NISSHINBO

VSAT
PRODUCT LINEUP



PRODUCTS LINEUP

VSAT PRODUCTS

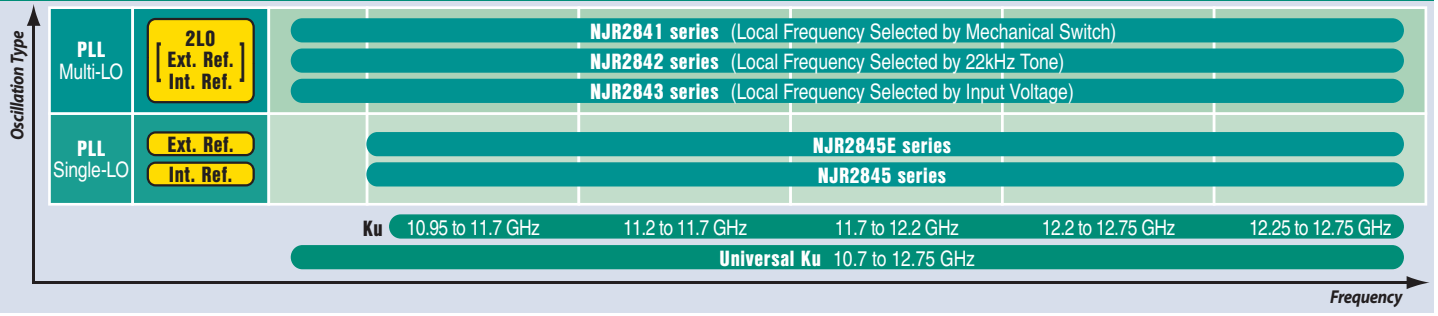
Ku-band BUC

P3 >



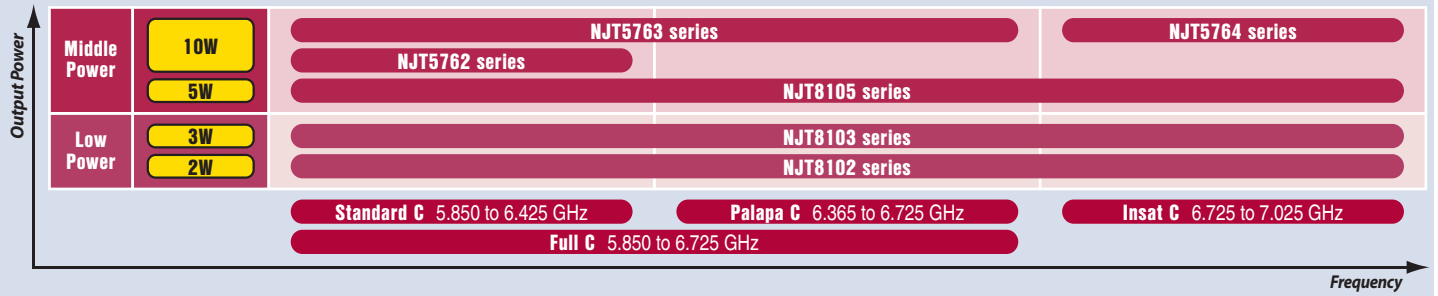
Ku-band LNB

P11 >



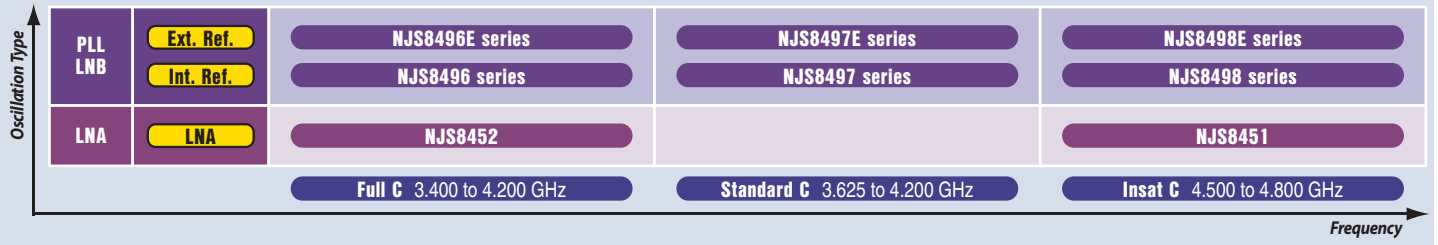
C-band BUC

P13 >



C-band LNA/LNB

P16 >



Ku-band GaN BUC: 40W NJT8340 series / 25W NJT8338 series

Features

- **Advanced GaN HEMT and Internal Linearizer Equipped**
- **High Efficiency Output Power**
- **Supporting High Operation Temperature**
- **Smaller Size & Lighter Weight**
- **Excellent Receive Band Rejection Filter Equipped:** -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)





