

# Universal/Standard Ku-band **GaN** 25W BUC

## MODEL No. **NJT8370** series

### < Features >

- \* **GaN** Technology Amplifier Inside
- \* **High Temperature Operating**
  - Operation Temperature Range: -40 to +75 °C
- \* **High Efficiency Output Power**
  - Saturation Output Power: +44.0 dBm
  - ACPR: -30 dBc @ Pout = +42.0 dBm
  - Power Consumption: 200 W
- \* **AC Power Operation Option**
- \* **Monitor & Control Option**
  - FSK Communications M&C
  - RS-232C Interface Serial M&C
- \* **Compact Size & Light Weight**
  - Dimension: 180 (L) x 130 (W) x 80 (H) mm
  - Weight: 2.5 kg

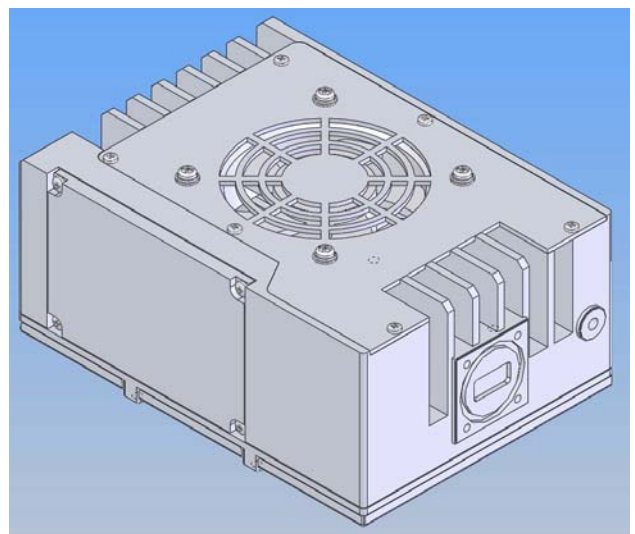
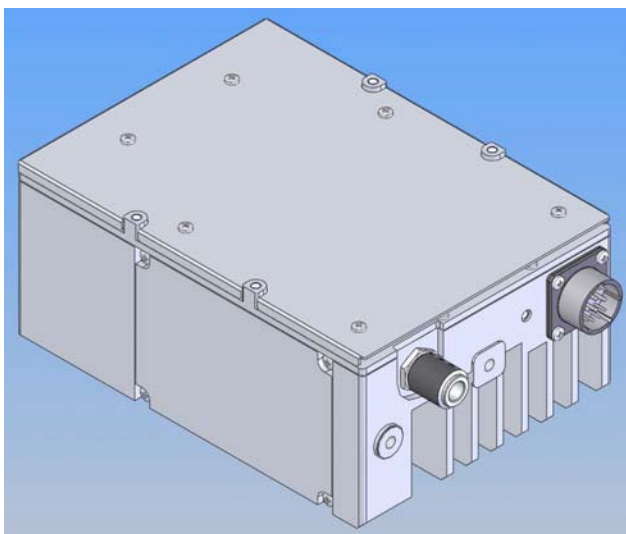


### < Line-Up >

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power	IF Connector	Power Supply	Port for Voltage Input	M&C Option	
NJT8370NMK	14.0 to 14.5 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz	25W Saturation (+44dBm)	N-type	+36 to +60 V	MS Connector	FSK M&C	
NJT8370FMK					F-type	DC Power			
NJT8370NMKA					N-type	AC Power	MS Connector * Note 1		
NJT8370NMR					F-type				
NJT8370FMR					N-type	+36 to +60 V	MS Connector		RS-232C M&C
NJT8370NMRA					F-type	DC Power			
NJT8370FMRA	N-type	AC Power	MS Connector * Note 1						
NJT8370UNMK	F-type				DC Power				
NJT8370UFMK	13.75 to 14.5 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz		N-type	+36 to +60 V	MS Connector	FSK M&C	
NJT8370UNMKA					F-type	DC Power			
NJT8370UFMKA					N-type	AC Power	MS Connector * Note 1		
NJT8370UNMR					F-type				
NJT8370UFMR				N-type	+36 to +60 V	MS Connector	RS-232C M&C		
NJT8370UNMRA				F-type	DC Power				
NJT8370UFMRA	N-type	AC Power	MS Connector * Note 1						
NJT8370UFMRA	F-type			DC Power					

\* Note 1 ) Additional outdoor 250W AC/DC PSU is enclosed for AC Power Option and DC Power is supplied at MS connector of BUC from AC/DC PSU via power cable.

