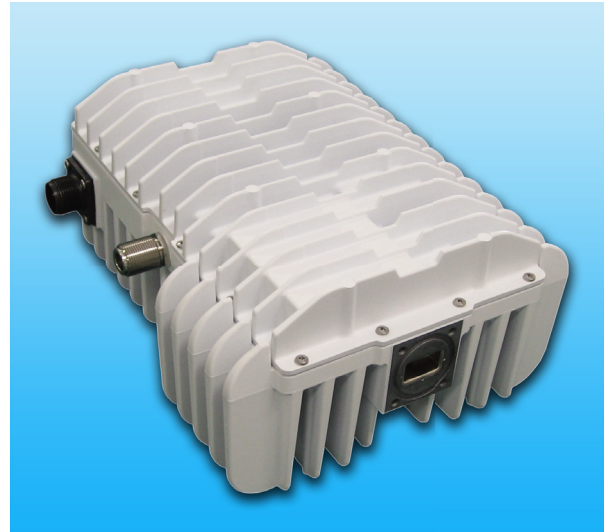


# Standard Ku-band 8W BUC

## MODEL No. NJT5118 series

### < Features >

- \* **High Efficiency & Low Distortion**
  - P1dB: +39 dBm min. over temperature
  - IM3: -28 dBc @ Pout = +36 dBm
  - Power Consumption: 79 W
- \* **Wide Operating Range of DC Power Operation**
  - Voltage Range: +18 to +60 VDC
- \* **Compact Size & Light Weight**
  - Weight: 3.2kg
- \* **LED Indicator**
- \* **RoHS Compliance**



### < Line-up >

| Model No. | RF Frequency                        | Local Frequency | IF Frequency     | Output Power @ P1dB      | IF Connector | Power Supply                          | Port for Voltage Input          | LED Indicator |
|-----------|-------------------------------------|-----------------|------------------|--------------------------|--------------|---------------------------------------|---------------------------------|---------------|
| NJT5118N  | 14.0 to 14.5 GHz (Standard Ku-band) | 13.05 GHz       | 950 to 1,450 MHz | 8W Linear (+39 dBm min.) | N-type       | DC Power +24/+48 VDC (+18 to +60 VDC) | Same as IF Connector            | Equipped      |
| NJT5118F  |                                     |                 |                  |                          | F-type       |                                       | MS Connector (Separate Port)    |               |
| NJT5118NM |                                     |                 |                  |                          | N-type       |                                       | IF Connector Supplied by AC PSU |               |
| NJT5118FM |                                     |                 |                  |                          | F-type       |                                       |                                 |               |
| NJT5118NA |                                     |                 |                  |                          | N-type       | AC Power Option                       |                                 |               |
| NJT5118FA |                                     |                 |                  |                          | F-type       |                                       |                                 |               |

### < Specifications >

| Item                               | Specifications  |
|------------------------------------|---|
| Output Interface                   | Waveguide, WR75 (with Groove)   |
| Input Interface                    | N-type, female (50 ohm) [N-type IF Connector Model]<br>F-type, female (75 ohm) [F-type IF Connector Model]  |
| Output Power @ 1 dB G.C.P.         | +39 dBm min. over temperature   |
| ACPR                               | -28 dBc typ. @ Pout = +38 dB  |
| Linear Gain                        | 65 dB nom., 59 dB min.  |
| Requirement for External Reference | [Frequency] 10 MHz (sine-wave)<br>[Input Power] -5 to +5 dBm @ Input port<br>[Phase Noise] -125 dBc/Hz max. @ 100 Hz<br>-135 dBc/Hz max. @ 1 kHz<br>-140 dBc/Hz max. @ 10 kHz |
| L.O. Phase Noise                   | -60 dBc/Hz max. @ 100 Hz<br>-70 dBc/Hz max. @ 1 kHz<br>-80 dBc/Hz max. @ 10 kHz<br>-90 dBc/Hz max. @ 100 kHz<br>-100 dBc/Hz max. @ 1 MHz                                      |
| Receive Band Noise Density         | -156 dBm/Hz max. @10.95 to 12.75 GHz, @ Pout ≤ +39 dBm  |
| Input V.S.W.R.                     | 2 : 1 max.  |
| Output V.S.W.R.                    | 2 : 1 max.  |
| Power Requirement                  | +18 to +60 VDC Power  |
| Power Consumption                  | 79 W typ., 90 W max.  |
| 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   |
| Temperature Range (ambient)        | [Operating] -40 to +55 °C<br>[Storage] -40 to +75 °C  |
| Waterproof/Dustproof (IP Code)     | IP 67   |
| Dimension & Housing                | 219.5 mm (L) x 175 mm (W) x 99 mm (H) [8.64" (L) x 6.89" (W) x 3.90" (H)]<br>( without Interface Connectors and Screws )  |
| Weight                             | 3.2 kg [7.0 lbs]  |

