

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

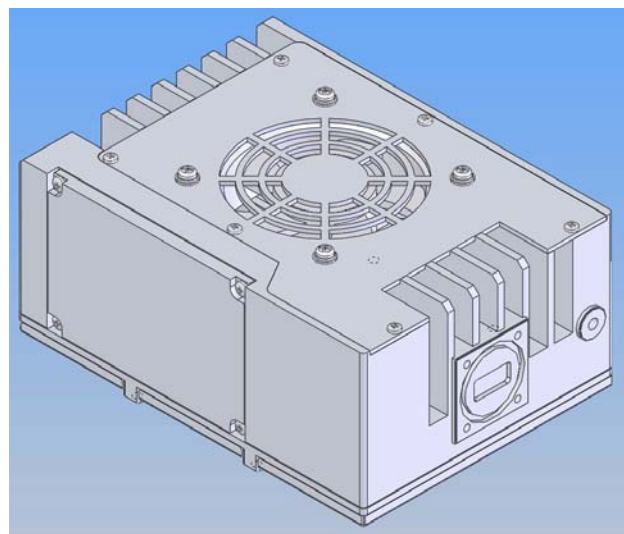
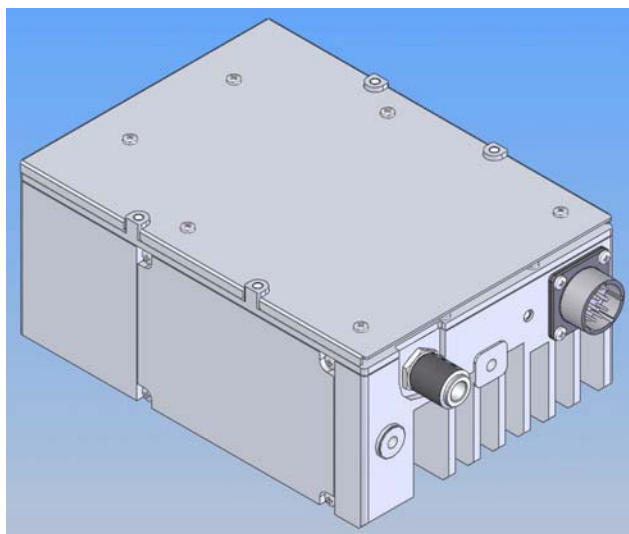


< Line-Up >

| 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 | | |
| NJT8370FMKA | | | | | F-type | | | | |
| NJT8370NMR | | | | | N-type | +36 to +60 V | MS Connector | | RS-232C M&C |
| NJT8370FMR | | | | | F-type | DC Power | | | |
| NJT8370NMRA | N-type | AC Power | MS Connector * Note 1 | | | | | | |
| NJT8370FMRA | F-type | | | | | | | | |
| NJT8370UNMK | 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 | |
| NJT8370UFMK | | | | | F-type | DC Power | | | |
| NJT8370UNMKA | | | | | N-type | AC Power | MS Connector * Note 1 | | |
| NJT8370UFMKA | | | | | F-type | | | | |
| NJT8370UNMR | | | | N-type | +36 to +60 V | MS Connector | RS-232C M&C | | |
| NJT8370UFMR | | | | F-type | DC Power | | | | |
| NJT8370UNMRA | N-type | AC Power | MS Connector * Note 1 | | | | | | |
| NJT8370UFMRA | F-type | | | | | | | | |