	NJT8340 series	NJT8338 series
Rated Output Power	+46 dBm	+44 dBm
Linear Output Power	+46 dBm typ. at -26 dBc / ACPR +45 dBm typ. at -30 dBc / ACPR	+44 dBm typ. at -26 dBc / ACPR +42 dBm typ. at -30 dBc / ACPR
Power Consumption	200 W typ., 250 W max. 145 W typ. @ No IF signal	145 W typ., 160 W max. 85W typ. @ No IF signal
Operation Temperature	-40 to +60 ℃ for Operation guarantee	-40 to +75 ℃ for Operation guarantee
Dimension	161 (L)×83.8 (W)×98.6 (H) mm	161 (L)×83.8 (W)×86.4 (H) mm
Weight	2.0 kg [4.4 lbs]	1.8 kg [4.0 lbs]

Products Information NJT8340 series

Products Information NJT8338 series

40W GaN BUC : NJT8340 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Rated Output Power	IF Connector	M&C Option	DC Power Input Port	LED Indicator
NJT8340UNMT	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+46 dBm min. (40W)	N-type	Ethernet	MS Connector	Equipped
NJT8340UFMT					F-type			
NJT8340UNMS					N-type	RS-485		
NJT8340UFMS					F-type			
NJT8340NMT	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	Ethernet		
NJT8340FMT					F-type			
NJT8340NMS					N-type	RS-485		
NJT8340FMS					F-type			



Standard Ku 40W: NJT8340 series
Universal Ku 40W: NJT8340U 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)
Rated Output Power	+46 dBm over temperature
Minimum Gain	64 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 max. @1kHz -140 dBc/Hz max. @10kHz
Phase Noise (SSB)	-60 dBc/Hz @100Hz -70 dBc/Hz max. @1kHz -80 dBc/Hz max. @10kHz -90 dBc/Hz max. @100kHz -100 dBc/Hz max. @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	200 W typ., 250 W max.
Temperature Range (ambient)	Operating : (Operation Guarantee) -40 to +60 °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) 98.6 mm [(L) 6.34" x (W) 3.30" x (H) 3.88"]
Weight	2.0 kg [4.4 lbs]

Products Information NJT8340 series

Products Information NJT8338 series

Products Information NJT8336 series

Products Information NJT8334 series

Model Numbering System

N J T 8 3 4 0 U N M T

- **M&C Option -** Non Suffix: N/A
  T: Ethernet Interface & Parallel I/O
  S: RS-485 Interface & Parallel I/O
  R: RS-232C Interface & Parallel I/O [Option]
- **DC Power Input Connector -** Non Suffix: IF Interface Connector
  M: MS Connector (PT02E-14-12P (025))
- **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)
- **Rated Output Power -** 40: +46.0 dBm (40W)
  38: +44.0 dBm (25W)
  36: +42.0 dBm (16W)
  34: +39.0 dBm (8W)
- **Ku-band BUC's Series Number**

25W GaN BUC : NJT8338 series / 16W GaN BUC : NJT8336 series / 8W GaN BUC : NJT8334 series

25W GaN BUC: NJT8338 series

Model No.	RF Frequency	Local Frequency	IF Frequency	Rated Output Power	IF Connector	M&C Option	DC Power Input Port	LED Indicator
NJT8338UN	13.75 to 14.50 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	+44 dBm min. (25W)	N-type	NA	IF Connector	Equipped
NJT8338UF					F-type			
NJT8338UNMT					N-type	Ethernet	MS or IF Connector	
NJT8338UFMT					F-type			
NJT8338UNMS					N-type	RS-485		
NJT8338UFMS					F-type			
NJT8338N	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	NA	IF Connector	
NJT8338F					F-type			
NJT8338NMT					N-type	Ethernet	MS or IF Connector	
NJT8338FMT					F-type			
NJT8338NMS					N-type	RS-485		
NJT8338FMS					F-type			

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	RS-485		
NJT8336UFMS					F-type			
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	RS-485		
NJT8336FMS					F-type			

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	RS-485		
NJT8334UFMS					F-type			
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	RS-485		
NJT8334FMS					F-type			



Standard Ku 25W: NJT8338 series
Universal Ku 25W: NJT8338U series
Standard Ku 16W: NJT8336 series
Universal Ku 16W: NJT8336U series
Standard Ku 8W: NJT8334 series
Universal Ku 8W: NJT8334U 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)
Rated Output Power	+44 dBm over temperature : (25W) NJT8338 series +42 dBm over temperature : (16W) NJT8336 series +39 dBm over temperature : (8W) NJT8334 series
Minimum Gain	62 dB: (25W) NJT8338 series / (16W) NJT8336 series 59 dB: (8W) NJT8334 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 -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 : (25W) NJT8338 series / (16W) NJT8336 series +18 to +54 VDC at BUC Input Port : (8W) NJT8334 series
Power Consumption	145 W typ., 160 W max. : (25W) NJT8338 series 110 W typ., 115 W max. : (16W) NJT8336 series 70 W typ., 75 W max. : (8W) NJT8334 series
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" x (W) 3.30" x (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.
CAUTION 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.

