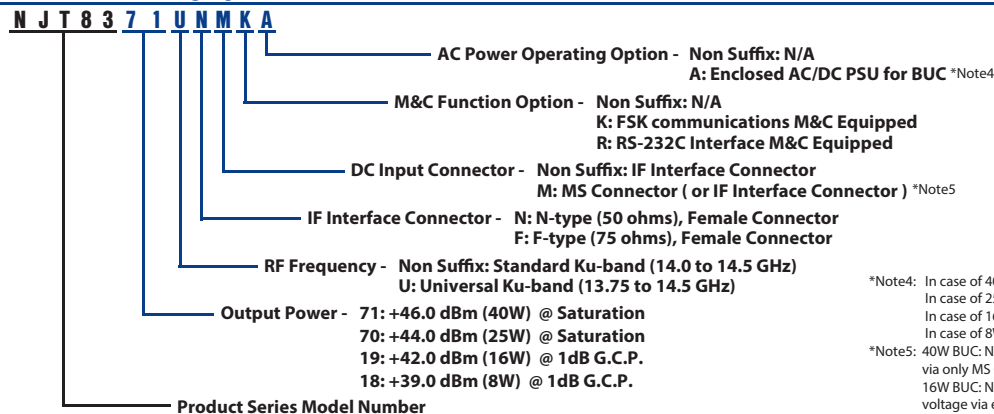


Standard Ku 40W: NJT8371 series  
Universal Ku 40W: NJT8371U series

## 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	Input Port: IF Connector ( combine reference with IF signal )
Reference 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 / 71UNMKA / 71UFMKA / 71UNMRA / 71UFMRA
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 / 71UNMKA / 71UFMKA / 71UNMRA / 71UFMRA
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 x (W) 150 x (H) 100 mm [ (L) 9.07" x (W) 5.91" x (H) 3.94" ]
Weight	4.2 kg [ 9.7 lbs ]

## Model Numbering System



\*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 Communications	NA	DC Power	Equipped				
NJT8370UFMK					F-type					M&C *Note1	Enclosed *Note3 Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8370UNMKA					N-type	RS-232C Interface	NA	DC Power					
NJT8370UFMKA					F-type					M&C *Note2	Enclosed *Note3 Outdoor AC/DC PSU	Supplied by Outdoor AC/DC PSU	
NJT8370UNMR					N-type	FSK Communications	NA	DC Power					
NJT8370UFMR					F-type					M&C *Note1	Enclosed *Note3 Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8370UNMRA					N-type	RS-232C Interface	NA	DC Power					
NJT8370UFMRA					F-type					M&C *Note2	Enclosed *Note3 Outdoor AC/DC PSU	Supplied by Outdoor AC/DC PSU	
NJT8370NMK					14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450 MHz						N-type
NJT8370FMK										F-type	M&C *Note1	Enclosed *Note3 Outdoor AC/DC PSU	Input Port: MS Connector
NJT8370NMKA	N-type	RS-232C Interface	NA	DC Power									
NJT8370FMKA	F-type								M&C *Note2	Enclosed *Note3 Outdoor AC/DC PSU	Supplied by Outdoor AC/DC PSU		
NJT8370NMRA	N-type	FSK Communications	NA	DC Power									
NJT8370FMRA	F-type								M&C *Note1	Enclosed *Note3 Outdoor AC/DC PSU	Input Port: MS Connector		
NJT8370NMR	N-type	RS-232C Interface	NA	DC Power									
NJT8370FMR	F-type								M&C *Note2	Enclosed *Note3 Outdoor AC/DC PSU	Supplied by Outdoor AC/DC PSU		
NJT8370NMRA	N-type	FSK Communications	NA	DC Power									
NJT8370FMRA	F-type								M&C *Note1	Enclosed *Note3 Outdoor AC/DC PSU	Input Port: MS Connector		

\*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 "ACCESSORIES".



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

## 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 / 71NMR / 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 Input Port: IF Connector	Equipped
NJT8319UF					F-type				
NJT8319UNM					N-type				
NJT8319UFM					F-type				
NJT8319UNMA					N-type				
NJT8319UFMA					F-type				
NJT8319UNK					N-type				
NJT8319UFK					F-type				
NJT8319UNMK					N-type				
NJT8319UFMK					F-type				
NJT8319UNMKA					N-type				
NJT8319UFMKA					F-type				
NJT8319UNMR					N-type				
NJT8319UFMR					F-type				
NJT8319UNMRA					N-type				
NJT8319UFMRA					F-type				
NJT8319N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	NA	NA	DC Power Input Port: IF Connector	
NJT8319F					F-type				
NJT8319NM					N-type				
NJT8319FM					F-type				
NJT8319NMA					N-type				
NJT8319FMA					F-type				
NJT8319NK					N-type				
NJT8319FK					F-type				
NJT8319NMK					N-type				
NJT8319FMK					F-type				
NJT8319NMKA					N-type				
NJT8319FMKA					F-type				
NJT8319NMR					N-type				
NJT8319FMR					F-type				
NJT8319NMRA					N-type				
NJT8319FMRA					F-type				

\*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 "ACCESSORIES".