* 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 >

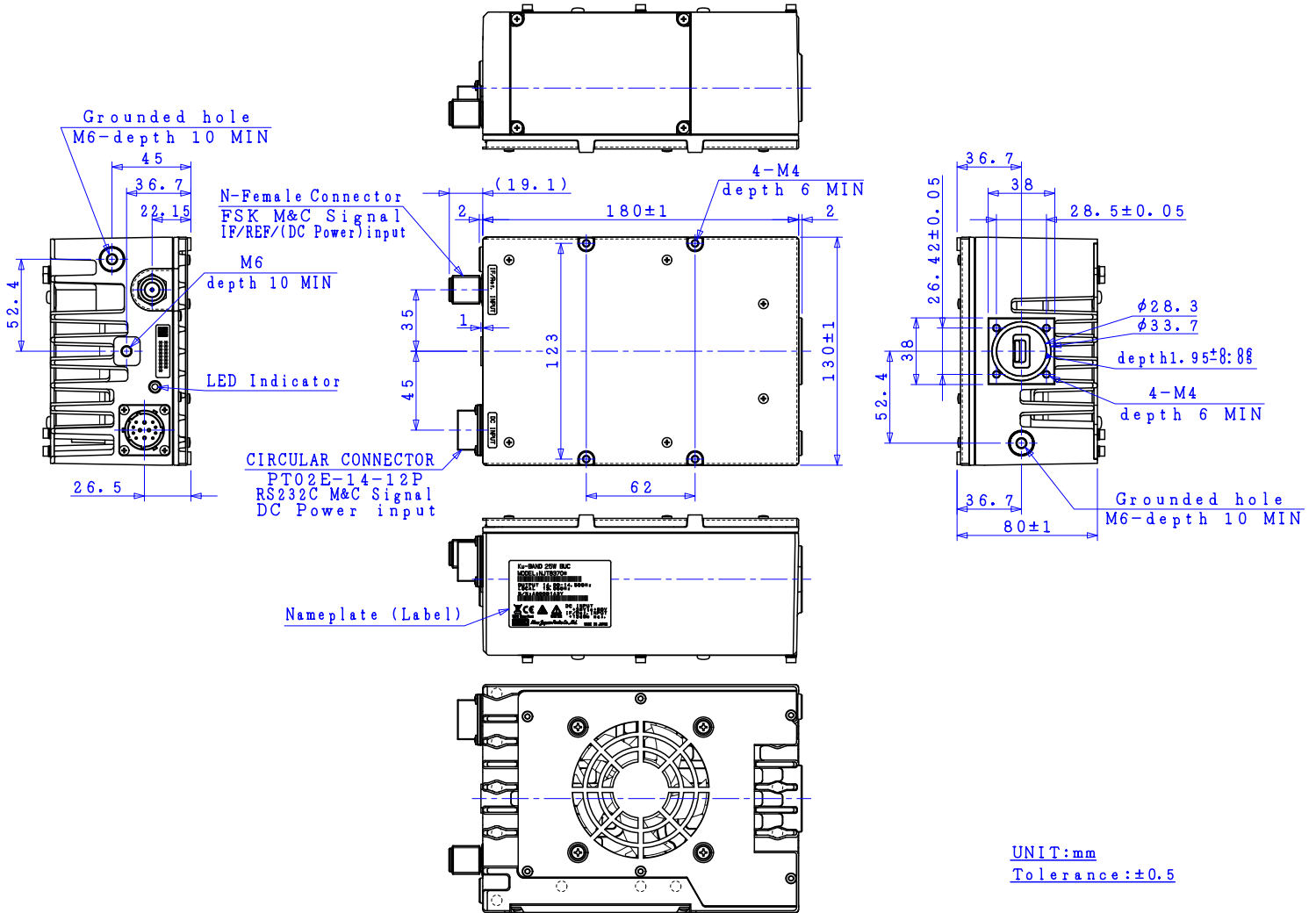
| Item | Specifications | |
|---|--|--|
| Output Interface | Waveguide, WR75 (with Groove) | |
| Input Interface | N-type, female (50 ohm) | [N-type IF Connector Model] |
| | F-type, female (75 ohm) | [F-type IF Connector Model] |
| Saturation Output Power | +44 dBm min. @ +25 °C +43 dBm min. over temperature | |
| 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 |
| | | -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 |
| | | -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 (without Interface Connectors) | 180 mm (L) x 130 mm (W) x 80 mm (H) | |
| | [7.09" (L) x 5.12" (W) x 3.15" (H)] | |
| Weight | 2.5kg [5.5 lbs] | |