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 Communications M&C *Note1	NA	DC Power Input Port: MS Connector	Equipped
NJT8371UFMK					F-type				
NJT8371UNMKA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8371UFMKA					F-type				
NJT8371UNMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power Input Port: MS Connector	
NJT8371UFMR					F-type				
NJT8371UNMRA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8371UFMRA					F-type				
NJT8371NMK	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	FSK Communications M&C *Note1	NA	DC Power Input Port: MS Connector	
NJT8371FMK					F-type				
NJT8371NMKA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8371FMKA					F-type				
NJT8371NMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power Input Port: MS Connector	
NJT8371FMR					F-type				
NJT8371NMRA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8371FMRA					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 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 × (W) 150 × (H) 100 mm [(L) 9.07" x (W) 5.91" x (H) 3.94"]
Weight	4.2 kg [9.7 lbs]

Model Numbering System

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

- **AC Power Operating Option - Non Suffix: N/A**
  A: Enclosed AC/DC PSU for BUC *Note4
- **M&C Function Option - Non Suffix: N/A**
  K: FSK communications M&C Equipped
  R: RS-232C Interface M&C Equipped
- **DC Input Connector - Non Suffix: IF Interface Connector**
  M: MS Connector (or IF Interface Connector) *Note5
- **IF Interface Connector - N: N-type (50 ohms), Female Connector**
  F: F-type (75 ohms), Female Connector
- **RF Frequency - Non Suffix: Standard Ku-band (14.0 to 14.5 GHz)**
  U: Universal Ku-band (13.75 to 14.5 GHz)
- **Output Power - 71: +46.0 dBm (40W) @ Saturation**
  70: +44.0 dBm (25W) @ Saturation
  19: +42.0 dBm (16W) @ 1dB G.C.P.
  18: +39.0 dBm (8W) @ 1dB G.C.P.
- **Product Series Model Number**

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

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

Ku-band BUC

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 Communications M&C *Note1	NA	DC Power Input Port: MS Connector	Equipped
NJT8370UFMK					F-type				
NJT8370UNMKA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8370UFMKA					F-type				
NJT8370UNMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power Input Port: MS Connector	
NJT8370UFMR					F-type				
NJT8370UNMRA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8370UFMRA					F-type				
NJT8370NMK	14.00 to 14.50 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz		N-type	FSK Communications M&C *Note1	NA	DC Power Input Port: MS Connector	
NJT8370FMK					F-type				
NJT8370NMKA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8370FMKA					F-type				
NJT8370NMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power Input Port: MS Connector	
NJT8370FMR					F-type				
NJT8370NMRA					N-type		Enclosed Outdoor AC/DC PSU *Note3	DC Power Supplied by Outdoor AC/DC PSU	
NJT8370FMRA					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 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" x (W) 5.12" x (H) 3.15"]
Weight	2.5 kg [5.5 lbs]

Model Numbering System

N J T 8 3 7 0 U N M K A

- **AC Power Operating Option - Non Suffix: N/A**
  A: Enclosed AC/DC PSU for BUC *Note4
- **M&C Function Option - Non Suffix: N/A**
  K: FSK communications M&C Equipped
  R: RS-232C Interface M&C Equipped
- **DC Input Connector - Non Suffix: IF Interface Connector**
  M: MS Connector (or IF Interface Connector) *Note5
- **IF Interface Connector - N: N-type (50 ohms), Female Connector**
  F: F-type (75 ohms), Female Connector
- **RF Frequency - Non Suffix: Standard Ku-band (14.0 to 14.5 GHz)**
  U: Universal Ku-band (13.75 to 14.5 GHz)
- **Output Power - 71: +46.0 dBm (40W) @ Saturation**
  70: +44.0 dBm (25W) @ Saturation
  19: +42.0 dBm (16W) @ 1dB G.C.P.
  18: +39.0 dBm (8W) @ 1dB G.C.P.
- **Product Series Model Number**

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

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

Ku-band BUC

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			DC Power Input Port: MS or IF Connector	
NJT8319UFM					F-type				
NJT8319UNMA					N-type		Enclosed *Note3 Outdoor AC/DC PSU	DC Power Supplied by Outdoor AC/DC PSU	
NJT8319UFMA					F-type				
NJT8319UNK					N-type	FSK Communications M&C *Note1	NA	DC Power Input Port: IF Connector	
NJT8319UFK					F-type				
NJT8319UNMK					N-type			DC Power Input Port: MS or IF Connector	
NJT8319UFMK					F-type				
NJT8319UNMKA					N-type		Enclosed *Note3 Outdoor AC/DC PSU	DC Power Supplied by Outdoor AC/DC PSU	
NJT8319UFMKA					F-type				
NJT8319UNMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power Input Port: MS or IF Connector	
NJT8319UFMR					F-type				
NJT8319UNMRA					N-type		Enclosed *Note3 Outdoor AC/DC PSU	DC Power Supplied by Outdoor AC/DC PSU	
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			DC Power Input Port: MS or IF Connector	
NJT8319FM					F-type				
NJT8319NMA					N-type		Enclosed *Note3 Outdoor AC/DC PSU	DC Power Supplied by Outdoor AC/DC PSU	
NJT8319FMA					F-type				
NJT8319NK					N-type	FSK Communications M&C *Note1	NA	DC Power Input Port: IF Connector	
NJT8319FK					F-type				
NJT8319NMK					N-type			DC Power Input Port: MS or IF Connector	
NJT8319FMK					F-type				
NJT8319NMKA					N-type		Enclosed *Note3 Outdoor AC/DC PSU	DC Power Supplied by Outdoor AC/DC PSU	
NJT8319FMKA					F-type				
NJT8319NMR					N-type	RS-232C Interface M&C *Note2	NA	DC Power Input Port: MS or IF Connector	
NJT8319FMR					F-type				
NJT8319NMRA					N-type		Enclosed *Note3 Outdoor AC/DC PSU	DC Power Supplied by Outdoor AC/DC PSU	
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" 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.
CAUTION 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.