### < Overview >



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

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# Universal/Standard Ku-band **GaN** 25W BUC

## MODEL No. **NJT8370** series

### < Specifications >

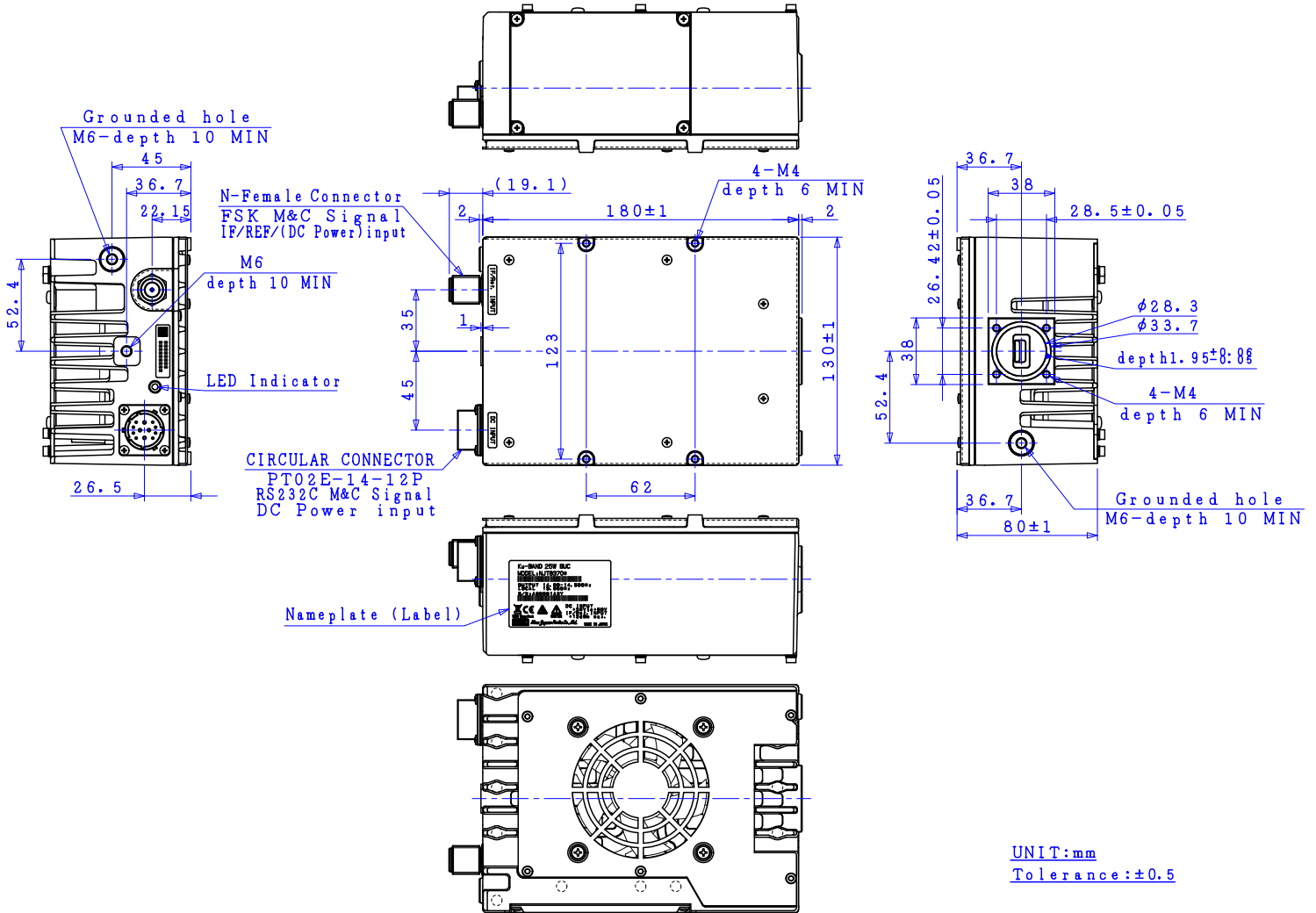
Item	Specifications	
Output Interface	Waveguide, WR75 (with Groove)	
Input Interface	N-type, female (50 ohm)	[N-type IF Connector Model]
	F-type, female (75 ohm)	[F-type IF Connector Model]
Saturation Output Power	+44 dBm min. @ +25 °C +43 dBm min. over temperature	
ACPR	-30 dBc typ., -26 dBc min. @ Pout = +42 dBm	
Linear Gain	72 dB nom., 66 dB min.	
Requirement for External Reference	[Frequency]	10 MHz (sine-wave)
	[Input Power]	-5 to +5 dBm @ Input port
	[Phase Noise]	-125 dBc/Hz max. @ 100 Hz
		-140 dBc/Hz max. @ 10 kHz
L.O. Phase Noise	-60 dBc/Hz max. @ 100 Hz	
	-70 dBc/Hz max. @ 1 kHz	
	-80 dBc/Hz max. @ 10 kHz	
	-90 dBc/Hz max. @ 100 kHz	
	-100 dBc/Hz max. @ 1 MHz	
Receive Band Noise Density	[Universal Ku-band]	Tx: 14.0 to 14.5 GHz -156 dBm/Hz max. @10.95 to 12.75 GHz
		Tx: 13.75 to 14.0 GHz -156 dBm/Hz max. @10.95 to 12.25 GHz