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

## 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 *Note6	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 x (W) 130 x (H) 80 mm [ (L) 7.09" x (W) 5.12" x (H) 3.15" ]
Weight	2.4 kg [ 5.3 lbs ]

\*Note6: 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 Input Port: IF Connector	Equipped								
NJT8318UF					F-type												
NJT8318UNM					N-type												
NJT8318UFM					F-type												
NJT8318UNA					N-type												
NJT8318UFA					F-type												
NJT8318UNK					N-type												
NJT8318UFK					F-type												
NJT8318UNMK					N-type												
NJT8318UFMK					F-type												
NJT8318UNMR					N-type												
NJT8318UFMR					F-type												
NJT8318UNMRA					N-type												
NJT8318UFMRA					F-type												
NJT8318N					14.00 to 14.50 GHz ( Standard Ku-band )					13.05 GHz	950 to 1,450 MHz	+39 dBm min. ( 8W )	N-type	NA	NA	DC Power Input Port: IF Connector	Equipped
NJT8318F													F-type				
NJT8318NM													N-type				
NJT8318FM													F-type				
NJT8318NA													N-type				
NJT8318FA													F-type				
NJT8318NK													N-type				
NJT8318FK													F-type				
NJT8318NMK													N-type				
NJT8318FMK													F-type				
NJT8318NMR	N-type																
NJT8318FMR	F-type																
NJT8318NMRA	N-type																
NJT8318FMR	F-type																
NJT8318MRA	N-type																
NJT8318FMRA	F-type																

\*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 "ACCESSORIES".



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

## 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 *Note6	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 ]

\*Note6: 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 <sup>*Note3</sup> 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 <sup>*Note3</sup> Indoor AC/DC PSU	Supplied by Indoor AC/DC PSU						

\*Note3: The detail is shown in section of "ACCESSORIES".



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

### 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



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

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



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

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
<b>NJT8376UN</b>	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
<b>NJT8376UF</b>					F-type	
<b>NJT8376N</b>	14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450 MHz		N-type	
<b>NJT8376F</b>					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 ( without Interface Connector )	( L ) 98 x ( W ) 128 x ( H ) 42.5 mm [ ( L ) 3.86" x ( W ) 5.04" x ( H ) 1.67" ]
Weight	540 g [ 1.2 lbs ]

## 4W BUC : NJT8304 & NJT8316L series



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

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
<b>NJT8316LN</b>	12.75 to 13.25 GHz ( Lower Ku-band )	11.80 GHz	950 to 1,450 MHz	+36 dBm min. ( 4W )	N-type	NA
<b>NJT8316LF</b>					F-type	
<b>NJT8304UN</b>	13.75 to 14.50 GHz ( Universal Ku-band )	12.80 GHz	950 to 1,700 MHz		N-type	
<b>NJT8304UF</b>					F-type	
<b>NJT8304N</b>	14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450 MHz		N-type	
<b>NJT8304F</b>					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 ( without Interface Connector )	( L ) 98 x ( W ) 98 x ( H ) 42.5 mm [ ( 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



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

### 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

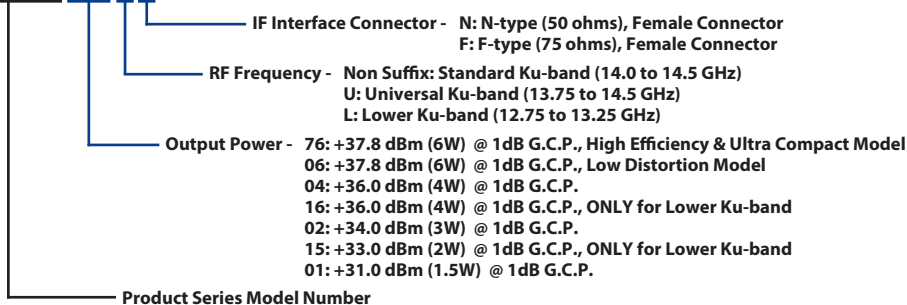
Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8301UN	13.75 to 14.50 GHz ( Universal Ku-band )	12.80 GHz	950 to 1,700 MHz	+31 dBm min. ( 1.5W )	N-type	NA
NJT8301UF					F-type	
NJT8301N	14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450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