Ku-band BUC

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			DC Power Input Port: MS or IF Connector	
NJT8318UFM					F-type				
NJT8318UNA					N-type		Enclosed *Note3 Indoor AC/DC PSU	DC Power Supplied by Indoor AC/DC PSU	
NJT8318UFA					F-type				
NJT8318UNK					N-type	FSK Communications M&C *Note1	NA	DC Power Input Port: IF Connector	
NJT8318UFK					F-type				
NJT8318UNMK					N-type			DC Power Input Port: MS or IF Connector	
NJT8318UFMK					F-type				
NJT8318UNMR					N-type	RS-232C Interface M&C *Note2		DC Power Input Port: MS or IF Connector	
NJT8318UFMR					F-type				
NJT8318UNMRA					N-type		Enclosed *Note3 Indoor AC/DC PSU	DC Power Supplied by Indoor AC/DC PSU	
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			DC Power Input Port: MS or IF Connector	
NJT8318FM					F-type				
NJT8318NA					N-type		Enclosed *Note3 Indoor AC/DC PSU	DC Power Supplied by Indoor AC/DC PSU	
NJT8318FA					F-type				
NJT8318NK					N-type	FSK Communications M&C *Note1	NA	DC Power Input Port: IF Connector	
NJT8318FK					F-type				
NJT8318NMK					N-type			DC Power Input Port: MS or IF Connector	
NJT8318FMK					F-type				
NJT8318NMR					N-type	RS-232C Interface M&C *Note2		DC Power Input Port: MS or IF Connector	
NJT8318FMR					F-type				
NJT8318NMRA					N-type		Enclosed *Note3 Indoor AC/DC PSU	DC Power Supplied by Indoor AC/DC PSU	
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" 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.

Ku-band BUC

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



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	



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

Products Information



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

Products Information NJT8316L series

Products Information NJT8304 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.	+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

Ku-band BUC

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

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**

Ku-band LNB

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



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	F-type
NJR2841HN					(+/- 100 kHz typ.)	N-type
NJR2841S	High Band: 11.70 to 12.75 GHz	High Band: 10.60 GHz	High Band: 1,100 to 2,150 MHz		+/- 3 ppm	F-type
NJR2841SN	(Universal Ku-band)				(+/- 30 kHz typ.)	N-type
NJR2842H				22kHz Tone	+/- 10 ppm	F-type
NJR2842HN					(+/- 100 kHz typ.)	N-type
NJR2842S					+/- 3 ppm	F-type
NJR2842SN					(+/- 30 kHz typ.)	N-type
NJR2843H				Input Voltage	+/- 10 ppm	F-type
NJR2843HN					(+/- 100 kHz typ.)	N-type
NJR2843S					+/- 3 ppm	F-type
NJR2843SN					(+/- 30 kHz typ.)	N-type

External Reference Type

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Frequency Selected by *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	High Band: 10.60 GHz	High Band: 1,100 to 2,150 MHz	22kHz Tone		F-type
NJR2842EN	(Universal Ku-band)					N-type
NJR2843E				Input Voltage		F-type
NJR2843EN						N-type

*Note7: The detail is shown in section of "LOCAL FREQUENCY SELECTION".

Specifications

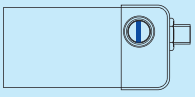
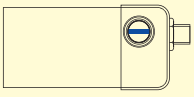
Item	Specifications
Input Interface	Waveguide, WR 75 with Groove
Output Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Noise Figure (at +25 °C)	0.8 dB
Conversion Gain (at +25 °C)	62 dB max., 48 dB min.
Requirement External Reference Signal (Only External Reference Type is 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

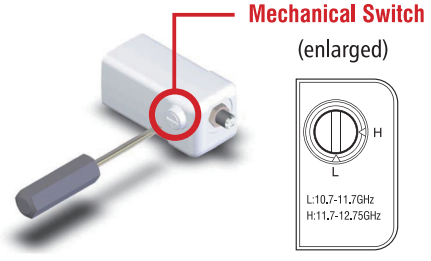
- Mechanical Switch
- 22kHz Tone On/Off
- Input Voltage High/Low