		-123 dBm/Hz max. @12.25 to 12.75 GHz
	[Standard Ku-band]	Tx: 14.0 to 14.5 GHz -156 dBm/Hz max. @10.95 to 12.75 GHz
Input V.S.W.R.	2 : 1 max.	
Output V.S.W.R.	2 : 1 max.	
Power Requirement	+36 to +60 VDC Power	
Power Consumption	120 W typ. @ No If signal 180 W typ. @ Pout = +39 dBm 200 W typ., 230 W max. @ Psat	
Mute	Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal, or Over temperature	
LED Indicator	GREEN: L.O. locked / RED: L.O. unlocked or no 10 MHz reference signal	
M&C	[FSK Communication M&C]	Interface: FSK Modulation Signal via IF connector Function: Power Monitor / TX On/Off Control / Alarm ... etc
	[RS-232C Serial M&C]	Interface: RS-232C Function: Power Monitor / TX On/Off Control / Alarm / Digital Step Attenuator ... etc
Temperature Range (ambient)	[Operating]	-40 to +75 °C (Operating Guarantee) -40 to +60 °C (Performance Guarantee)
	[Storage]	-40 to +75 °C
Waterproof/Dustproof (IP Code)	IP 67	
Dimension & Housing	180 mm (L) x 130 mm (W) x 80 mm (H) [7.09" (L) x 5.12" (W) x 3.15" (H)] ( without Interface Connectors and Screws )	
Weight	2.5kg [5.5 lbs]	

