

# Universal/Standard Ku-band **GaN** 40W BUC

MODEL No. **NJT8371** series

## < Features >

- \* **GaN** Technology Amplifier Inside
- \* **RF Frequency Line-up**
  - Universal Ku-band: 13.75 to 14.5 GHz
  - Standard Ku-band: 14.0 to 14.5 GHz
- \* **High Efficiency Output Power**
  - Saturation Output Power: +46.0 dBm
  - ACPR: -30 dBc @ Pout = +44.0 dBm
  - Power Consumption: 260 W
- \* **AC Power Operation Option**
- \* **Monitor & Control Option**
  - FSK Communications M&C
  - RS-232C Interface Serial M&C
- \* **Compact Size & Light Weight**
  - Dimension: 230 (L) x 150 (W) x 100 (H) mm
  - Weight: 4.2 kg



## < Line-Up >

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power	IF Connector	Power Supply	Port for Voltage Input	M&C Option
NJT8371NMK	14.0 to 14.5 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz	40W Saturation (+46dBm)	N-type	+36 to +60 V	MS Connector	FSK M&C
NJT8371FMK					F-type	DC Power		
NJT8371NMKA					N-type	AC Power	MS Connector * Note 1	RS-232C M&C
NJT8371FMKA					F-type			
NJT8371NMR					N-type	+36 to +60 V	MS Connector	RS-232C M&C
NJT8371FMR					F-type	DC Power		
NJT8371NMRA					N-type	AC Power	MS Connector * Note 1	FSK M&C
NJT8371FMRA					F-type			
NJT8371UNMK	13.75 to 14.5 GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz	40W Saturation (+46dBm)	N-type	+36 to +60 V	MS Connector	FSK M&C
NJT8371UFMK					F-type	DC Power		
NJT8371UNMKA					N-type	AC Power	MS Connector * Note 1	RS-232C M&C
NJT8371UFMKA					F-type			
NJT8371UNMR					N-type	+36 to +60 V	MS Connector	RS-232C M&C
NJT8371UFMR					F-type	DC Power		
NJT8371UNMRA					N-type	AC Power	MS Connector * Note 1	FSK M&C
NJT8371UFMRA					F-type			

\* Note1 ) Additional outdoor 500W 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.