Specification of Local Switch

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

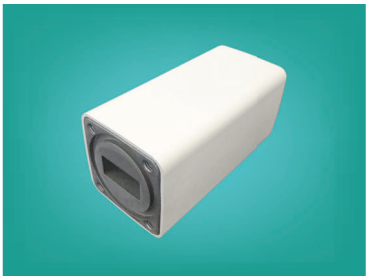
Applicable Models: NJR2841, NJR2842 and NJR2843 series

Image of Mechanical Switch



Ku-band LNB

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					N-type
NJR2845DEF	11.20 to 11.70 GHz	10.25 GHz	950 to 1,450 MHz		F-type
NJR2845DEN					N-type
NJR2845BEF	11.70 to 12.20 GHz	10.75 GHz	950 to 1,450 MHz		F-type
NJR2845BEN					N-type
NJR2845GEF	12.20 to 12.75 GHz	11.25 GHz	950 to 1,500 MHz		F-type
NJR2845GEN					N-type
NJR2845CEF	12.25 to 12.75 GHz	11.30 GHz	950 to 1,450 MHz		F-type
NJR2845CEN					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 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

- **IF Interface Connector -** N: N-type (50 ohms), Female Connector; F: F-type (75 ohms), Female Connector
- **Local Stability Line-up -** H: Internal Reference, Local Stability: +/- 10 ppm, H-type; S: Internal Reference, Local Stability: +/- 3 ppm, S-type; U: Internal Reference, Local Stability: +/- 1 ppm, U-type; V: Internal Reference, Local Stability: +/- 0.5 ppm, V-type; E: External Reference, E-type
- **RF Frequency Band -** A: 10.95-11.7GHz; B: 11.7-12.2GHz; C: 12.25-12.75GHz; D: 11.2-11.7GHz; G: 12.2-12.75GHz
- **Product Series Model Number**

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 Input Port: IF Connector	NA	Equipped
NJT5763F					F-type				
NJT5763NM					N-type		DC Power Input Port: MS Connector		
NJT5763FM					F-type				
NJT5763NMD					N-type		Floating DC Power: -48/+48V Input Port: MS Connector		
NJT5763FMD					F-type				
NJT5763NA					N-type	Enclosed *Note3 Indoor AC/DC PSU	DC Power Input Port: MS Connector		
NJT5763FA					F-type				
NJT5762N	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	NA	DC Power Input Port: IF Connector		
NJT5762F					F-type				
NJT5762NM					N-type		DC Power Input Port: MS Connector		
NJT5762FM					F-type				
NJT5762NMD					N-type		Floating DC Power: -48/+48V Input Port: MS Connector		
NJT5762FMD					F-type				
NJT5762NA					N-type	Enclosed *Note3 Indoor AC/DC PSU	DC Power Supplied by Indoor AC/DC PSU		
NJT5762FA					F-type				
NJT5762KN					N-type	NA	DC Power Input Port: IF Connector	FSK Communications M&C *Note1	
NJT5762KF					F-type				
NJT5762KNM					N-type		DC Power Input Port: MS Connector		
NJT5762KFM					F-type				
NJT5764N	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type		DC Power Input Port: IF Connector	NA	
NJT5764F					F-type				
NJT5764NM					N-type		DC Power Input Port: MS Connector		
NJT5764FM					F-type				
NJT5764NMD					N-type		Floating DC Power: -48/+48V Input Port: MS Connector		
NJT5764FMD					F-type				
NJT5764NA					N-type	Enclosed *Note3 Indoor AC/DC PSU	DC Power Supplied by Indoor AC/DC PSU		
NJT5764FA					F-type				

*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 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	IF Connector	LED Indicator
NJT8105WN	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz	+37 dBm min. (5W)	N-type	Equipped
NJT8105WF					F-type	
NJT8105N	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	
NJT8105F					F-type	
NJT8105EN	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type	
NJT8105EF					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

- **IF Interface Connector -** N: N-type (50 ohms), Female Connector; F: F-type (75 ohms), Female Connector
- **RF Frequency -** Non Suffix: Standard C-band (5.85 to 6.425 GHz); W: Full C-band (5.85 to 6.725 GHz); E: Insat / Extend C-band (6.725 to 7.025 GHz)
- **Output Power @ 1dB G.C.P. -** 5: +37.0 dBm (5W); 3: +34.5 dBm (3W); 2: +33.0 dBm (2W)
- **Product Series Model Number**

C-band BUC

3W / 2W BUC : NJT8102 & NJT8103 series



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
NJT8103WN	5.850 to 6.725 GHz (Full C-band)	4.90 GHz	950 to 1,825 MHz	+34.5 dBm min. (3W)	N-type	N/A
NJT8103WF					F-type	
NJT8103N	5.850 to 6.425 GHz (Standard C-band)		950 to 1,525 MHz		N-type	
NJT8103F					F-type	
NJT8103EN	6.725 to 7.025 GHz (Insat C-band)	5.76 GHz	965 to 1,265 MHz		N-type	
NJT8103EF					F-type	