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< **Outline Drawing** >

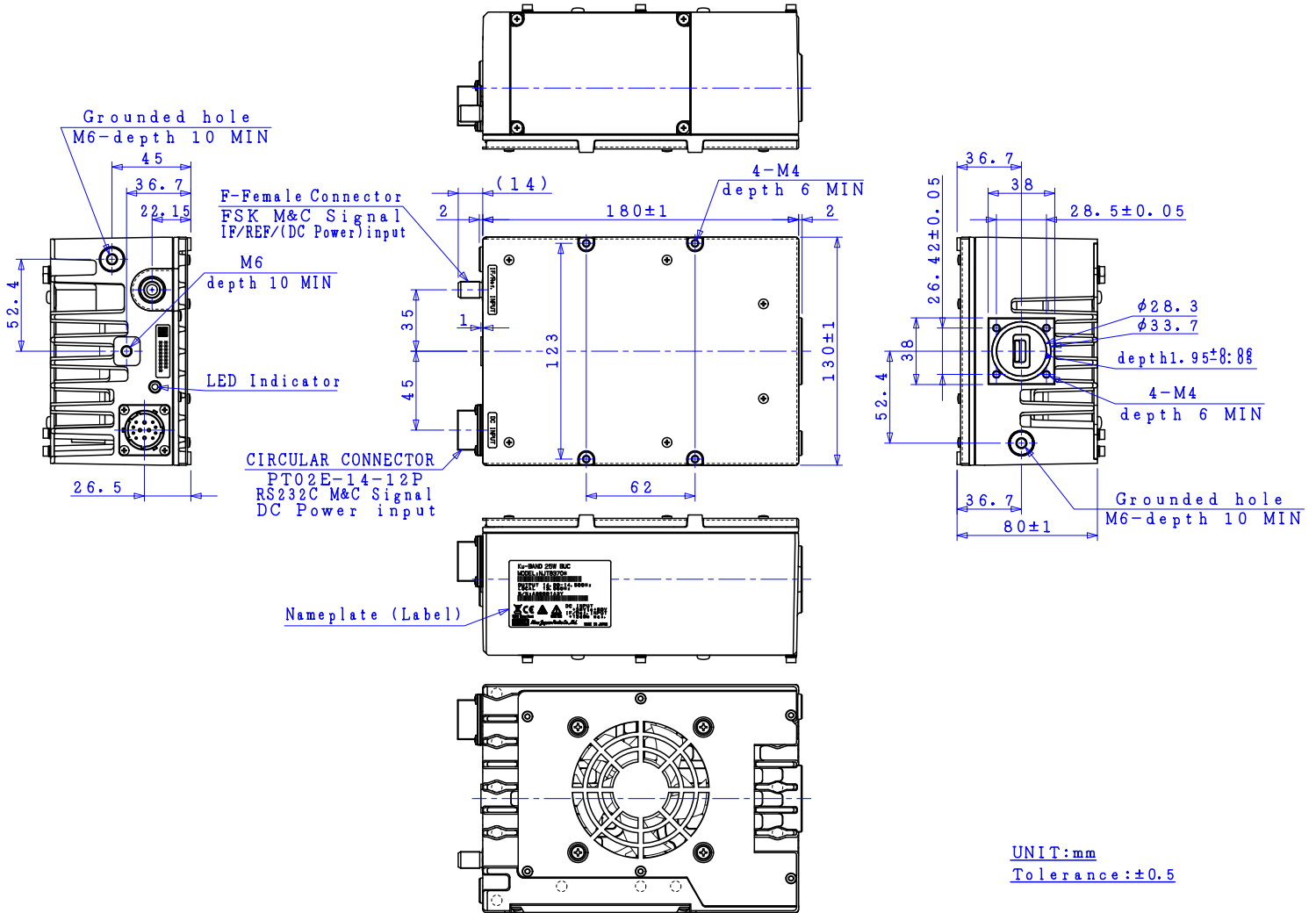
**N-type, female Connector Model / DC Input: MS Connector**



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< **Outline Drawing** >

**F-type, female Connector Model / DC Input: MS Connector**



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# ■ Universal/Standard Ku-band **GaN** 25W BUC

## AC Power Option: **Outdoor 250W AC/DC Power Supply Unit (PSU)**

### < Features >

#### \* **Outdoor AC/DC Power Supply**

- Active Power Factor Correction (PFC) Equipped
- Input AC Voltage: 100 to 240 V
- Output DC Voltage: 48 V typ.
- Output DC Power: 250 W max.