# Universal/Standard Ku-band **GaN** 40W BUC

## MODEL No. **NJT8371** series

### < Specifications >

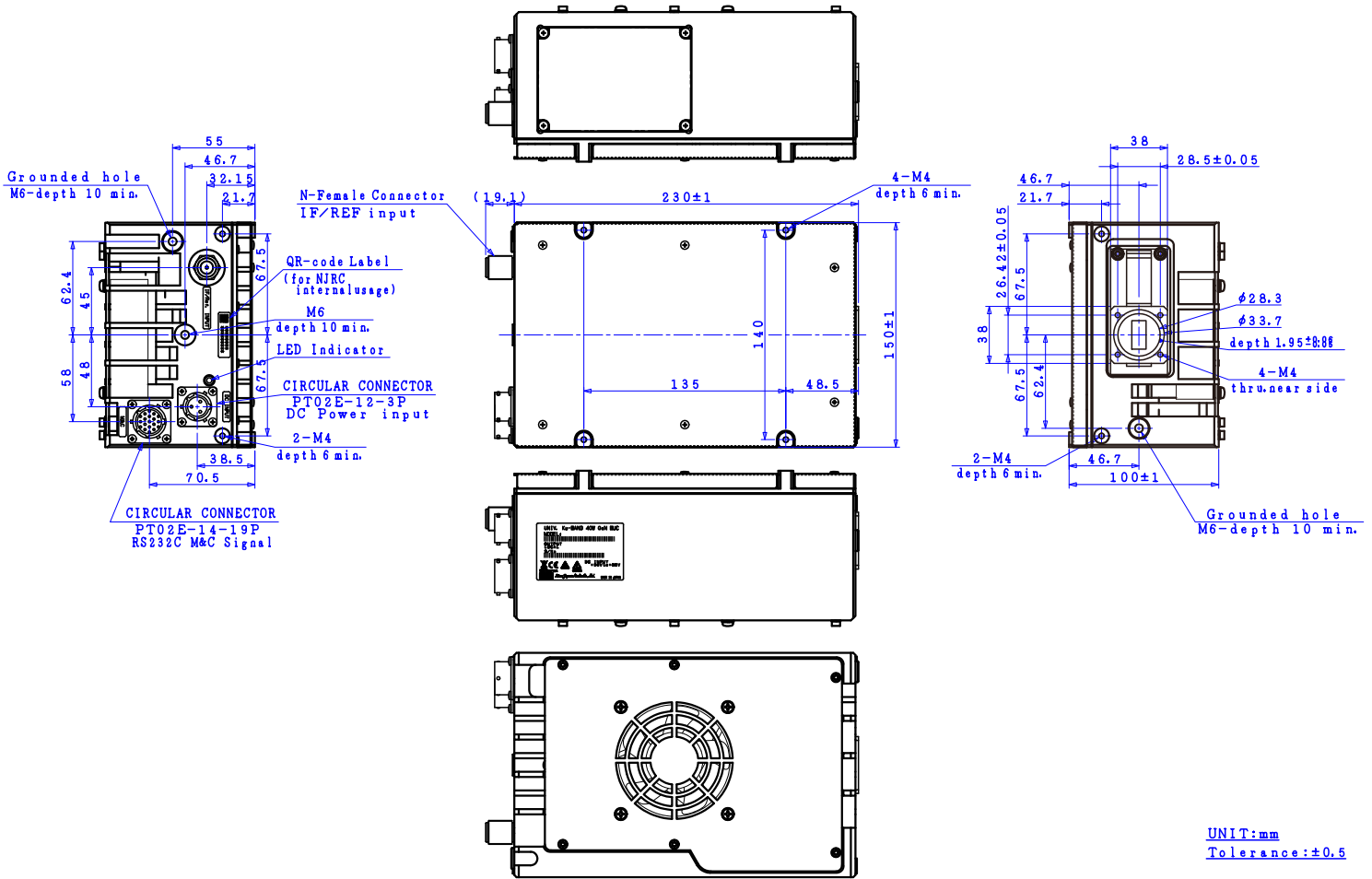
Item	Specifications	
Output Interface	Waveguide, WR75 (with Groove)	
Input Interface	N-type, female (50 ohm)	[N-type IF Connector Model]
	F-type, female (75 ohm)	[F-type IF Connector Model]
Saturation Output Power	+46 dBm min. @ +25 °C +45 dBm min. over temperature	
ACPR	-30 dBc typ., -26 dBc min. @ Pout = +44 dBm	
Linear Gain	72 dB nom., 68 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
		-135 dBc/Hz max. @ 1 kHz
L.O. Phase Noise	-140 dBc/Hz max. @ 10 kHz	
	-60 dBc/Hz max. @ 100 Hz	
	-70 dBc/Hz max. @ 1 kHz	
	-80 dBc/Hz max. @ 10 kHz	
	-90 dBc/Hz max. @ 100 kHz	
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
		-121 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.	1.5 : 1 max.	
Power Requirement	+36 to +60 VDC Power	
Power Consumption	120 W typ. @ No If signal 220 W typ. @ Pout = +44 dBm 260 W typ., 290 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 +60 °C
	[Storage]	-40 to +75 °C
Waterproof/Dustproof (IP Code)	IP 67	
Dimension & Housing	230 mm (L) x 150 mm (W) x 100 mm (H) [9.07" (L) x 5.91" (W) x 3.15" (H)] ( without Interface Connectors Screws )	
Weight	4.2kg [9.1 lbs]	

