

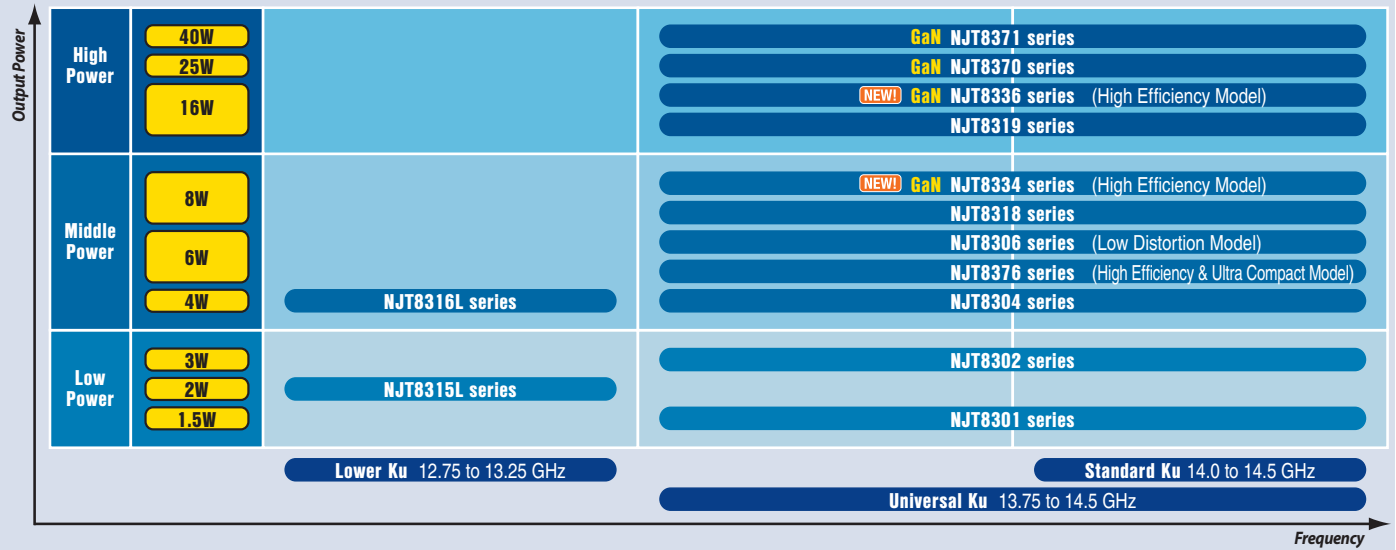
# VSAT PRODUCT LINEUP 2024



**NISSHINBO**

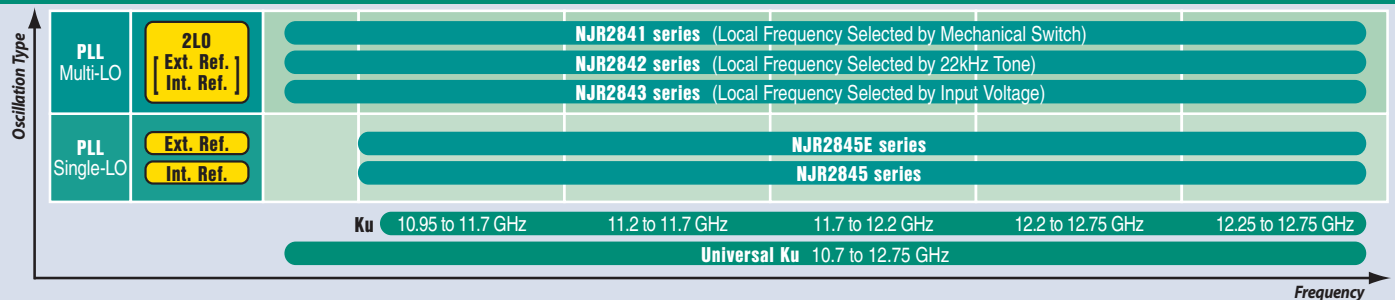
## Ku-band BUC

P3 >



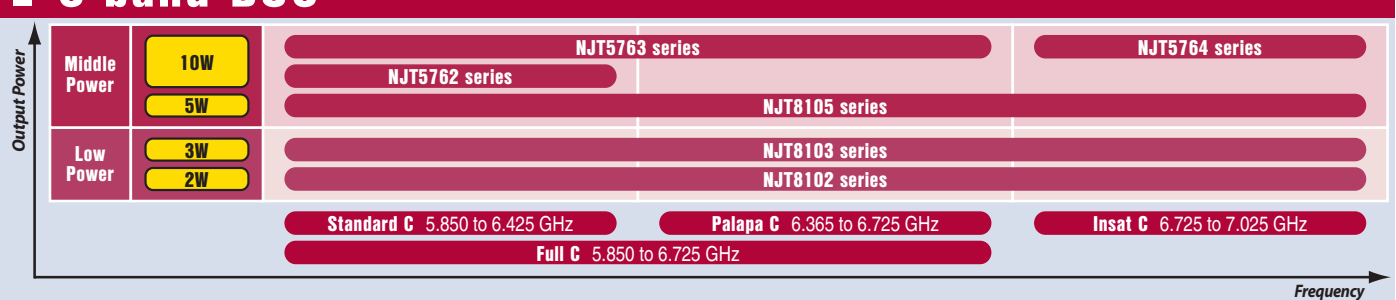
## Ku-band LNB

P11 >



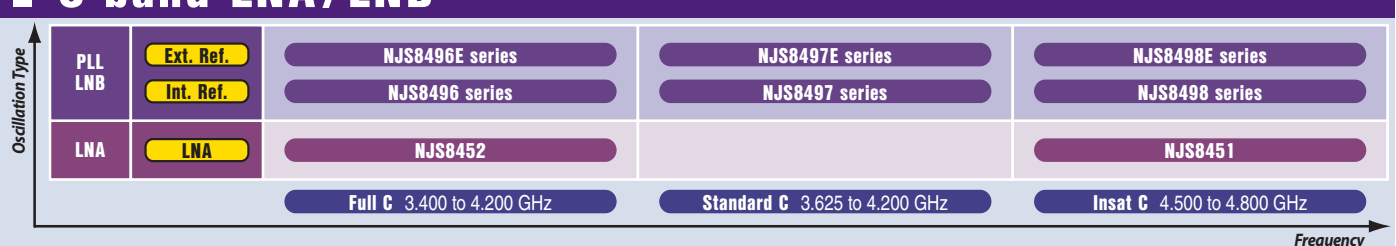
## C-band BUC

P13 >



## C-band LNA/LNB

P16 >



## Ku-band GaN BUC: 16W NJT8336 series / 8W NJT8334 series

### Features

➤ **Advanced GaN HEMT and Internal Linearizer Equipped**

➤ **High Efficiency Output Power**

	NJT8336 series	NJT8334 series
Rated Output Power	+42 dBm	+39 dBm
Linear Output Power	+42 dBm typ. at -26 dBc / ACPR +41 dBm typ. at -30 dBc / ACPR	+39 dBm typ. at -26 dBc / ACPR +38 dBm typ. at -30 dBc / ACPR
Power Consumption	110 W typ., 115 W max. 85W typ. @ No IF Signal	70 W typ., 75 W max. 55W typ. @ No IF Signal

➤ **Supporting High Operation Temperature**

-40 to +75 °C for Operation guarantee

➤ **Excellent Receive Band Rejection Filter Equipped**

Receive Band Noise Density: -156 dBm/Hz max. @ 10.95 to 12.75 GHz

➤ **Output Isolator Option Available**

1.3 : 1 max. for output VSWR [Isolator Option model]

➤ **Various M&C Interface Support**

Ethernet (HTTP/SNMP v2c), RS-485, Parallel I/O, RS-232 (option)

