

# 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 DC Power	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 DC Power	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 DC Power	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 DC Power	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			

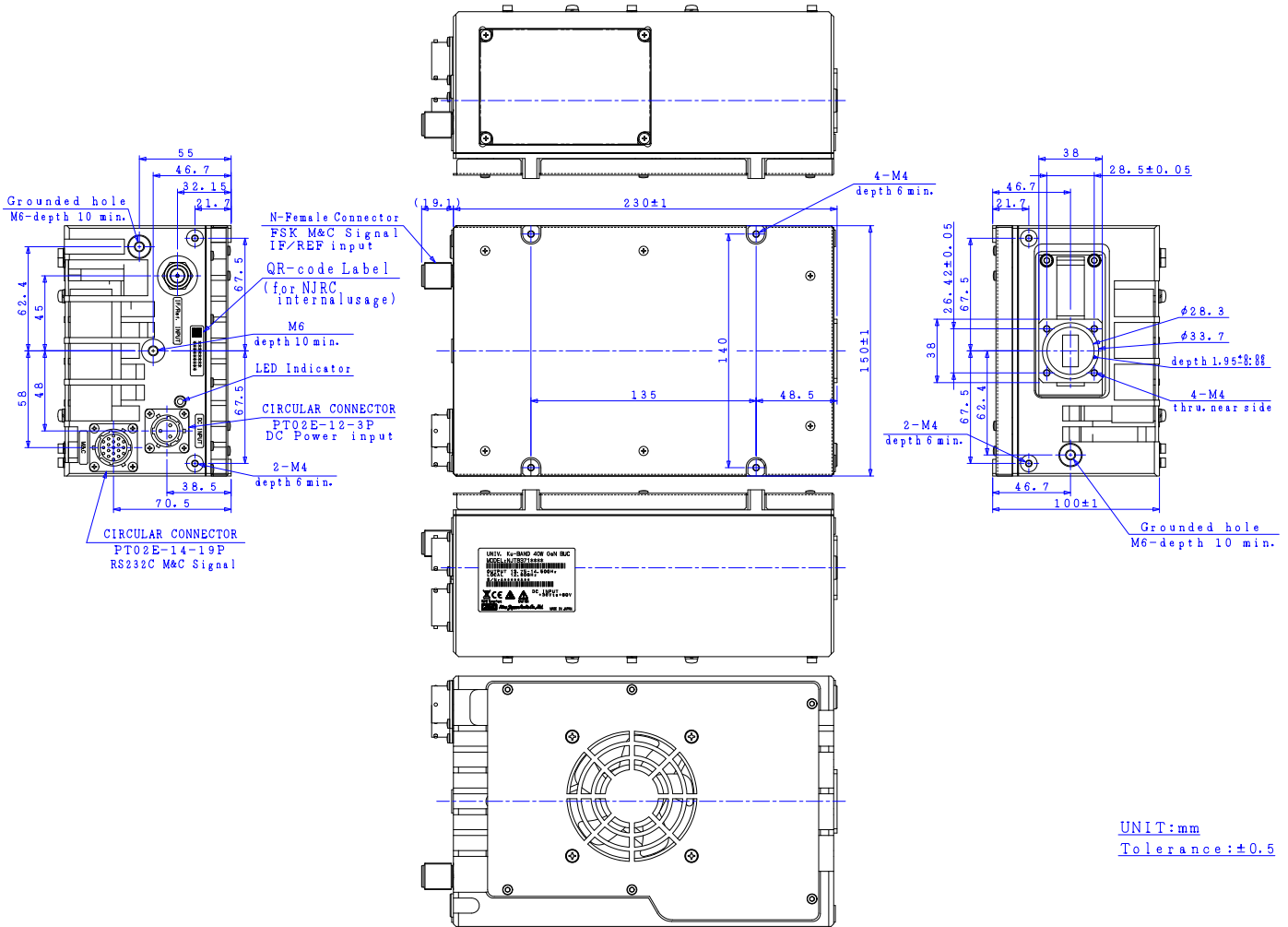
\* Note1 ) Additional outdoor 500W AC/DC PSU is enclosed for AC Power Option and DC Power is supplied at MS connector of BUC from AC/DC PSU via power cable.

### < Specifications >

Item	Specifications
Saturation Output Power	+46 dBm min. @ +25 °C +45 dBm min. over temperature
Linear Gain	74 dB nom., 68 dB min.
Gain Variation over frequency	Standard Ku-band: 5 dBp-p max. over 500 MHz / 2 dBp-p max. over 36 MHz Universal Ku-band: 5 dBp-p max. over 750 MHz / 2 dBp-p max. over 36 MHz
Gain Stability over temperature	2 dBp-p typ., 4 dBp-p max.
ACPR	-30 dBc typ., -26 dBc max.. @ Pout = +44 dBm
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
Input V.S.W.R.	2 : 1 max.
Output V.S.W.R.	1.5 : 1 max.
DC Power Requirement (1) Voltage Range (2) Power Consumption	+36 to +60 VDC 120 W typ. @ No IF signal 220 W typ. @ Pout=+44dBm 260 W typ., 290 W max. @ Psat
Mute	Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal
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
Dimension & Housing	230(L) x 150(W) x 100(H) mm [9.07" (L) x 5.91" (W) x 3.15" (H)] without interface connector and screws
Weight	4.2 kg [9.1 lbs ]

< **Outline Drawing** >

**N-type, female Connector Model**



UNIT:mm  
Tolerance:±0.5

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