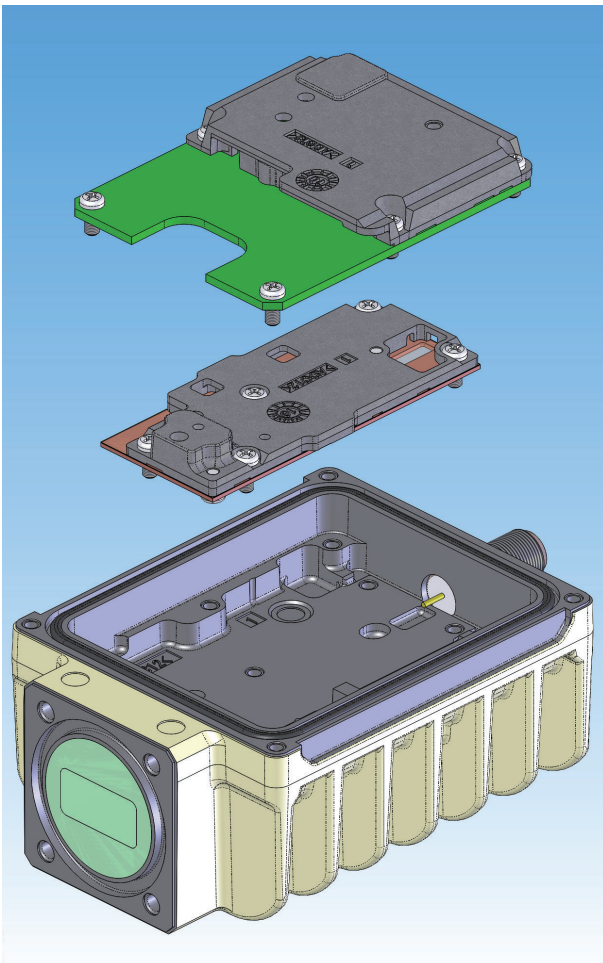
## Ku-band Bare-Die-Module BUC

### Feature

Miniaturization and stable characteristics by the following advantage technologies

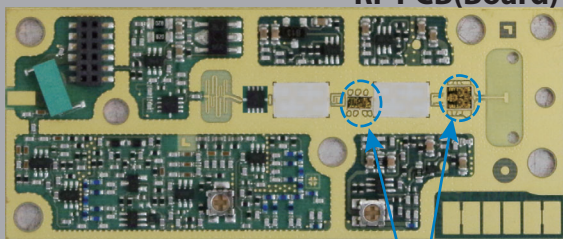
### Advantage

- 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 COMPACT-BUC : NJT8376

- **High Temperature Operating**  
Operation Temp. Range: -40 to +60 °C
- **High Efficiency & Low Distortion**  
P1dB: +37.8 dBm over Temp.  
ACPR: -26 dBc @ Pout = +37.0 dBm  
Power Consumption: 34 W
- **Compact Size & Light Weight**  
Weight: 540 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 2LO PLL (Int. & Ext.):**  
**NJR2841 series**  
**NJR2842 series**  
**NJR2843 series**

### Internal Reference Type

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Frequency Selected by *Note7	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 (+/- 500 kHz typ.)	F-type
NJR2841LN						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	22kHz Tone	+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2841HN						N-type
NJR2841S				Input Voltage	+/- 3 ppm (+/- 30 kHz typ.)	F-type
NJR2841SN						N-type
NJR2842L					+/- 50 ppm (+/- 500 kHz typ.)	F-type
NJR2842LN						N-type
NJR2842H					+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2842HN						N-type
NJR2842S					+/- 3 ppm (+/- 30 kHz typ.)	F-type
NJR2842SN						N-type
NJR2843L					+/- 50 ppm (+/- 500 kHz typ.)	F-type
NJR2843LN						N-type
NJR2843H					+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2843HN						N-type
NJR2843S					+/- 3 ppm (+/- 30 kHz typ.)	F-type
NJR2843SN						N-type

### External Reference Type

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Frequency Selected by *Note7	Local Stability [ -40 to +60 °C ]	IF Connector
NJR2841E	Low Band: 10.70 to 11.70 GHz	Low Band: 9.75 GHz	Low Band: 950 to 1,950 MHz	Mechanical Switch	Depends on External Reference	F-type
NJR2841EN						N-type
NJR2842E	High Band: 11.70 to 12.75 GHz ( Universal Ku-band )	High Band: 10.60 GHz	High Band: 1,100 to 2,150 MHz	22kHz Tone		F-type
NJR2842EN						N-type
NJR2843E				Input Voltage		F-type
NJR2843EN						N-type

\*Note7: 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 ( without Interface Connector & Mechanical Switch )	( L ) 83.2 x ( W ) 42 x ( H ) 42 mm [ ( L ) 3.28" x ( W ) 1.65" x ( H ) 1.65" ] : NJR2841 series ( 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