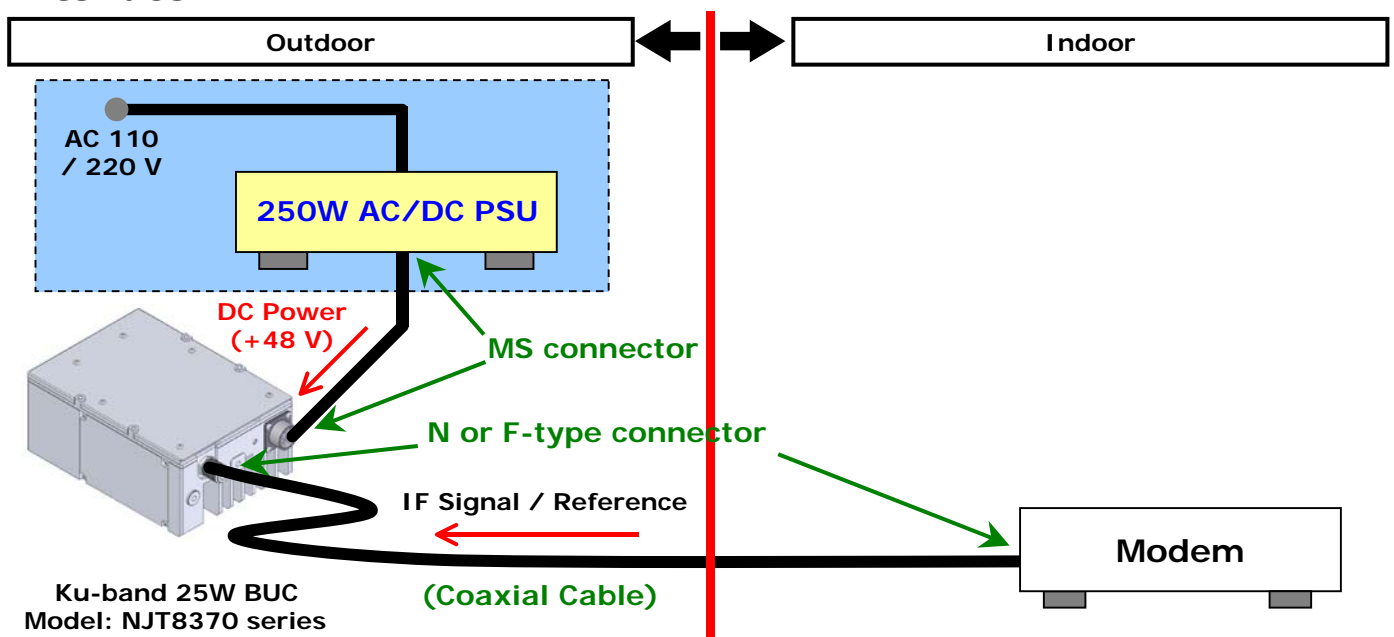
#### \* **Compact Size & Light Weight**

- Dimension: 186 (L) x 133 (W) x 60 (H) mm
- Weight: 1.6 kg



### < Overview of AC Power Option >

#### - Interface -



#### - 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 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 AC/DC PSU complies with EC DIRECTIVE.