2W BUC: NJT8102 series

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

Specifications

Item	Specifications
Output Interface	Waveguide, CPR 137 with Groove
Input Interface	Coax. Connector, N-type female (50 ohm) / F-type female (75 ohm)
Output Power @ 1 dB G.C.P.	+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]

C-band LNA/LNB

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 ℃]	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				+/- 0.3 ppm (+/- 1.5 kHz typ.)	F-type
NJS8496VN					N-type
NJS8497HF	3.625 to 4.200 GHz (Standard C-band)	5.15 GHz	950 to 1,525 MHz	+/- 10 ppm (+/- 50 kHz typ.)	F-type
NJS8497HN					N-type
NJS8497SF				+/- 3 ppm (+/- 15 kHz typ.)	F-type
NJS8497SN					N-type
NJS8497UF				+/- 1 ppm (+/- 5 kHz typ.)	F-type
NJS8497UN					N-type
NJS8497VF				+/- 0.3 ppm (+/- 1.5 kHz typ.)	F-type
NJS8497VN					N-type
NJS8498HF	4.500 to 4.800 GHz (Insat C-band)	5.76 GHz	960 to 1,260 MHz	+/- 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

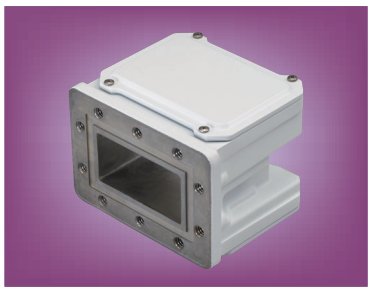
External Reference Type: NJS8496E series

Model No.	RF Frequency	Local Frequency	IF Frequency	Local Stability [-40 to +60 ℃]	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 ℃)	15 K typ., 30 K max.
Conversion Gain (at +25 ℃)	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 ℃ Storage : -40 to +80 ℃
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

Products Information

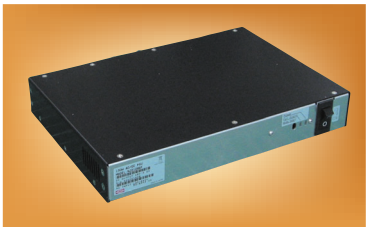
Model No.	RF Frequency
NJS8452	3.400 to 4.200 GHz (Full C-band)
NJS8451	4.500 to 4.800 GHz (Insat C-band)

Specifications

Item	Specifications
Input Interface	Waveguide, CPR 229 (with Groove)
Output Interface	Coax. Connector, N-type female (50 ohm)
Noise Temperature (at +25 ℃)	15 K
Gain (at +25 ℃)	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 ℃ Storage : -40 to +80 ℃
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]

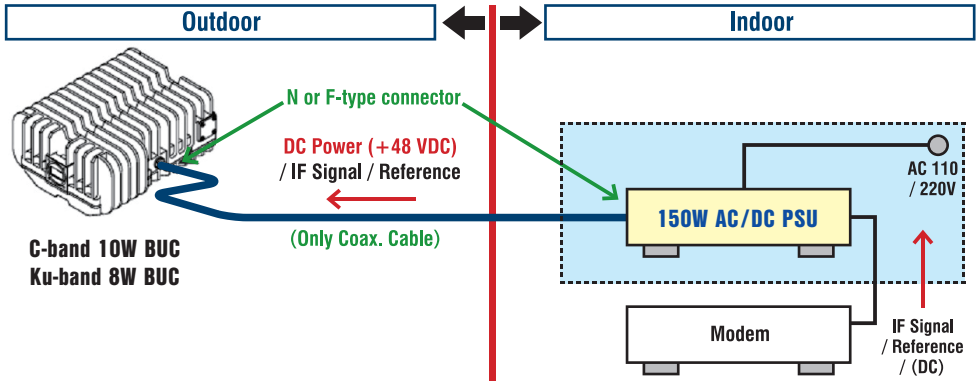
INDOOR 150W AC/DC PSU

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

Overview



Applicable Models:
NJT5118, NJT5218, NJT5762, NJT5763, NJT5764, NJT8318 and NJT8334 series