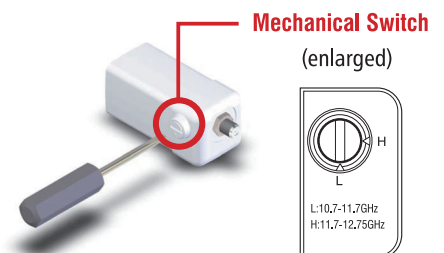
In case of the products of Switchable 2LO PLL LNB, the following three methods to switch local frequency can be chosen by the customer

- 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		
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

### Image of Mechanical Switch



**Applicable Models: NJR2841, NJR2842 and NJR2843 series**

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



**Ku PLL (Int): NJR2835 series**  
**Ku PLL (Ext): 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 (+/- 100 kHz typ.)	F-type
NJR2837HN					N-type
NJR2837S					F-type
NJR2837SN					N-type
NJR2837U					F-type
NJR2837UN	11.20 to 11.70 GHz	10.25 GHz	950 to 1,450 MHz	+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2839H					N-type
NJR2839S					F-type
NJR2839SN					N-type
NJR2839U					F-type
NJR2839UN	11.70 to 12.20 GHz	10.75 GHz	950 to 1,450 MHz	+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2835H					N-type
NJR2835HN					F-type
NJR2835S					N-type
NJR2835SN					F-type
NJR2835U	12.25 to 12.75 GHz	11.30 GHz	950 to 1,450 MHz	+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2835UN					N-type
NJR2836H					F-type
NJR2836HN					N-type
NJR2836S					F-type
NJR2836SN	N-type				
NJR2836U	F-type				
NJR2836UN	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		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		Supplied by Indoor AC/DC PSU									
NJT5762KN					N-type	Enclosed <sup>*Note3</sup> Indoor AC/DC PSU	DC Power	FSK Communications M&C <sup>*Note1</sup>								
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	NA	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	Supplied by Indoor AC/DC PSU														

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

\*Note3: The detail is shown in section of "ACCESSORIES".



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

## 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 MINI-BUC : NJT8105 series



- NEW Full C 5W: NJT8105W series**
- NEW Standard C 5W: NJT8105 series**
- NEW Insat C 5W: NJT8105E series**

### 5W BUC: NJT8105 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
<b>NJT8105WN</b>	5.850 to 6.725 GHz ( Full C-band )	4.90 GHz	950 to 1,825 MHz	+37 dBm min. ( 5W )	N-type	Equipped
<b>NJT8105WF</b>					F-type	
<b>NJT8105N</b>	5.850 to 6.425 GHz ( Standard C-band )	5.76 GHz	950 to 1,525 MHz		N-type	
<b>NJT8105F</b>					F-type	
<b>NJT8105EN</b>	6.725 to 7.025 GHz ( Insat C-band )	5.76 GHz	965 to 1,265 MHz		N-type	
<b>NJT8105EF</b>					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 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: -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
Power Consumption	40 W typ., 44 W max.
Temperature Range ( ambient )	Operating : -40 to +60 °C Storage : -40 to +75 °C
Waterproof / Dustproof ( IP Code )	IP 67
Dimension ( without Interface Connector )	(L) 149.1 x (W) 134 x (H) 57 mm [ (L) 5.87" x (W) 5.28" x (H) 2.24" ]
Weight	1.37 kg [ 3 lbs ]

## 5W BUC : NJT5669 series



- Standard C 5W: NJT5669 series**
- Full C 5W: NJT5677 series**
- Palapa C 5W: NJT5675 series**
- Insat C 5W: NJT5670 series**

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

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
<b>NJT5677N</b>	5.850 to 6.725 GHz ( Full C-band )	4.90 GHz	950 to 1,825 MHz	+37 dBm min. ( 5W )	N-type	Equipped
<b>NJT5677F</b>					F-type	
<b>NJT5669</b>	5.850 to 6.425 GHz ( Standard C-band )	5.30 GHz	1,065 to 1,425 MHz		N-type	
<b>NJT5669F</b>					F-type	
<b>NJT5675N</b>	6.365 to 6.725 GHz ( Palapa C-band )	5.76 GHz	965 to 1,265 MHz		N-type	
<b>NJT5675F</b>					F-type	
<b>NJT5670</b>	6.725 to 7.025 GHz ( Insat C-band )	5.76 GHz	965 to 1,265 MHz		N-type	
<b>NJT5670F</b>					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 dBm min. over temperature
Conversion Gain	61 dB nom.
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	+15 to +30 VDC
Power Consumption	48 W max. : ( 5W ) NJT5669 / NJT5675 / NJT5677 series 50 W max. : ( 5W ) NJT5670 series
Temperature Range ( ambient )	Operating : -40 to +55 °C Storage : -40 to +75 °C
Waterproof / Dustproof ( IP Code )	IP 67
Dimension ( without Interface Connector )	(L) 190.6 x (W) 160 x (H) 59 mm (L) 7.50" x (W) 6.30" x (H) 2.32" ]
Weight	1.9 kg [ 4.2 lbs ]