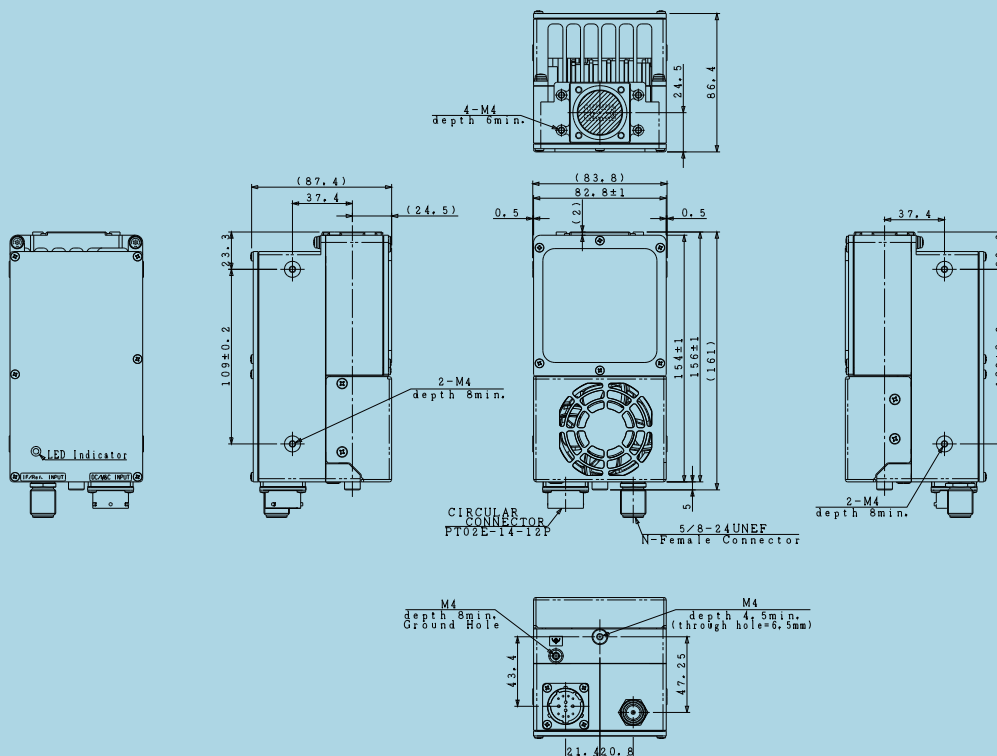
➤ **Smaller Size & Lighter Weight**

Dimension: 161 (L) x 83.8 (W) x 86.4 (H) mm

Weight: 1.8 kg [4.0 lbs]



### Outline Drawing



## GaN 40W 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 <sup>*Note3</sup> Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8371UNMKA					N-type	M&C	DC Power		
NJT8371UFMKA					F-type	<sup>*Note1</sup>	Supplied by Outdoor AC/DC PSU		
NJT8371UNMR					N-type	RS-232C	DC Power		
NJT8371UFMR					F-type	Interface	Input Port: MS Connector		
NJT8371UNMRA					N-type	M&C	DC Power		
NJT8371UFMRA					F-type	<sup>*Note2</sup>	Supplied by Outdoor AC/DC PSU		
NJT8371NMK	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	FSK	NA	DC Power	
NJT8371FMK					F-type	Communications	Enclosed <sup>*Note3</sup> Outdoor AC/DC PSU	Input Port: MS Connector	
NJT8371NMKA					N-type	M&C	DC Power		
NJT8371FMKA					F-type	<sup>*Note1</sup>	Supplied by Outdoor AC/DC PSU		
NJT8371NMRA					N-type	RS-232C	DC Power		
NJT8371FMRA					F-type	Interface	Input Port: MS Connector		
NJT8371NMRA					N-type	M&C	DC Power		
NJT8371FMRA					F-type	<sup>*Note2</sup>	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