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< **Outline Drawing** >

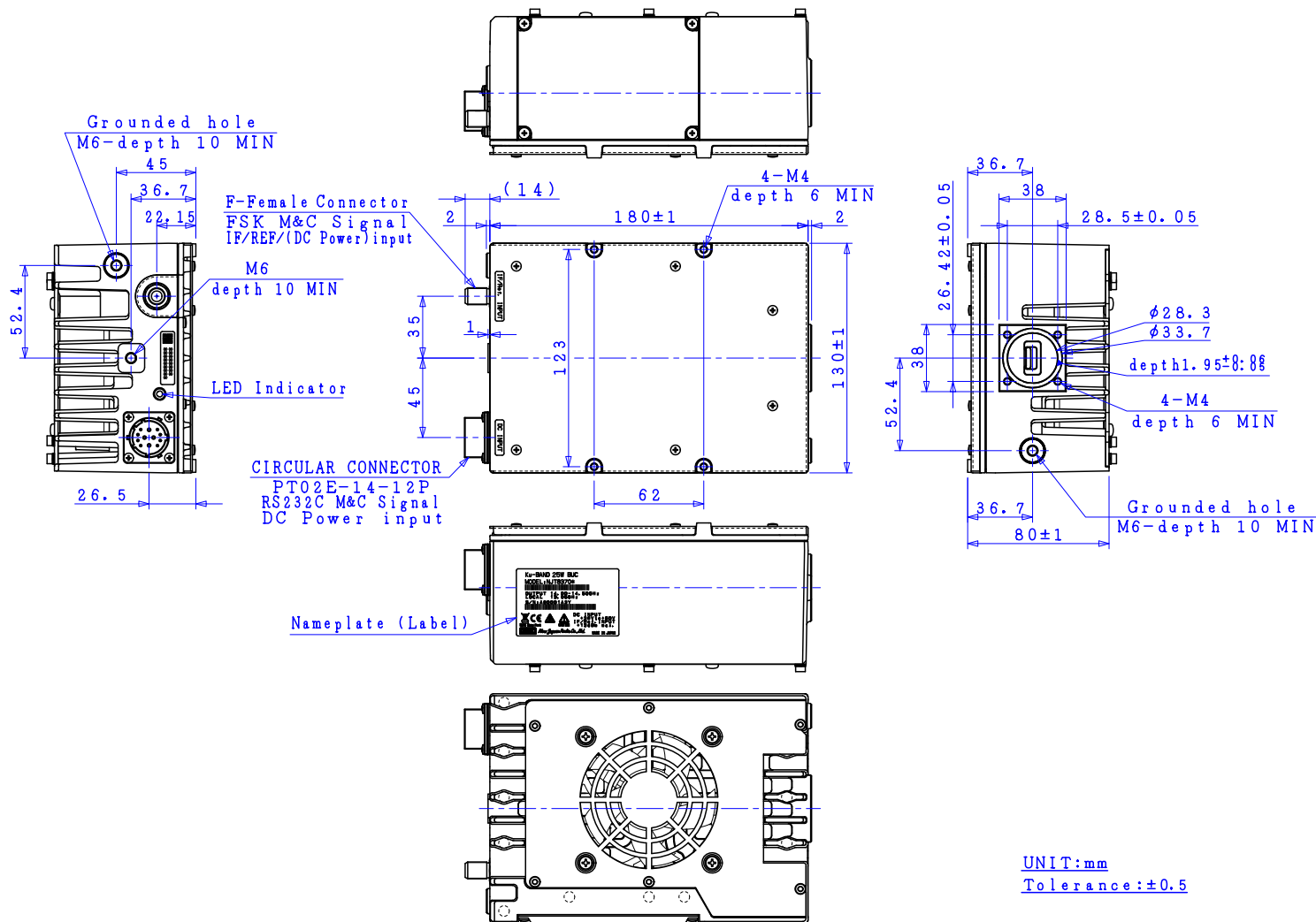
N-type, female Connector Model / DC Input: MS Connector



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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.

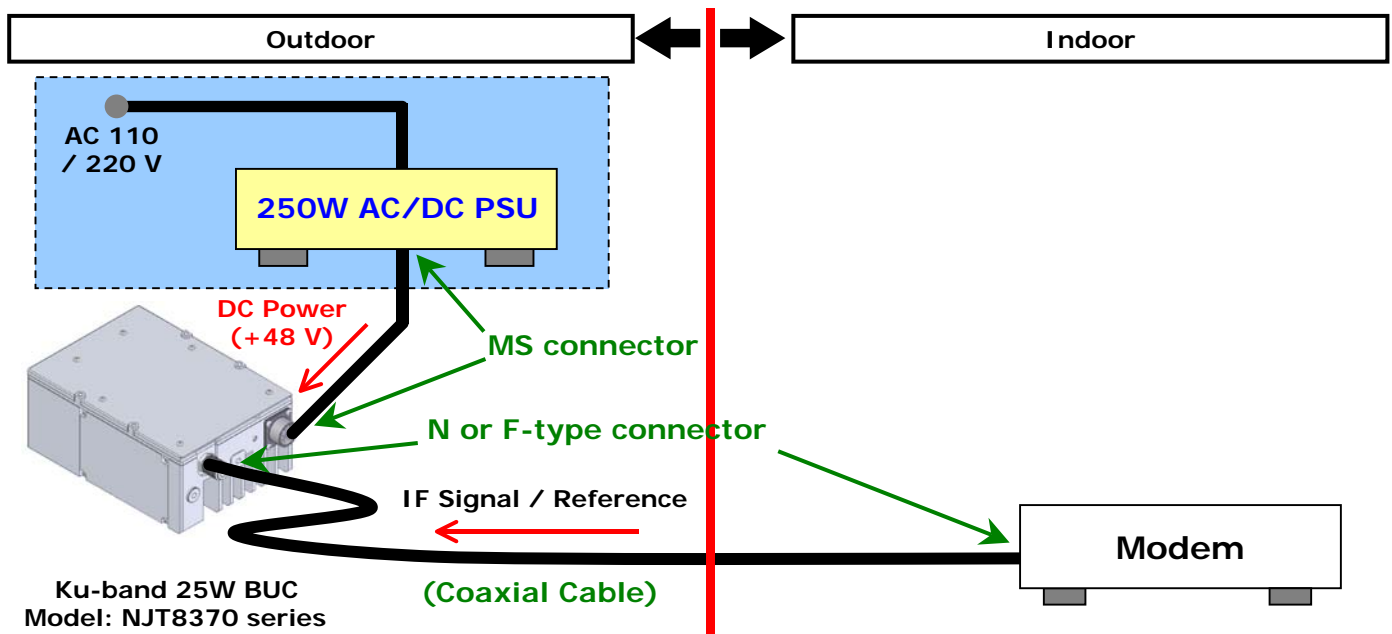
* **Compact Size & Light Weight**

- 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.