## 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**

### 3W BUC: NJT8103 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB (3W)	IF Connector	LED Indicator
NJT8103WN	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz		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 (2W)	IF Connector	LED Indicator
NJT8102WN	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz		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.	+34.5 dBm min. over temperature : ( 3W ) NJT8103 series +33.0 dBm min. over temperature : ( 2W ) NJT8102 series
Conversion Gain	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
Power Consumption	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
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" ]
Weight	800 g [ 1.8 lbs ]



## PLL LNB [ Internal & External Reference Type ] : NJS8496, NJS8497 & NJS8498 series



**NEW C PLL (Int): NJS8496 series**  
**NEW C PLL (Ext): NJS8496E series**

### Internal Reference Type: NJS8496 series

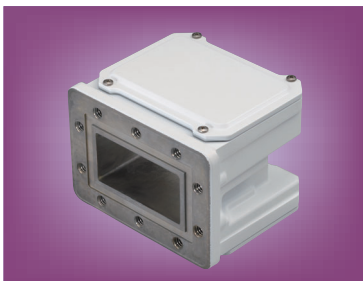
Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 °C]	IF Connector
NJS8496HF	3.400 to 4.200 GHz ( Full C-band )	5.15 GHz	950 to 1,750 MHz	+/- 10 ppm (+/- 50 kHz typ.)	F-type
NJS8496HN					N-type
NJS8496SF					F-type
NJS8496SN					N-type
NJS8496UF					F-type
NJS8496UN					N-type
NJS8496VF					F-type
NJS8496VN	3.625 to 4.200 GHz ( Standard C-band )	5.15 GHz	950 to 1,525 MHz	+/- 10 ppm (+/- 50 kHz typ.)	F-type
NJS8497HF					N-type
NJS8497HN					F-type
NJS8497SF					N-type
NJS8497SN					F-type
NJS8497UF					N-type
NJS8497UN					F-type
NJS8497VF	N-type				
NJS8497VN	4.500 to 4.800 GHz ( Insat C-band )	5.76 GHz	960 to 1,260 MHz	+/- 10 ppm (+/- 50 kHz typ.)	F-type
NJS8498HF					N-type
NJS8498HN					F-type
NJS8498SF					N-type
NJS8498SN					F-type
NJS8498UF					N-type
NJS8498UN					F-type
NJS8498VF	N-type				
NJS8498VN				+/- 0.3 ppm (+/- 1.5 kHz typ.)	F-type

### External Reference Type: NJS8496E series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 °C]	IF Connector
NJS8496EF	3.400 to 4.200 GHz ( Full C-band )	5.15 GHz	950 to 1,750 MHz	Depend on External Reference	F-type
NJS8496EN					N-type
NJS8497EF	3.625 to 4.200 GHz ( Standard C-band )	5.15 GHz	950 to 1,525 MHz		F-type
NJS8497EN					N-type
NJS8498EF	4.500 to 4.800 GHz ( Insat C-band )	5.76 GHz	960 to 1,260 MHz		F-type
NJS8498EN					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 typ., 30 K max.
Conversion Gain ( at +25 °C )	59 dB min., 67 dB max.
Requirement External Reference Signal (Only NJS8496E 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 )	-70 dBc/Hz typ., -59 dBc/Hz max. @100 Hz -80 dBc/Hz typ., -75 dBc/Hz max. @1 kHz -90 dBc/Hz typ., -85 dBc/Hz max. @10 kHz -100 dBc/Hz typ., -95 dBc/Hz max. @100 kHz -110 dBc/Hz typ., -105 dBc/Hz max. @100 kHz
Power Requirement	+12 to +24 VDC
Operating Current	350 mA
Temperature Range (ambient)	Operating : -40 to +60 °C Storage : -40 to +80 °C
Waterproof / Dustproof ( IP Code )	IP 67
Dimension (without Interface Connector)	(L) 144.5 x (W) 98.4 x (H) 69.9 mm [ (L) 5.68" x (W) 3.87" x (H) 2.75" ]
Weight	670 g [ 1.47 lbs ]



**LNA: NJS8451 & NJS8452**

### LNA : NJS8451 & NJS8452

Model No.	RF Frequency
NJS8452	3.400 to 4.200 GHz ( Full 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. : (Full 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 ]



## ACCESSORIES

### AC/DC PSU

Model No.	Description
NJZ1286F	INDOOR 150W AC/DC Power Supply Unit (PSU) This PSU is having enough power supply of 150W and to provide the stable +48V DC power enable to operate C-band 10W or Ku-band 8W BUC as well as having the bias-tee which enable to pass 10MHz reference signal and IF signal from the modem.  Applicable Models : NJT5118, NJT5218, NJT5762, NJT5763, NJT5764, and NJT8318 series
NJZ1286N	
NJZ1289	OUTDOOR 250W AC/DC Power Supply Unit (PSU) This PSU is to provide the stable +48V/250W DC power enable to operate Ku-band 16W/25W BUC and is structured with the waterproof aluminum enclosure in order to use perfectly as the outdoor unit.  Applicable Models : NJT8319 and NJT8370 series
NJZ1295	OUTDOOR 500W AC/DC Power Supply Unit (PSU) This PSU is to provide the stable +51V/500W DC power enable to operate Ku-band 40W BUC and is structured with the waterproof aluminum enclosure in order to use perfectly as the outdoor unit.  Applicable Models : NJT8371 series