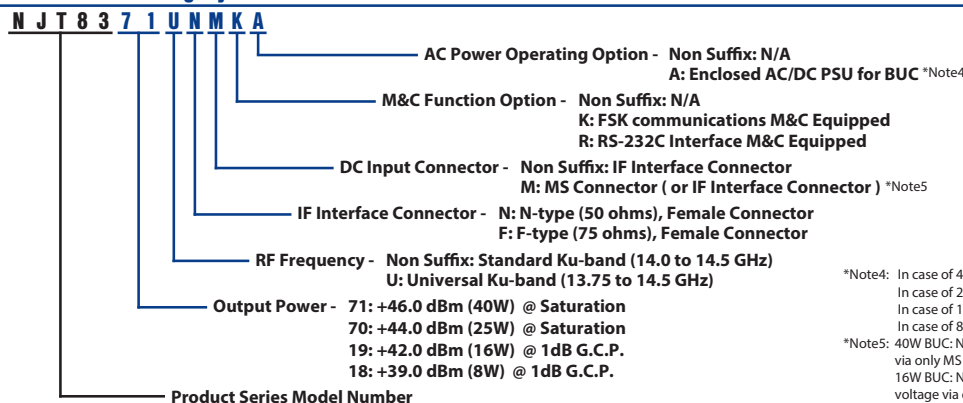
### Products Information



### 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 / 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 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	Input Port: MS Connector					
NJT8370UNMKA					N-type	M&C	Enclosed <sup>*Note3</sup>	DC Power				
NJT8370UFMKA					F-type	<sup>*Note1</sup>	Outdoor AC/DC PSU	Supplied by Outdoor AC/DC PSU				
NJT8370UNMR					N-type	RS-232C	NA	DC Power				
NJT8370UFMR					F-type	Interface	Input Port: MS Connector					
NJT8370UNMRA					N-type	M&C	Enclosed <sup>*Note3</sup>	DC Power				
NJT8370UFMRA					F-type	<sup>*Note2</sup>	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		FSK	NA	DC Power
NJT8370FMK								F-type		Communications	Input Port: MS Connector	
NJT8370NMKA	N-type	M&C	Enclosed <sup>*Note3</sup>	DC Power								
NJT8370FMKA	F-type	<sup>*Note1</sup>	Outdoor AC/DC PSU	Supplied by Outdoor AC/DC PSU								
NJT8370NMR	N-type	RS-232C	NA	DC Power								
NJT8370FMR	F-type	Interface	Input Port: MS Connector									
NJT8370NMRA	N-type	M&C	Enclosed <sup>*Note3</sup>	DC Power								
NJT8370FMRA	F-type	<sup>*Note2</sup>	Outdoor AC/DC PSU	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 25W: NJT8370 series  
Universal Ku 25W: NJT8370U series

### Products Information



### 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 GaN BUC : NJT8336 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Rated Output Power	IF Connector	M&C Option	DC Power Input Port	LED Indicator
NJT8336UN	13.75 to 14.50 GHz ( Universal Ku-band )	12.80 GHz	950 to 1,700 MHz	+42 dBm min. ( 16W )	N-type	NA	IF Connector	Equipped
NJT8336UF					F-type			
NJT8336UNMT					N-type	Ethernet	MS or IF Connector *Note6	
NJT8336UFMT					F-type			
NJT8336UNMS					N-type			
NJT8336UFMS	F-type	RS-485						
NJT8336N	14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450 MHz		N-type	NA	IF Connector	
NJT8336F					F-type			
NJT8336NMT					N-type	Ethernet	MS or IF Connector *Note6	
NJT8336FMT					F-type			
NJT8336NMS					N-type			
NJT8336FMS	F-type	RS-485						



Standard Ku 16W: NJT8336 series  
Universal Ku 16W: NJT8336U series

### Products Information

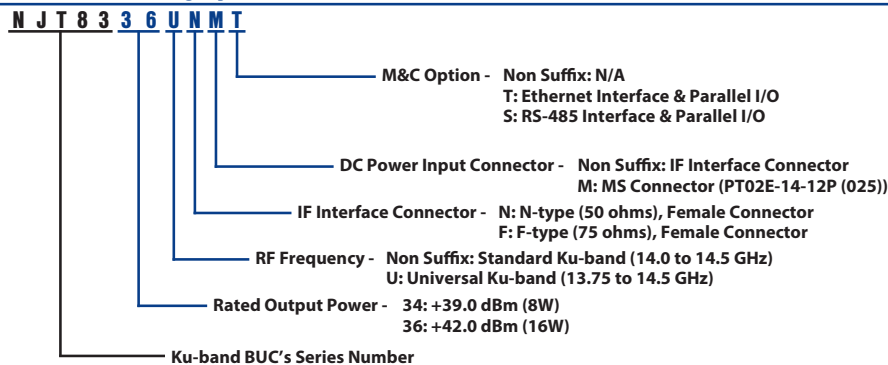


### Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female ( 50 ohm ) / F-type female ( 75 ohm )
Rated Output Power	+42 dBm over temperature
Minimum Gain	62 dB
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    -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 V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. / 1.3 : 1 max. for Isolator Option @ RF Frequency
Power Requirement	+36 to +54 VDC at BUC Input Port
Power Consumption	110 W typ., 115 W max.
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 ) 161 × ( W ) 83.8 × ( H ) 86.4 mm [ ( L ) 6.34" × ( W ) 3.30" × ( H ) 3.40" ]
Weight	1.8 kg [ 4.0 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.