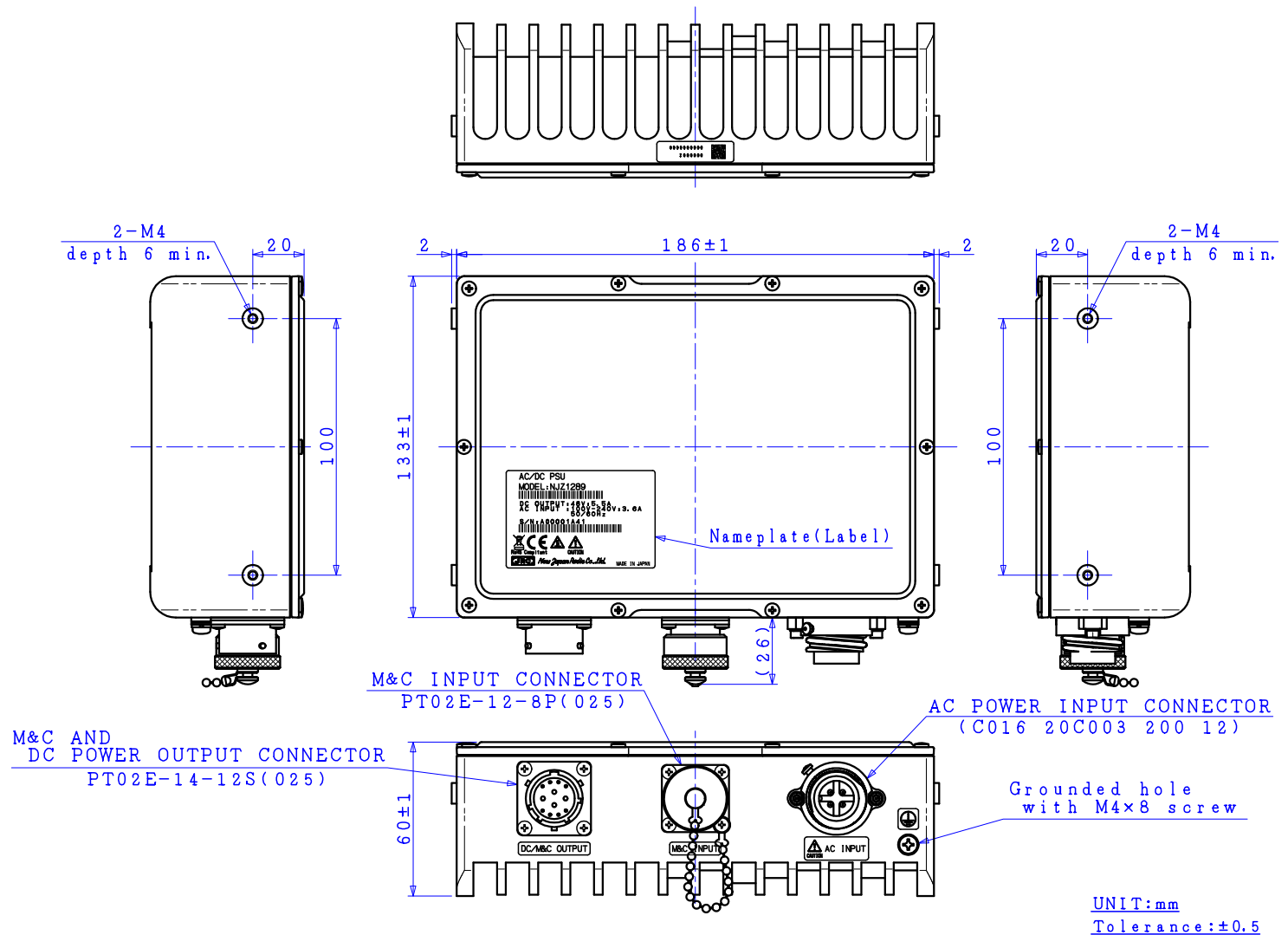
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AC Power Option: **Outdoor 250W AC/DC Power Supply Unit (PSU)**

< 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 >



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