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

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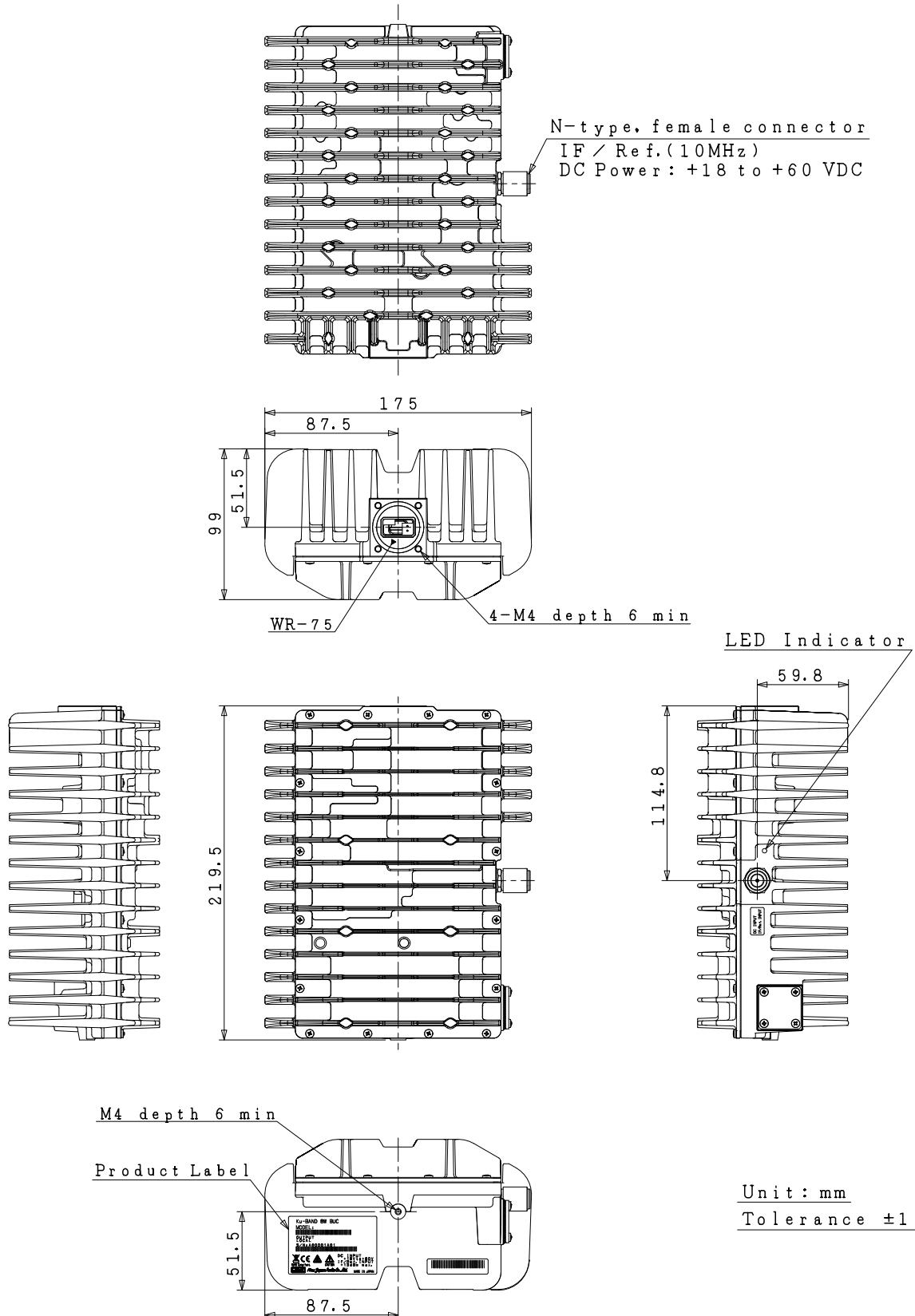
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■ Standard Ku-band **8W** BUC