### Model Numbering System



## 16W 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

### Products Information



### 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 Outdoor 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 Outdoor 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]

\*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 GaN BUC : NJT8334 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Rated Output Power	IF Connector	M&C Option	DC Power Input Port	LED Indicator
NJT8334UN	13.75 to 14.50 GHz ( Universal Ku-band )	12.80 GHz	950 to 1,700 MHz	+39 dBm min. ( 8W )	N-type	NA	IF Connector	Equipped
NJT8334UF					F-type			
NJT8334UNMT					N-type	Ethernet	MS or IF Connector *Note6	
NJT8334UFMT					F-type			
NJT8334UNMS					N-type			
NJT8334UFMS	F-type	RS-485						
NJT8334N	14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450 MHz		N-type	NA	IF Connector	
NJT8334F					F-type			
NJT8334NMT					N-type	Ethernet	MS or IF Connector *Note6	
NJT8334FMT					F-type			
NJT8334NMS					N-type			
NJT8334FMS	F-type	RS-485						



Standard Ku 8W: NJT8334 series  
Universal Ku 8W: NJT8334U series

### Products Information



### Specifications

Item	Specifications
Output Interface	Waveguide, WR 75 with Groove
Input Interface	Coax. Connector, N-type female ( 50 ohm ) / F-type female ( 75 ohm )
Rated Output Power	+39 dBm over temperature
Minimum Gain	59 dB
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    -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 V.S.W.R.	2.0 : 1 max. @ IF Frequency
Output V.S.W.R.	2.0 : 1 max. / 1.3 : 1 max. for Isolator Option @ RF Frequency
Power Requirement	+18 to +54 VDC at BUC Input Port
Power Consumption	70 W typ., 75 W max.
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) 161 × (W) 83.8 × (H) 86.4 mm [ (L) 6.34" × (W) 3.30" × (H) 3.40" ]
Weight	1.8 kg [ 4.0 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 : 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		N-type	NA	NA	DC Power Input Port: IF Connector
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															
NJT8318FMRA	F-type															
NJT8318N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz			N-type	FSK Communications M&C *Note1	Enclosed *Note3 Indoor AC/DC PSU	DC Power Input Port: MS or IF Connector							
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											
NJT8318FMRA					F-type											
NJT8318N					14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz				950 to 1,450 MHz		N-type	RS-232C Interface M&C *Note2	Enclosed *Note3 Indoor AC/DC PSU	DC Power Input Port: MS or IF Connector	
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															
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

### Products Information



### 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.



## 6W BUC : NJT8376 series & NJT8306 series / 4W BUC : NJT8304 & NJT8316L series

### UNIVERSAL KU-BAND



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

### Products Information



### 6W BUC: NJT8376 series [High Efficiency & Ultra Compact Model]

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	

### 6W BUC: NJT8306 series [Low Distortion Model]

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	

### 4W BUC: NJT8304 & NJT8316L series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
NJT8316LN	12.75 to 13.25 GHz ( Lower Ku-band )	11.80 GHz	950 to 1,450 MHz	+36 dBm min. ( 4W )	N-type	NA
NJT8316LF					F-type	
NJT8304UN	13.75 to 14.50 GHz ( Universal Ku-band )	12.80 GHz	950 to 1,700 MHz		N-type	
NJT8304UF					F-type	
NJT8304N	14.00 to 14.50 GHz ( Standard Ku-band )	13.05 GHz	950 to 1,450 MHz	N-type		
NJT8304F				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 : ( 6W ) NJT8376, NJT8306 series +36 dBm min. over temperature : ( 4W ) NJT8304, NJT8316L series
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 typ. @ RF Frequency : ( 6W ) NJT8376 series 1.3 : 1 max. for Recommendation of Output Load V.S.W.R. : ( 6W ) NJT8306 series 2.0 : 1 max. @ RF Frequency : ( 4W ) NJT8304, NJT8316L series
Power Requirement	+12 to +30 VDC
Power Consumption	34 W typ., 38 W max. : ( 6W ) NJT8376 series 40 W typ., 48 W max. : ( 6W ) NJT8306 series 28 W typ., 32 W max. : ( 4W ) NJT8304, NJT8316L series
Temperature Range ( ambient )	( 6W ) NJT8306 series : Operating : ( Operation Guarantee ) -40 to +65 °C ( Performance Guarantee ) -40 to +60 °C Storage : -40 to +75 °C ( 6W ) NJT8376 series / ( 4W ) NJT8304, NJT8316L series : 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" ] : ( 6W ) NJT8376 series ( L ) 174.9 x ( W ) 84 x ( H ) 59.2 mm [ ( L ) 6.89" x ( W ) 3.31" x ( H ) 2.33" ] : ( 6W ) NJT8306 series ( L ) 98 x ( W ) 98 x ( H ) 42.5 mm [ ( L ) 3.86" x ( W ) 3.86" x ( H ) 1.67" ] : ( 4W ) NJT8304, NJT8316L series
Weight	540 g [ 1.2 lbs ] : ( 6W ) NJT8376 series 1.2 kg [ 2.6 lbs ] : ( 6W ) NJT8306 series 500 g [ 1.1 lbs ] : ( 4W ) NJT8304, NJT8316L series

### UNIVERSAL KU-BAND



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

### Products Information



### UNIVERSAL KU-BAND



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

### Products Information

#### NJT8316L series



### Products Information

#### NJT8304 series



## 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

### Products Information NJT8302 series



### Products Information NJT8315L series



### Products Information 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
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 +55 °C    Storage : -40 to +75 °C : ( 3W / 1.5W ) NJT8302 / NJT8301 series Operating : -40 to +60 °C    Storage : -40 to +75 °C : ( 2W ) NJT8315L 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