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

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< **Outline Drawing** >

**N-type, female Connector / RS-232C M&C Model**

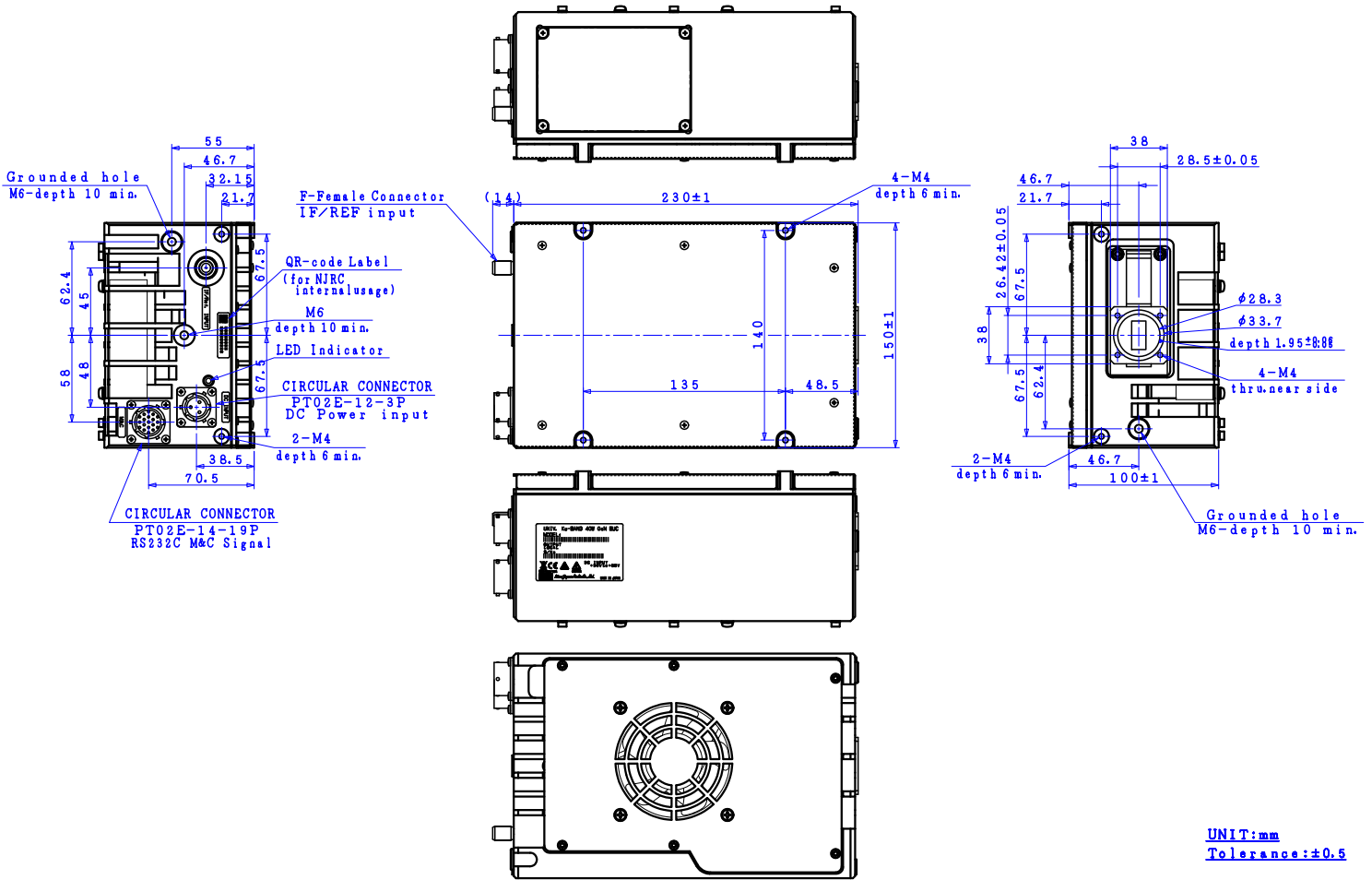


UNIT:mm  
Tolerance:±0.5

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< **Outline Drawing** >