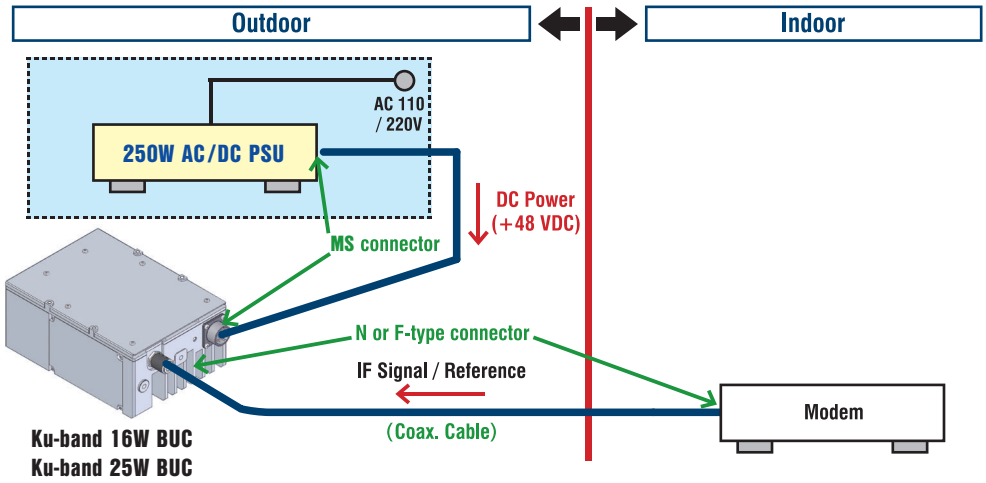
OUTDOOR 250W AC/DC PSU

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

Overview



Applicable Models:
NJT8319, NJT8336, NJT8338 and NJT8370 series

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.

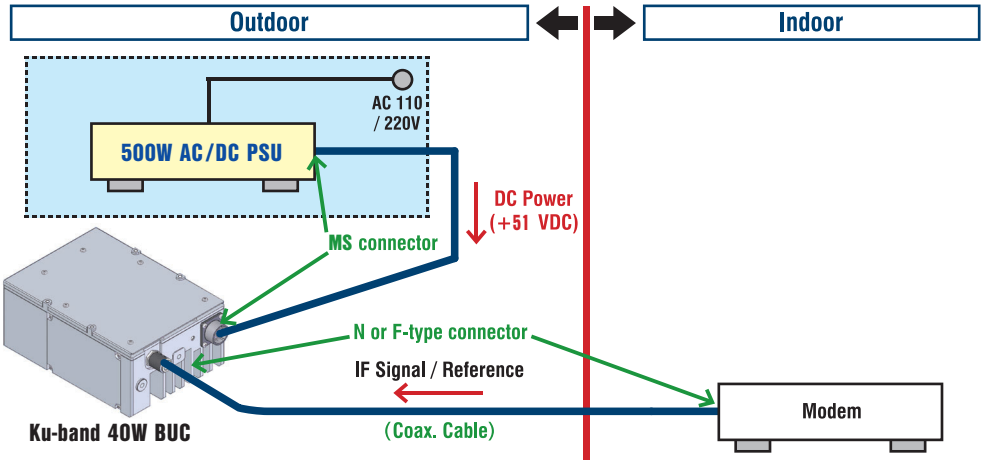


Outdoor 500W AC/DC PSU

CE

Applicable Models:
NJT8340 and 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]

Products Information

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

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:

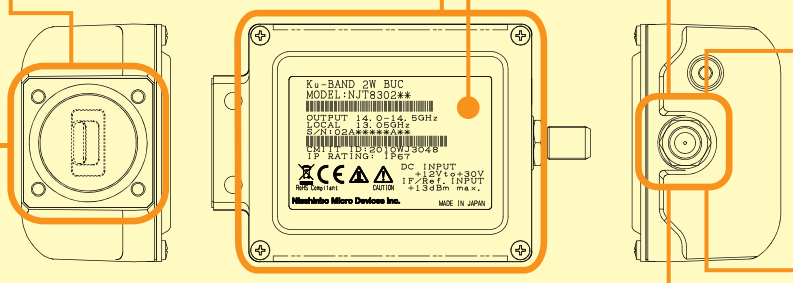
Sealing Film
CAUTION
DO NOT remove the film on the waveguide when the unit has it. If the film is removed, it may lose the performance of waterproof.

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.

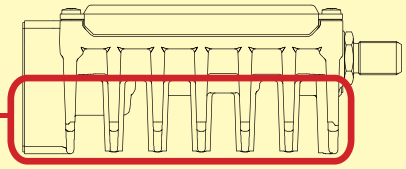
WG Filter
CAUTION
DO NOT touch the filter in the waveguide.
The filter is used for Rx-band rejection. If the filter is damaged or dirty, it may not reject a sufficient quantity of false Rx-bands and could damage BUC internals.



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.

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.



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

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



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.

PRODUCT LABEL

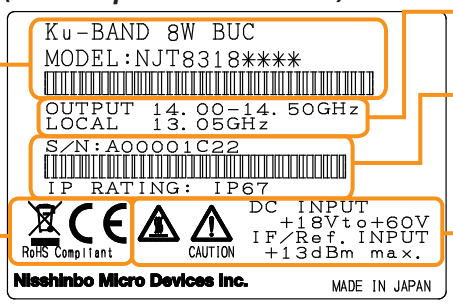
The common product label with following format is employed for both of all LNBs and BUCs manufactured by Nisshinbo Micro Devices Inc.

Label Format:

(for Example as Ku-band BUC)

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

WEEE Logo
RoHS Compliant
CE Marking



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.