## 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**

### Products Information



### Internal Reference Type

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Frequency Selected by *Note7	Local Stability [-40 to +60 °C]	IF Connector
NJR2841H	Low Band: 10.70 to 11.70 GHz	Low Band: 9.75 GHz	Low Band: 950 to 1,950 MHz	Mechanical Switch	+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2841HN						N-type
NJR2841S	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	+/- 3 ppm (+/- 30 kHz typ.)	F-type
NJR2841SN						N-type
NJR2842H				Input Voltage	+/- 10 ppm (+/- 100 kHz typ.)	F-type
NJR2842HN						N-type
NJR2842S					+/- 3 ppm (+/- 30 kHz typ.)	F-type
NJR2842SN						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	240 g [ 0.53 lbs ] : ( N-type IF Connector ) 210 g [ 0.46 lbs ] : ( F-type IF Connector )

## LOCAL FREQUENCY SELECTION

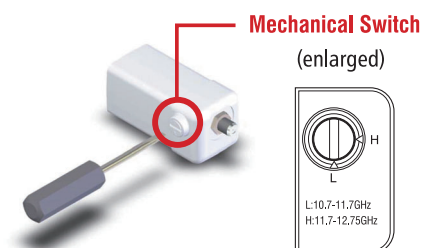
In case of the products of Switchable 2LO PLL LNB, the following three methods to switch local frequency can be chosen by the customer

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

### Specification of Local Switch

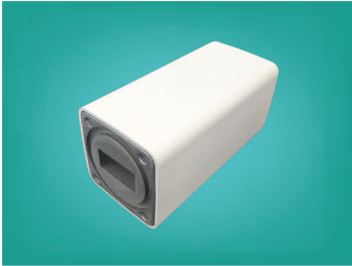
	RF Frequency	
	Low Band (10.7 to 11.7 GHz)	High Band (11.7 to 12.75 GHz)
Mechanical Switch		
22kHz Tone On/Off	Tone Level: 0 to 0.2 Vp-p	Tone Level: 0.4 to 0.8 Vp-p
Input Voltage High/Low	Voltage: +10 to +14 VDC	Voltage: +15.5 to +24 VDC

### Image of Mechanical Switch



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

## PLL LNB [ Internal & External Reference Type ] : NJR2845 & NJR2845E series



**Ku PLL (Int): NJR2845 series**  
**Ku PLL (Ext): NJR2845E series**

### Products Information NJR2845 series



### Products Information NJR2845E series



### Internal Reference Type: NJR2845 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [ -40 to +60 °C ]	IF Connector
NJR2845AH*	10.95 to 11.70 GHz	10.00 GHz	950 to 1,700 MHz	+/- 10 ppm (+/- 100 kHz typ.)	F-type / N-type *Note8
NJR2845AS*				+/- 3 ppm (+/- 30 kHz typ.)	
NJR2845AU*				+/- 1 ppm (+/- 10 kHz typ.)	
NJR2845AV*				+/- 0.5 ppm (+/- 5 kHz typ.)	
NJR2845DH*	11.20 to 11.70 GHz	10.25 GHz	950 to 1,450 MHz	+/- 10 ppm (+/- 100 kHz typ.)	
NJR2845DS*				+/- 3 ppm (+/- 30 kHz typ.)	
NJR2845DU*				+/- 1 ppm (+/- 10 kHz typ.)	
NJR2845DV*				+/- 0.5 ppm (+/- 5 kHz typ.)	
NJR2845BH*	11.70 to 12.20 GHz	10.75 GHz	950 to 1,450 MHz	+/- 10 ppm (+/- 100 kHz typ.)	
NJR2845BS*				+/- 3 ppm (+/- 30 kHz typ.)	
NJR2845BU*				+/- 1 ppm (+/- 10 kHz typ.)	
NJR2845BV*				+/- 0.5 ppm (+/- 5 kHz typ.)	
NJR2845GH*	12.20 to 12.75 GHz	11.25 GHz	950 to 1,500 MHz	+/- 10 ppm (+/- 100 kHz typ.)	
NJR2845GS*				+/- 3 ppm (+/- 30 kHz typ.)	
NJR2845GU*				+/- 1 ppm (+/- 10 kHz typ.)	
NJR2845GV*				+/- 0.5 ppm (+/- 5 kHz typ.)	
NJR2845CH*	12.25 to 12.75 GHz	11.30 GHz	950 to 1,450 MHz	+/- 10 ppm (+/- 100 kHz typ.)	
NJR2845CS*				+/- 3 ppm (+/- 30 kHz typ.)	
NJR2845CU*				+/- 1 ppm (+/- 10 kHz typ.)	
NJR2845CV*				+/- 0.5 ppm (+/- 5 kHz typ.)	