**F-type, female Connector / RS232C M&C Model**

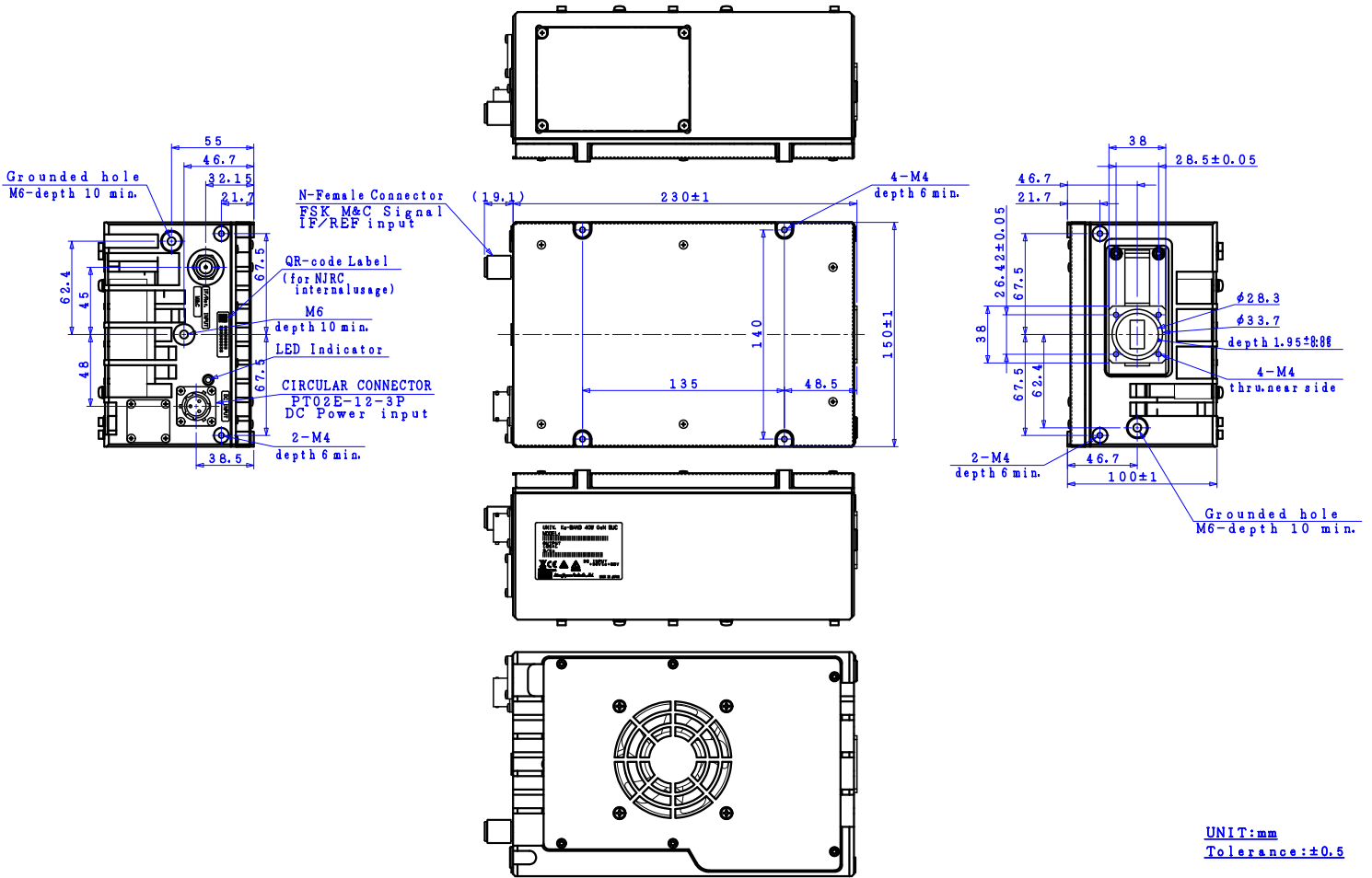


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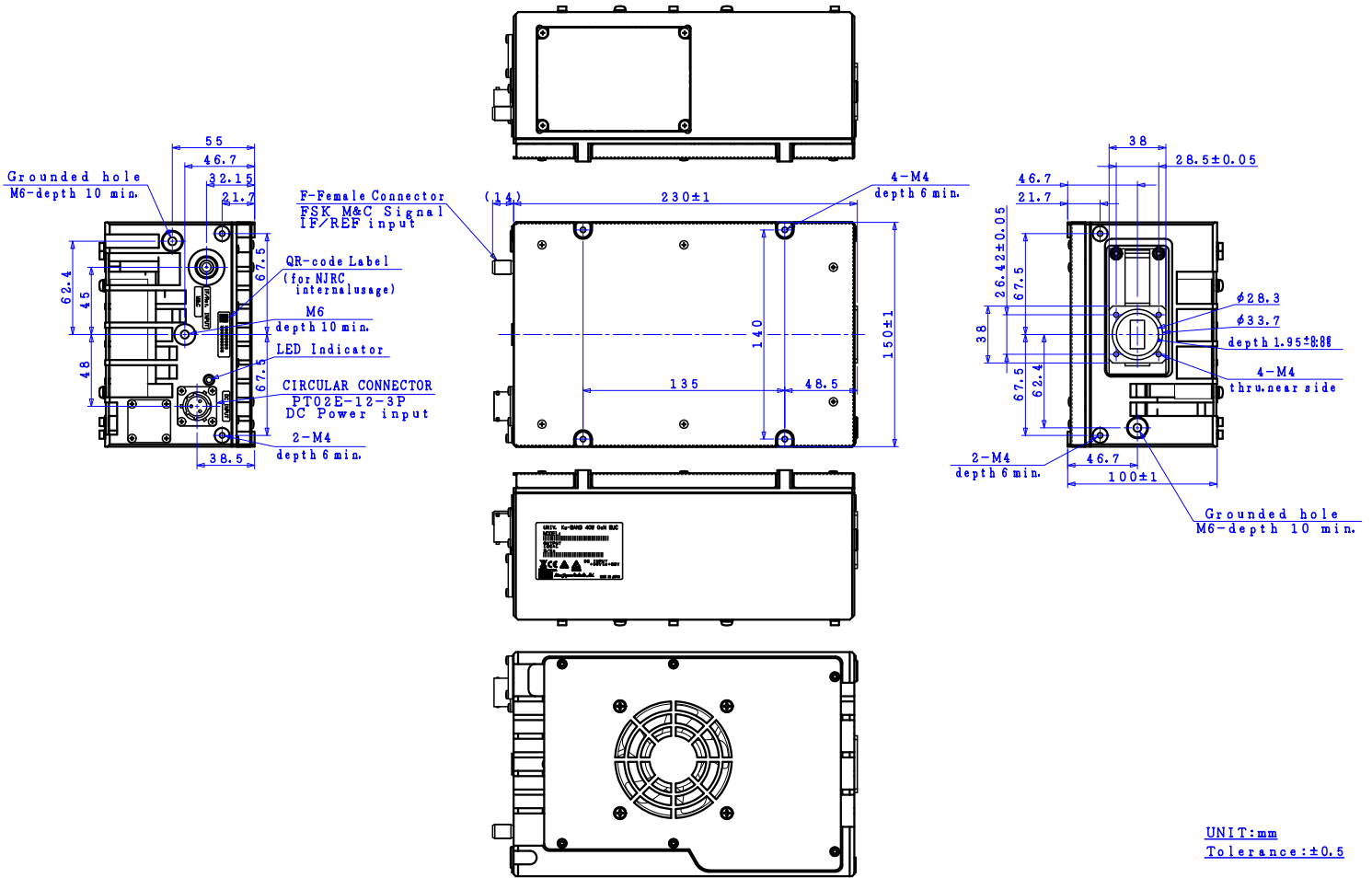
**N-type, female Connector / FSK M&C Model**



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**F-type, female Connector / FSK M&C Model**



UNIT:mm  
Tolerance:±0.5

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# ■ Universal/Standard Ku-band **GaN** 40W BUC

## AC Power Option: **Outdoor 500W 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: 51 V typ.
- Output DC Power: 500 W max.