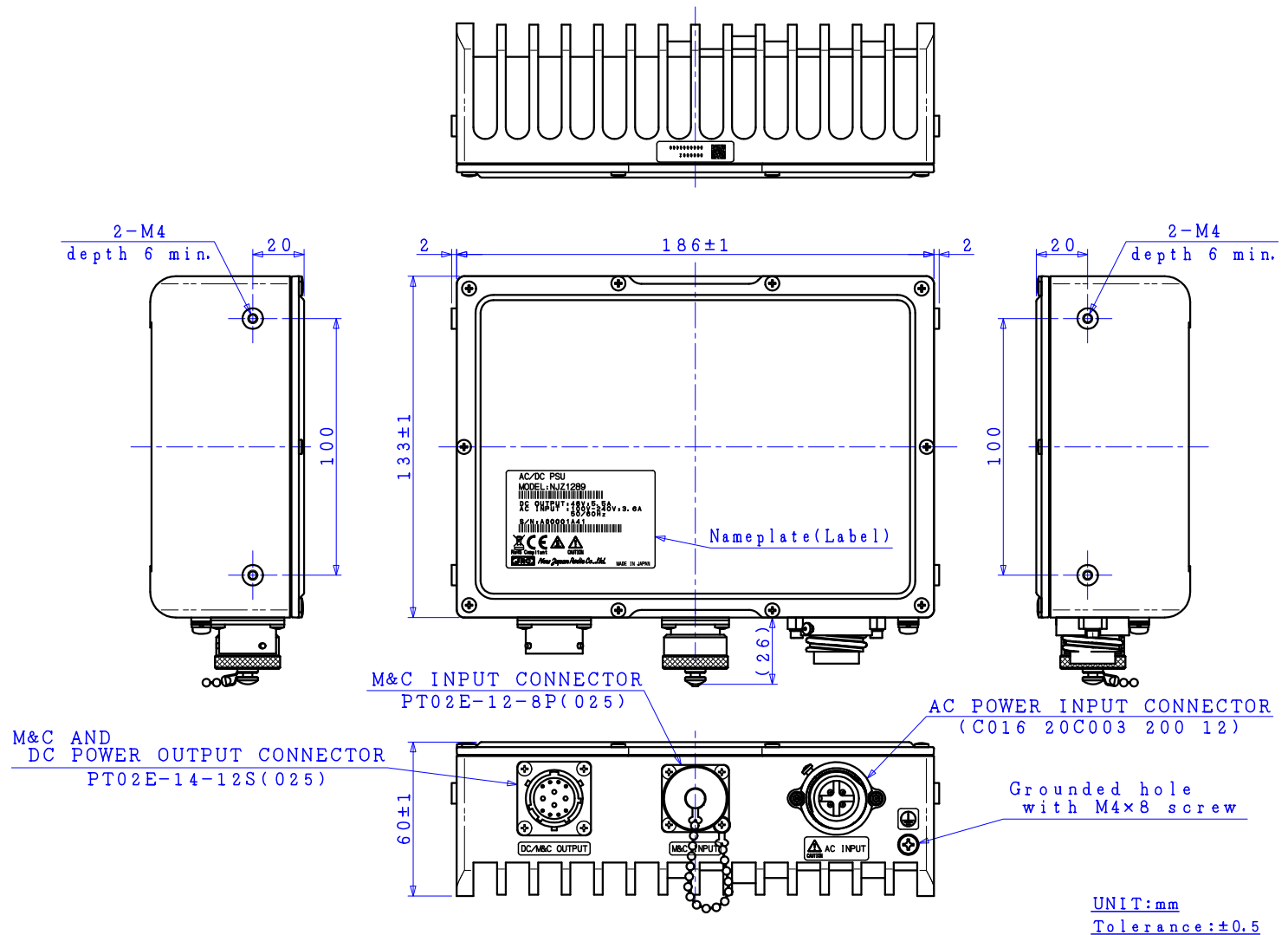
# ■ Universal/Standard Ku-band **GaN** 25W BUC

## AC Power Option: **Outdoor 250W AC/DC Power Supply Unit (PSU)**

### < Specifications >

Item	Specifications
Input AC Voltage Range	100 to 240 V (Rating: 90 to 264 V)
Input AC Power	300 VA max.
Output DC Voltage	+48 V typ.
Output DC Power Capacity	250 W max.
Efficiency	90 %
Power Factor	0.9
Temperature Range (ambient)	Operating: -40 to +55 °C Storage: -40 to +75 °C
Dimension & Housing	186 (L) x 133 (W) x 60 (H) mm [7.32" (L) x 5.24" (W) x 2.36" (H)] without interface connector and screws
Weight	1.6 kg max. [3.5 lbs max.]

### < Outline Drawing >



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

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