\*Note8: Specify by "\*" in Model No.  
 N: N-type  
 F: F-type

### External Reference Type: NJR2845E series

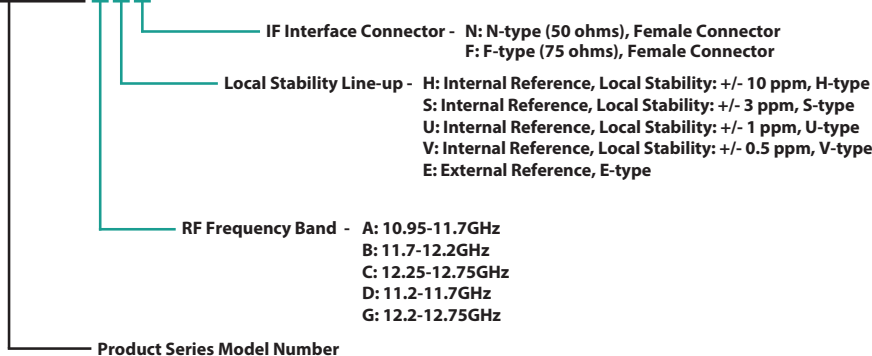
Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [ -40 to +60 °C ]	IF Connector
NJR2845AEF	10.95 to 11.70 GHz	10.00 GHz	950 to 1,700 MHz	Depends on External Reference	F-type
NJR2845AEN	11.20 to 11.70 GHz	10.25 GHz	950 to 1,450 MHz		N-type
NJR2845DEF				11.70 to 12.20 GHz	10.75 GHz
NJR2845DEN	12.20 to 12.75 GHz	11.25 GHz	950 to 1,500 MHz		
NJR2845BEF				12.25 to 12.75 GHz	11.30 GHz
NJR2845BEN					
NJR2845GEF					
NJR2845GEN					
NJR2845CEF					
NJR2845CEN					

## 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 typ., 1.0 dB max.
Conversion Gain ( at +25 °C )	52 dB min., 57 dB typ.
Requirement External Reference Signal ( Only NJR2845E 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: -125 dBc/Hz max. @100Hz -135 dBc/Hz max. @1kHz -140 dBc/Hz max. @10kHz
Phase Noise (SSB)	-50 dBc/Hz typ. @ 100 Hz -70 dBc/Hz typ. @ 1 kHz -75 dBc/Hz typ. @ 10 kHz -85 dBc/Hz typ. @ 100 kHz -105 dBc/Hz typ. @ 1 MHz * In case of External Reference Type , depend on 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 )	(L) 82.2 x (W) 40 x (H) 40 mm [3.24" (L) x 1.57" (W) x 1.57" (H) ]
Weight	240 g [ 0.53 lbs ] : ( N-type IF Connector ) 210 g [ 0.46 lbs ] : ( F-type IF Connector )

## Model Numbering System

**N J R 2 8 4 5 A H F**



## 10W BUC : NJT5762 series

### 10W BUC: NJT5762, NJT5763 & NJT5764 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB ( 10W )	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		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	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	NA												
NJT5764N	6.725 to 7.025 GHz ( Insat C-band )	5.76 GHz		965 to 1,265 MHz		N-type	NA	DC Power							
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									
NJT5764KN			N-type			DC Power		FSK Communications M&C *Note1							
NJT5764KF			F-type			Input Port: IF Connector									
NJT5764KNM	N-type	DC Power													
NJT5764KFM	F-type	Input Port: MS Connector	NA												
NJT5764N	6.725 to 7.025 GHz ( Insat C-band )	5.76 GHz		965 to 1,265 MHz		N-type	NA	DC Power							
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									
NJT5764KN			N-type			DC Power		FSK Communications M&C *Note1							
NJT5764KF			F-type			Input Port: IF Connector									
NJT5764KNM	N-type	DC Power													
NJT5764KFM	F-type	Input Port: MS Connector	NA												

\*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

#### Products Information

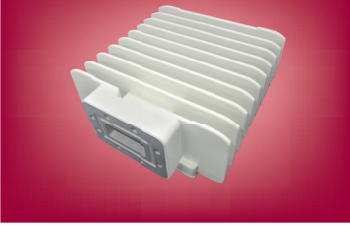


#### Specifications

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

FULL C-BAND



Full C 5W: NJT8105W series  
Standard C 5W: NJT8105 series  
Insat C 5W: NJT8105E series

### Products Information



## ● 5W BUC: NJT8105 series

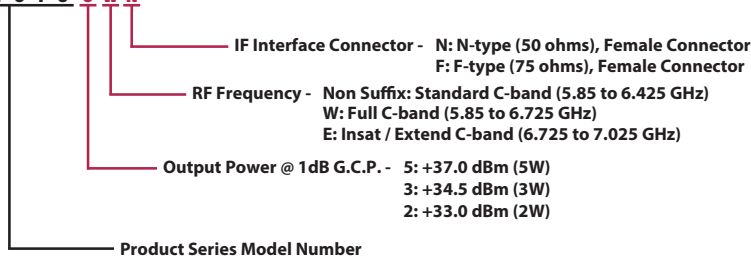
Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB (5W)	IF Connector	LED Indicator
<b>NJT8105WN</b>	5.850 to 6.725 GHz ( Full C-band )	4.90 GHz	950 to 1,825 MHz	+37 dBm min. ( 5W )	N-type	Equipped
<b>NJT8105WF</b>			950 to 1,525 MHz		F-type	
<b>NJT8105N</b>	5.850 to 6.425 GHz ( Standard C-band )	5.76 GHz			965 to 1,265 MHz	
<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 ]

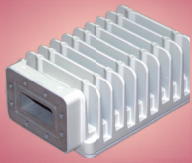
## ■ Model Numbering System

**N J T 8 1 0 5 W N**



## 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**

### Products Information NJT8103 series



### Products Information NJT8102 series



### 3W BUC: NJT8103 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
<b>NJT8103WN</b>	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
<b>NJT8103WF</b>			950 to 1,525 MHz		F-type	
<b>NJT8103N</b>	5.850 to 6.425 GHz ( Standard C-band )	5.76 GHz			965 to 1,265 MHz	
<b>NJT8103F</b>			F-type			
<b>NJT8103EN</b>	6.725 to 7.025 GHz ( Insat C-band )	5.76 GHz	965 to 1,265 MHz		N-type	
<b>NJT8103EF</b>					F-type	