### Mount Bracket Option

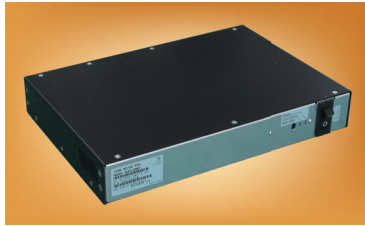
Model No.	Description
NJZ1290D01	Mount Bracket for NJT8318 [Ku-band 8W BUC]
	Mount Bracket for NJT8319 [Ku-band 16W BUC]
	Mount Bracket for NJT8370 [Ku-band GaN 25W BUC]
NJZ1290D05	Mount Bracket for NJT8371 [Ku-band GaN 40W BUC]
NJZ1290D02	Mount Bracket for NJZ1289 [Outdoor 250W AC/DC PSU]
NJZ1290D04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

### Cable Option

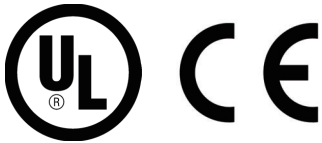
Model No.	Description
NJZ1290A01	AC Power Cable of 3 m length for NJZ1289 [Outdoor 250W AC/DC PSU] Connecting between NJZ1289 and AC outlet
NJZ1290A02	DC Power Cable of 5 m length for NJZ1289 [Outdoor 250W AC/DC PSU] Connecting between NJZ1289 and BUC
NJZ1290A03	AC Power Cable of 3 m length for NJZ1295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



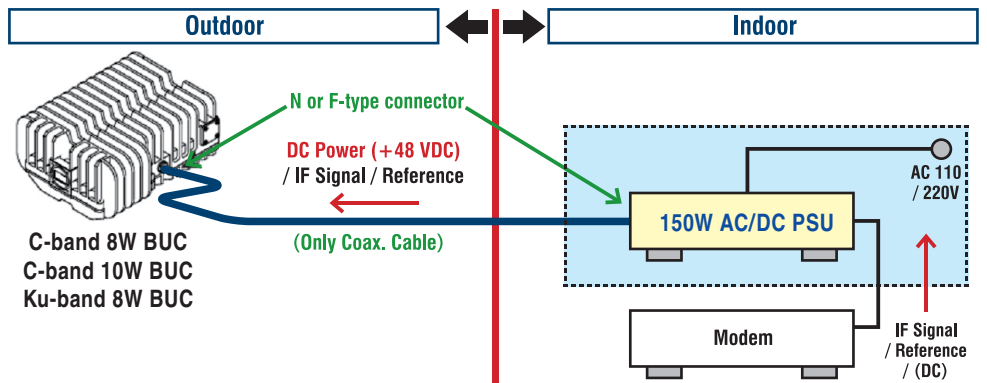
## INDOOR 150W AC/DC PSU : NJZ1286F / NJZ1286N