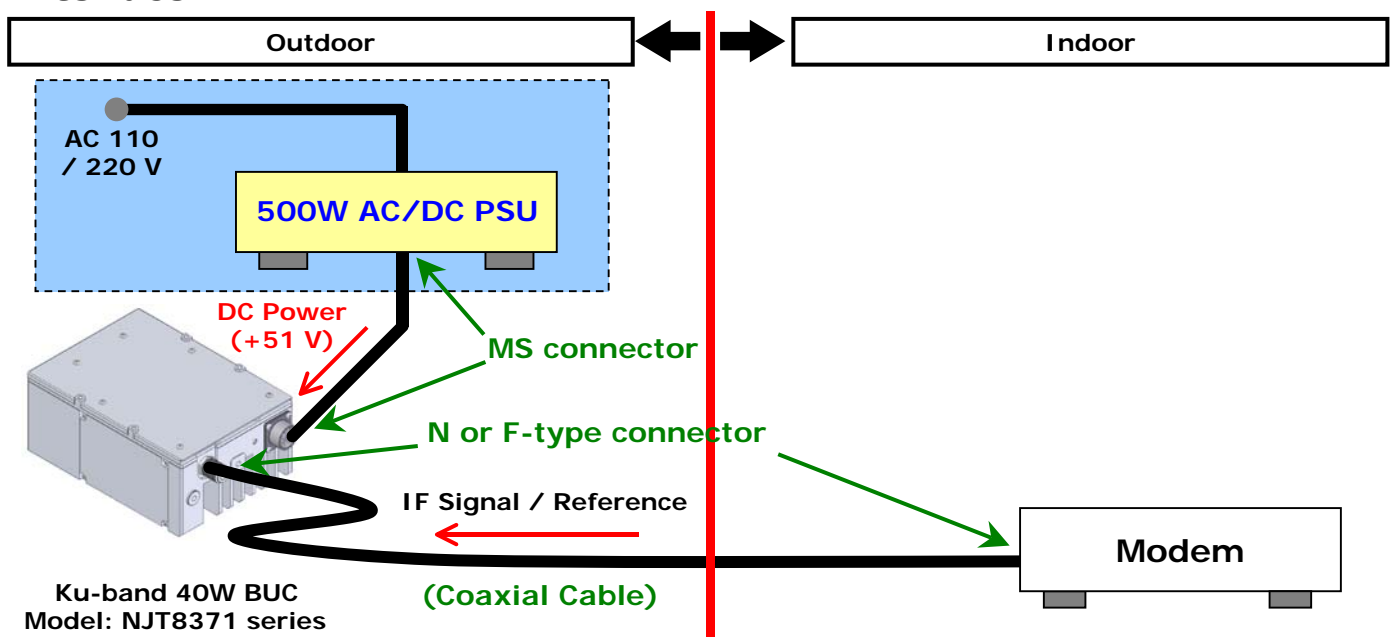
#### \* Compact Size & Light Weight

- Dimension: 250 (L) x 191 (W) x 118.1 (H) mm
- Weight: 5.0 kg



### < Overview of AC Power Option >

#### - Interface -



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

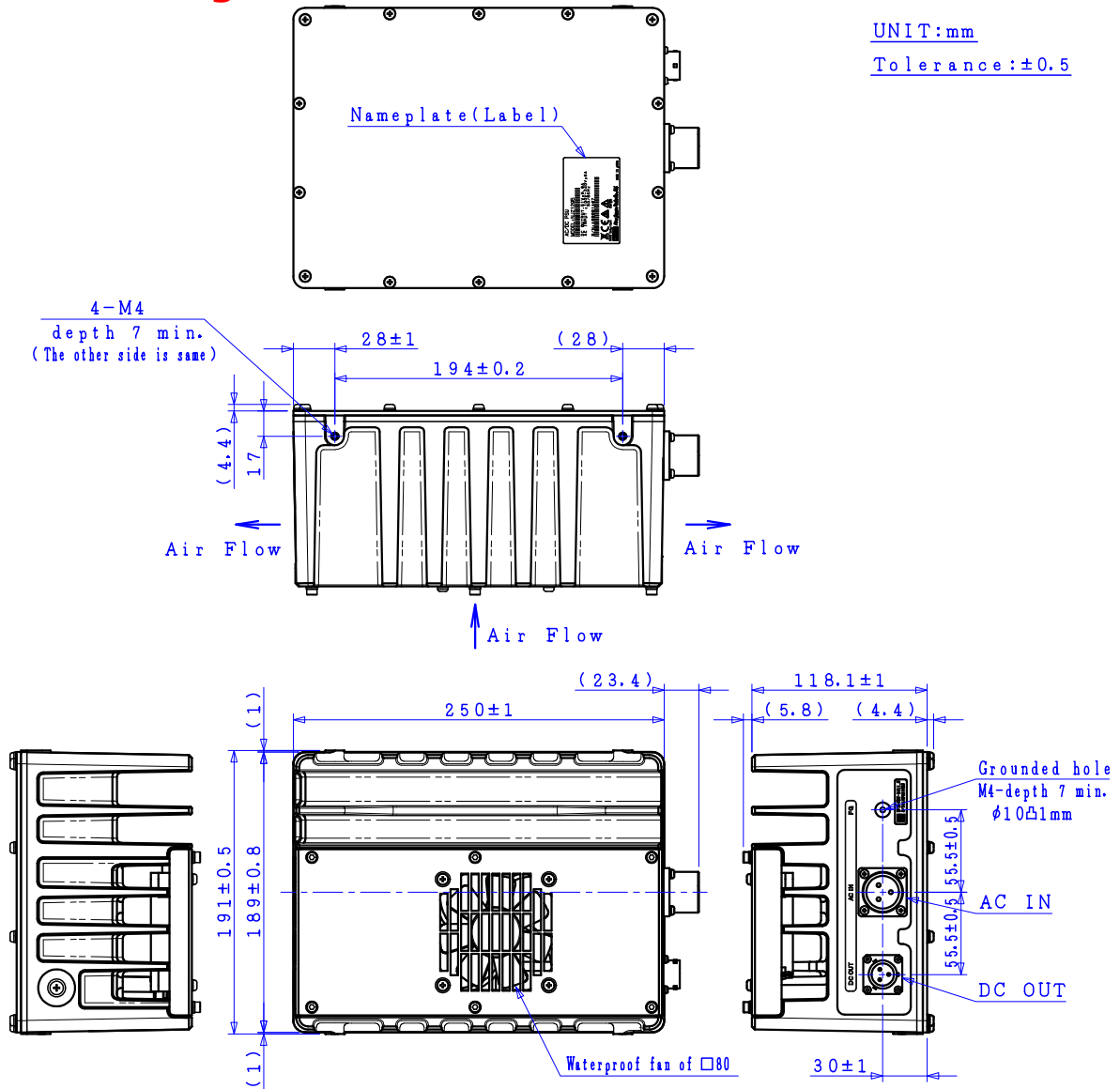
# Universal/Standard Ku-band **GaN** 40W BUC

## AC Power Option: **Outdoor 500W AC/DC Power Supply Unit (PSU)**

### < Specifications >

Item	Specifications
Input AC Voltage Range	100 to 240 V (Rating: 90 to 264 V)
Input AC Current	6 A max. @ 110V Input / 3 A max. @ 230V Input
Output DC Voltage	+51 V typ.
Output DC Power Capacity	500 W max.
Efficiency	85 % typ. @ 110V Input & 500W Load
Power Factor	0.96 typ. @ 110V Input & 500W Load
Temperature Range (ambient)	Operating: -40 to +55 °C Storage: -40 to +75 °C
Dimension & Housing	250 (L) x 191 (W) x 118.1 (H) mm [9.84" (L) x 7.52" (W) x 4.65" (H)] without interface connector and screws
Weight	5.0 kg [11 lbs]

### < Outline Drawing >



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