### 2W BUC: NJT8102 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	LED Indicator
<b>NJT8102WN</b>	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
<b>NJT8102WF</b>			950 to 1,525 MHz		F-type	
<b>NJT8102N</b>	5.850 to 6.425 GHz ( Standard C-band )	5.76 GHz			965 to 1,265 MHz	
<b>NJT8102F</b>			F-type			
<b>NJT8102EN</b>	6.725 to 7.025 GHz ( Insat C-band )	5.76 GHz	965 to 1,265 MHz		N-type	
<b>NJT8102EF</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.	+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



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

### Products Information



### ● 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				+/- 3 ppm (+/- 15 kHz typ.)	F-type
NJS8496SN				N-type	
NJS8496UF				+/- 1 ppm (+/- 5 kHz typ.)	F-type
NJS8496UN				N-type	
NJS8496VF	3.625 to 4.200 GHz ( Standard C-band )	5.15 GHz	950 to 1,525 MHz	+/- 0.3 ppm (+/- 1.5 kHz typ.)	F-type
NJS8496VN				N-type	
NJS8497HF				+/- 10 ppm (+/- 50 kHz typ.)	F-type
NJS8497HN				N-type	
NJS8497SF				+/- 3 ppm (+/- 15 kHz typ.)	F-type
NJS8497SN				N-type	
NJS8497UF	4.500 to 4.800 GHz ( Insat C-band )	5.76 GHz	960 to 1,260 MHz	+/- 1 ppm (+/- 5 kHz typ.)	F-type
NJS8497UN				N-type	
NJS8497VF				+/- 0.3 ppm (+/- 1.5 kHz typ.)	F-type
NJS8497VN				N-type	
NJS8498HF				+/- 10 ppm (+/- 50 kHz typ.)	F-type
NJS8498HN				N-type	
NJS8498SF	+/- 3 ppm (+/- 15 kHz typ.)	F-type			
NJS8498SN	N-type				
NJS8498UF	+/- 1 ppm (+/- 5 kHz typ.)	F-type			
NJS8498UN	N-type				
NJS8498VF	+/- 0.3 ppm (+/- 1.5 kHz typ.)	F-type			
NJS8498VN	N-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 * In case of E-type, depend on External Reference
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**

### Products Information



## ■ 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 ]

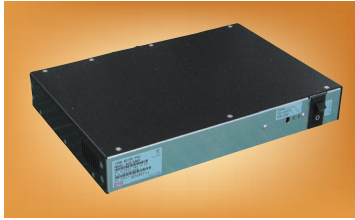


## INDOOR 150W AC/DC PSU

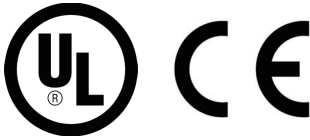
The features of Indoor 150W AC/DC Power Supply Unit (PSU) are to provide the stable +48V DC power to operate both C-band 8W/10W and Ku-band 8W BUCs, even if inner power supply of the modem is not capable enough to operate these BUCs.

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.



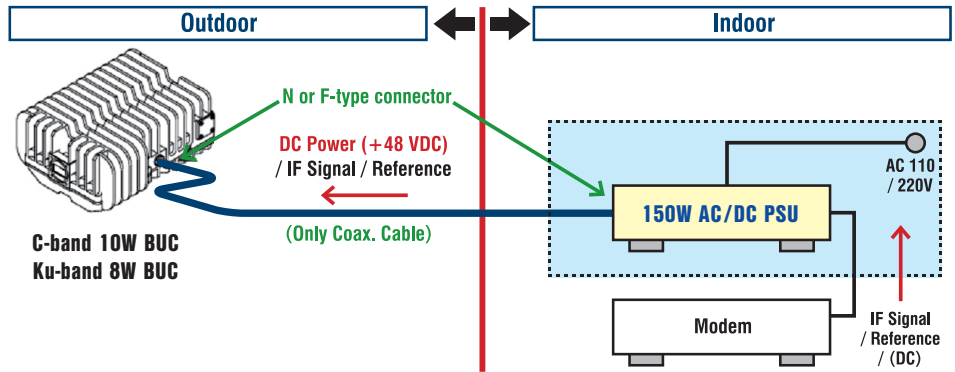
Indoor 150W AC/DC PSU



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.



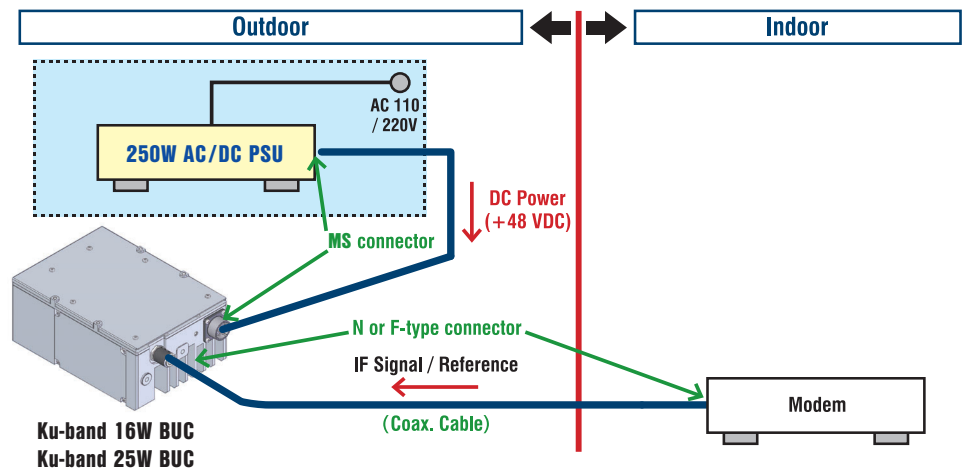
Outdoor 250W AC/DC PSU



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.