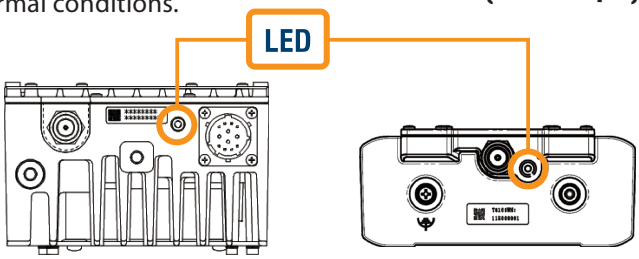
Status Chart



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

Applicable Models: Specified BUCs

LED Location (for Example)



(NJT8318 series) (NJT8105 series)

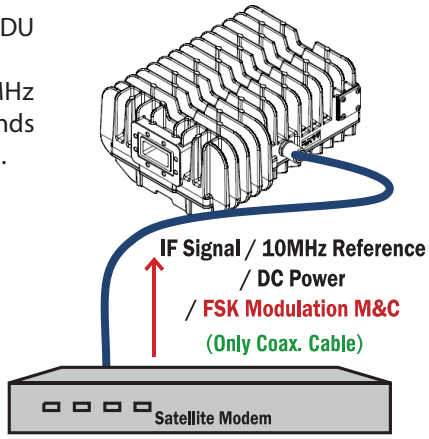
FSK COMMUNICATIONS M&C

The BUC equipped FSK communications M&C includes capability to communicate with a IDU (e.g. satellite modem or M&C controller).
The signal of the M&C is multiplexed onto the IF coaxial cable with the IF signal, 10 MHz reference, and DC power between the BUC and the IDU. The M&C implements commands to control BUC functions and to query the BUC for configuration or status information.

Functions

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

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



RS-232C/RS-485 INTERFACE M&C

The BUC equipped RS-232C/RS-485 interface M&C includes cpability to communicate with a IDU (e.g. M&C contoroller or personal computer). The signal of the M&C is compliance with RS-232C/RS-485 and the M&C impremments commands to control BUC functions and to query the BUC for configuration or status information.

Applicable Models

RS-232C: NJT8318, NJT8319, NJT8334, NJT8336, NJT8338, NJT8340, NJT8370 and NJT8371 series

RS-485: NJT8334, NJT8336, NJT8338 and NJT8340 series

Functions

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

CSR ACTIVITIES

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: December 12, 2024
Expiry Date: August 22, 2027
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_2, H_2S, SO_2, and NO_2. 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.

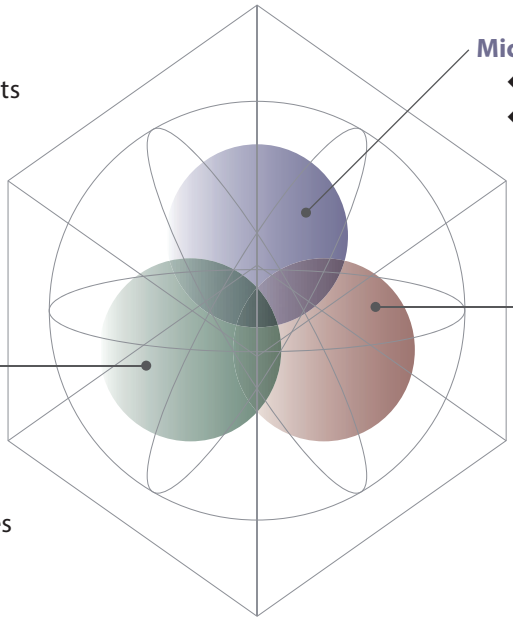
8. The product specifications on this document are subject to change without notice. If you are considering using a product, delivery specifications must first be settled.

COMPANY PROFILE

NISSHINBO

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 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



Microwave Tubes and Radar Components
- Electron tubes and peripheral devices
- Electron guns and cathodes

Microwave Application Products
- Components for Satellite Communications
- Sensor components

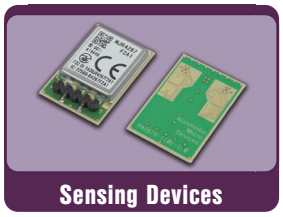
Semiconductor Devices
- MOS ICs
- Bipolar ICs
- GaAs ICs
- SAW Devices
- Optoelectronic Devices
- MEMS

Microwave Business Division is one of divisions engaged in Nisshinbo Micro Devices Inc. which has kept supplying reliable components, created through the concept of "Microelectronics" and "Microwave", in microwave fields.
Components which Microwave Business Division has been supplying are as shown below.
Microwave Business Division will keep complying with any requirements to be brought from the market.

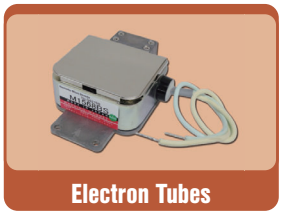

LNBs for VSAT


BUCs for VSAT


RF units for FWA/BWA


Sensing Devices


Electron Guns


Electron Tubes

Catalog URL

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

Nisshinbo Micro Devices Inc.

Microwave Business Division

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