Indoor 150W AC/DC PSU



### Overview



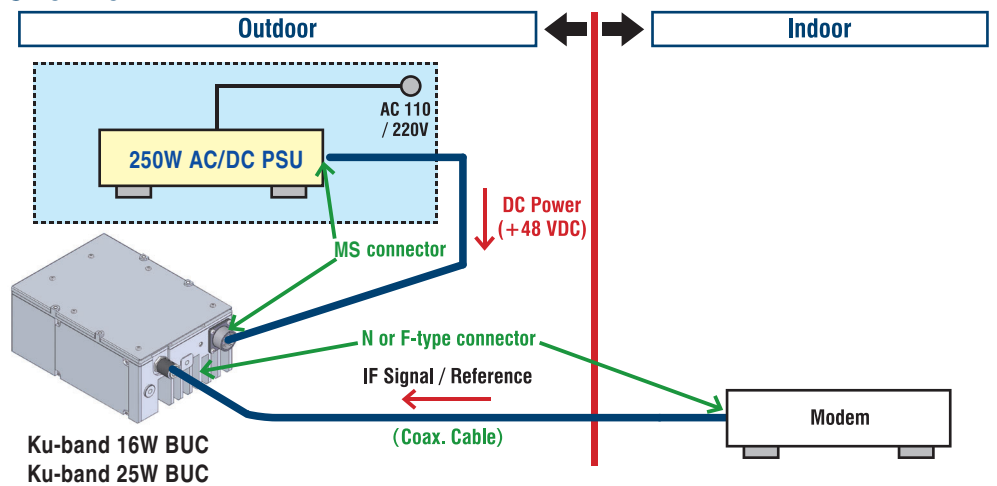
## OUTDOOR 250W AC/DC PSU : NJZ1289



Outdoor 250W AC/DC PSU



### Overview



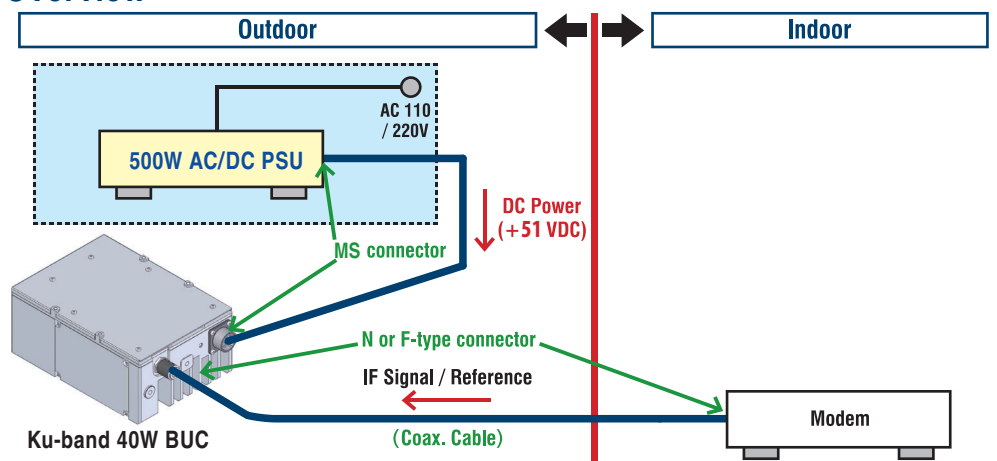
## OUTDOOR 500W AC/DC PSU : NJZ1295



Outdoor 500W AC/DC PSU



### Overview





## 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:

**Sealing Film**  
CAUTION  
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.

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

**Product Label**  
CAUTION  
DO NOT remove the label. This is for our QA traceability

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

**WG Filter**  
CAUTION  
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.

**Input Voltage**  
CAUTION  
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.

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

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

**Fins**  
WARNING  
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.

### LNBS Instructions:

**Sealing Film**  
CAUTION  
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.

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

**Product Label**  
CAUTION  
DO NOT remove the label. This is for our QA traceability

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

**Input Voltage**  
CAUTION  
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.

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

## 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:

**(for Example as Ku-band BUC)**

Product Name Model Number Model Number Bar-code [CODE 39]	Ku-BAND 8W BUC MODEL : NJT5118F [Barcode]	RF Frequency Local Frequency
WEEE Logo RoHS Compliant CE Marking	RoHS Compliant CAUTION MADE IN JAPAN	DANGER: * High Temperature CAUTION: * DC Input Voltage Range * Maximum IF/Ref. Input Level
	INPUT 14.0-14.5 GHz LOCAL 13.05 GHz S/N: A00001A02 [Barcode]	Serial Number Serial Number Bar-code [CODE 39]
	DC INPUT +18V to +60V IF/Ref. INPUT +13dBm max.	

Applicable Models: All models of LNB and BUC



## DECLARATION OF EC DIRECTIVE

Nisshinbo Micro Devices Inc. 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**

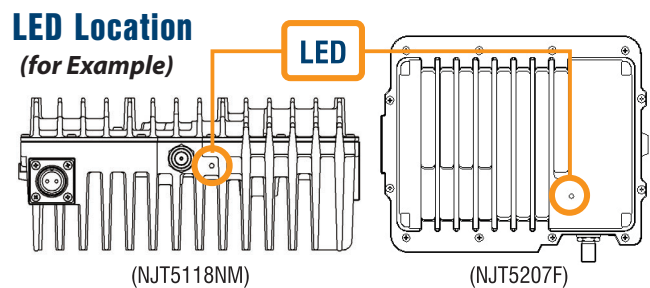
## LED INDICATOR

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

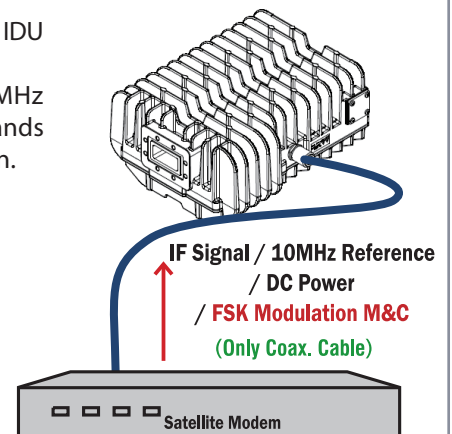
The BUC equipped FSK communications M&C includes capability to communicate with a IDU (e.g. satellite modem or M&C controller).