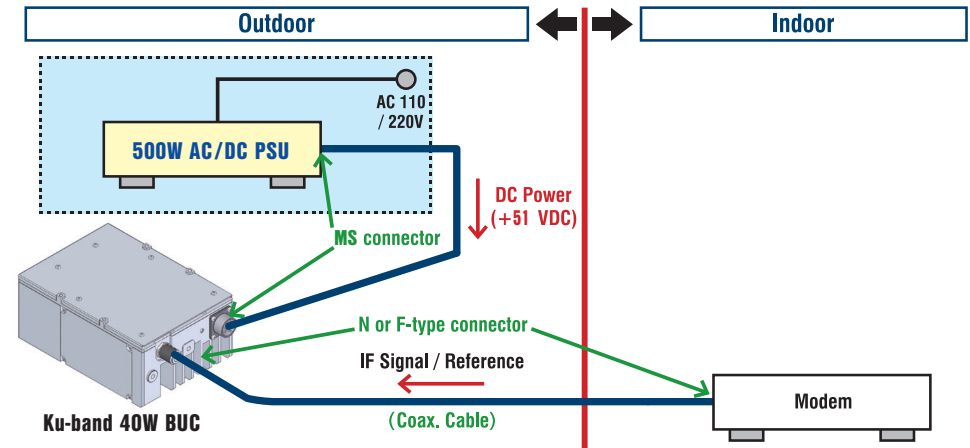


Outdoor 500W AC/DC PSU



Applicable Models:  
NJT8371 series

### 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]

### 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

Products Information



Products Information





## 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**

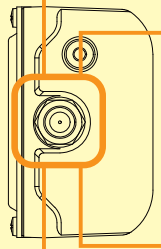
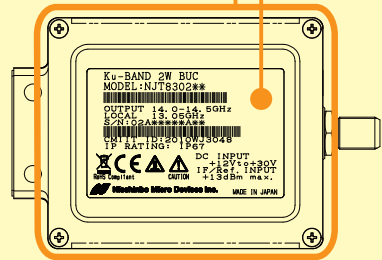
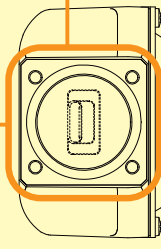
DO NOT remove the label. This is for our QA traceability

**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**

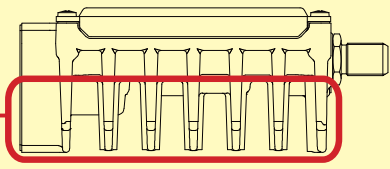
Apply DC voltage within the range indicated on product label. BUCs are operated at the input voltage of +12 to +30VDC, +15 to +24VDC, +15 to +30VDC, +18 to +60VDC, or +36 to +60VDC.

**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**

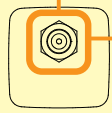
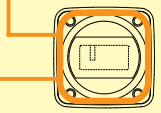
DO NOT remove the label. This is for our QA traceability

**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 Nisshinbo Micro Devices Inc.

### Label Format:

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

WEEE Logo  
RoHS Compliant  
CE Marking

(for Example as Ku-band BUC)

Ku-BAND 8W BUC  
MODEL: NJT8318\*\*\*\*  
OUTPUT 14.00-14.50GHz  
LOCAL 13.05GHz  
S/N: A00001C22  
IP RATING: IP67  
RoHS Compliant  
Nisshinbo Micro Devices Inc. MADE IN JAPAN

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

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, Radio Equipment directive 2014/53/EU (RED), 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

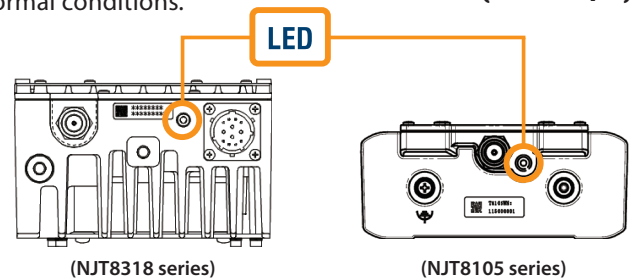
BUC products integrated with LED Indicator show normal or abnormal conditions.

### Status Chart

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

**Applicable Models: Specified BUCs**

### LED Location (for Example)



## FSK COMMUNICATIONS M&C

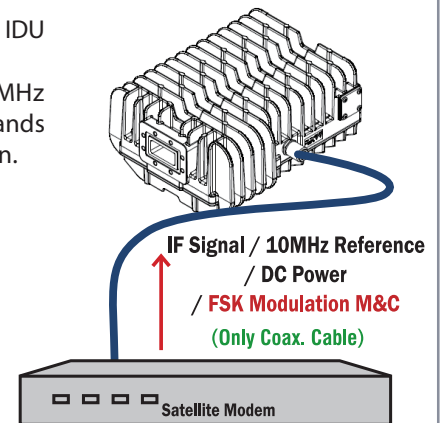
The BUC equipped FSK communications M&C includes capability to communicate with a IDU (e.g. satellite modem or M&C controller).

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.

**Applicable Models: NJT8318, NJT8319, NJT8334, NJT8336, NJT8370 and NJT8371 series**

### 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> <li>etc</li> </ul>



## 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 technologies of "Microelectronics" and "Microwave".
- 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: July 18, 2023  
 Expiry Date: August 22, 2024  
 Certification Number: 03082-2022-AQ-KOB-JAB  
 Certification Organization: DNV (\*)

(\*) DNV: DNV Business Assurance Japan KK

### ISO 14001 : 2015

Registration Date: December 17, 2004  
 Last Renewal Date: January 13, 2024  
 Expiry Date: January 12, 2027  
 Certification Number: JQA-EM4431  
 Certification Organization: JQA (\*)

(\*) JQA: Japan Quality Assurance Organization



## 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.