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
<ul style="list-style-type: none"> <li>● Request Status</li> <li>● Set Transmit On/Off Control</li> </ul>	<ul style="list-style-type: none"> <li>● Output Power Monitor               <ul style="list-style-type: none"> <li>* Detector Range: 20 dB ( up to P1dB)</li> <li>* Accuracy: +/- 1.0 dB</li> </ul> </li> <li>● Temperature Monitor etc</li> </ul>

**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.

### Functions

CONTROL	MONITOR
<ul style="list-style-type: none"> <li>● Request Status</li> <li>● Transmit On/Off Control</li> <li>● Step Attenuator Setting               <ul style="list-style-type: none"> <li>* Attenuator Range: 0 to 15.5 dB</li> <li>* Attenuator Step: 0.5 dB</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Output Power Monitor               <ul style="list-style-type: none"> <li>* Detector Range: 15 dB ( up to P1dB/Psat)</li> <li>* Accuracy: +/- 1.0 dB</li> </ul> </li> <li>● Temperature Monitor</li> <li>● Status               <ul style="list-style-type: none"> <li>* Temperature Out-of-Range</li> <li>* PLL Out-of-Lock</li> <li>* Tx Status</li> </ul> </li> </ul>

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



## CSR VISION

Nisshinbo Micro Devices Inc. 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

Nisshinbo Micro Devices Inc. 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 Nisshinbo Micro Devices Inc. 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

Nisshinbo Micro Devices Inc. Group provides products and services meeting quality expectations of society and customers by ingenious technologies and originality of all the members.

## ENVIRONMENTAL VISION

Nisshinbo Micro Devices Inc. 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, 2021  
 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, 2021  
 Expiry Date: January 12, 2024  
 Certification Number: JQA-EM4431  
 Certification Organization: JQA



## GENERAL CAUTION

1. While Nisshinbo Micro Devices Inc., 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. Nisshinbo Micro Devices Inc. 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 Nisshinbo Micro Devices Inc. are responsible occurring during the warranty period, Nisshinbo Micro Devices Inc. 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 Nisshinbo Micro Devices Inc. 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. 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. Nisshinbo Micro Devices Inc. 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.

Nisshinbo Micro Devices Inc. was founded in 1959, as the progeny of Japan Radio Co., Ltd., and has emerged as pioneer in microwave and semiconductor technologies in Japan.

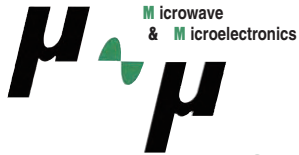
Since then, Nisshinbo Micro Devices Inc. has devoted their own technologies to develop the products.

Now, under the concept of " $\mu$  &  $\mu$ " development which means the convergence of "Microelectronics" and "Microwave" to expand their technology, Nisshinbo Micro Devices Inc. sets to meet demands of the ubiquitous age.

Nisshinbo Micro Devices Inc. has three business segments:

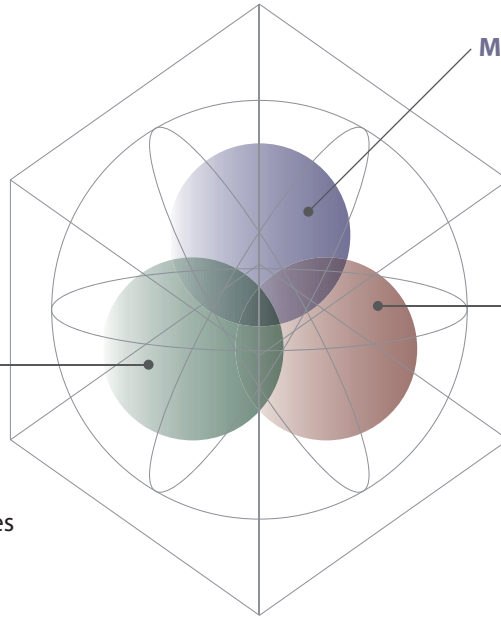
- Semiconductor devices
- Microwave application products
- Microwave tubes and radar components

Creating a future through the convergence of "Microelectronics" and "Microwave" ( $\mu$  &  $\mu$ )



### 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

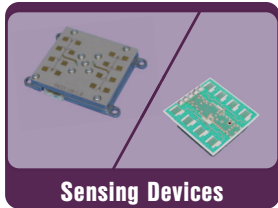
### Microwave Application Products

- ◆ Components for Satellite Communications
- ◆ Sensor components

Microwave Business Headquarters is one of divisions engaged in Nisshinbo Micro Devices Inc. which has kept supplying reliable components, created through the concept of " $\mu$  &  $\mu$ ", in microwave fields.

Components which Microwave Business Headquarters has been supplying are as shown below.

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



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



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