MODEL No. **NJT5118** series

< **Outline Drawing** >

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



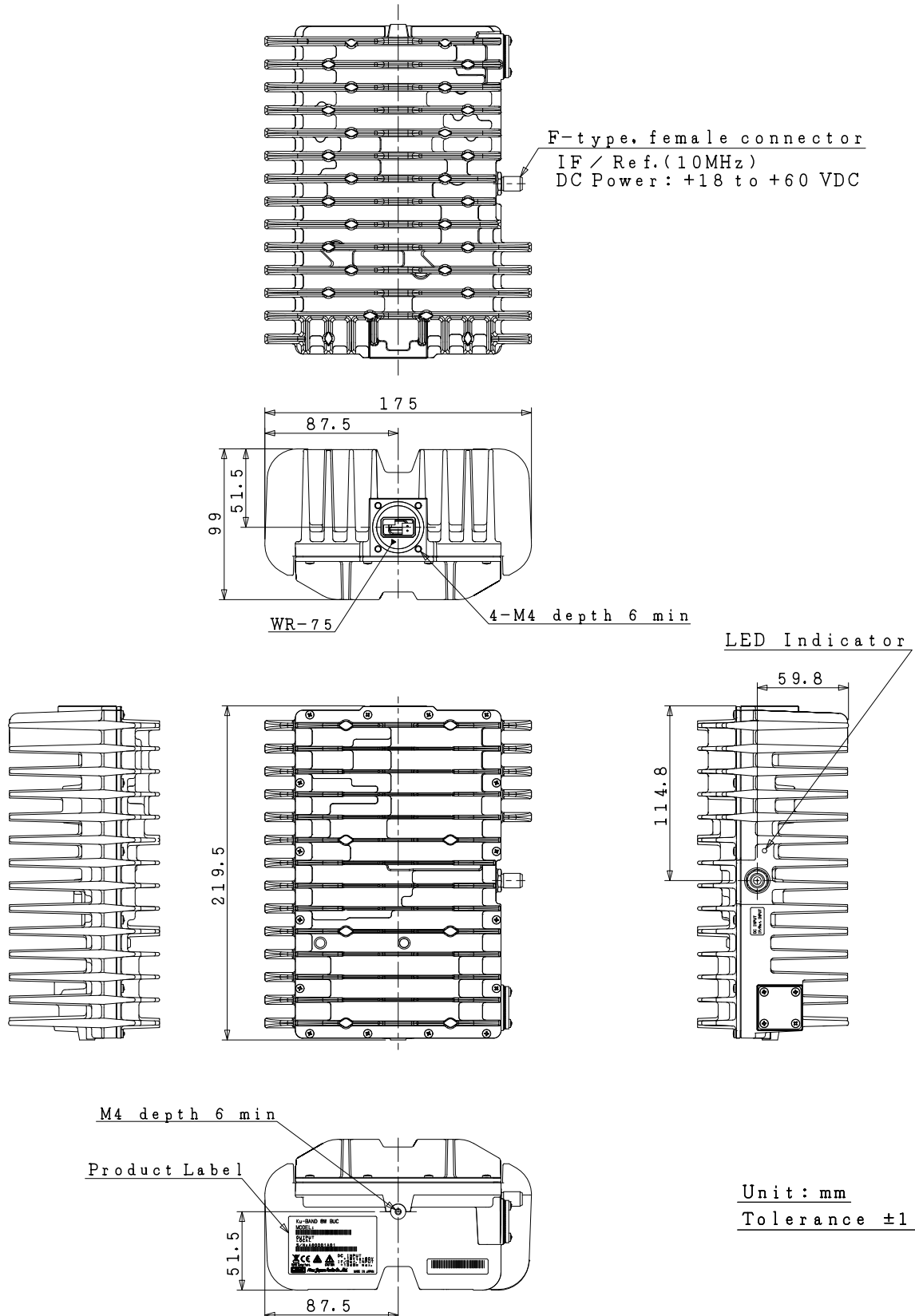
\*Note: The contents of this sheet are subject to change without notice.

■ Standard Ku-band **8W** BUC

MODEL No. **NJT5118** series

< **Outline Drawing** >

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



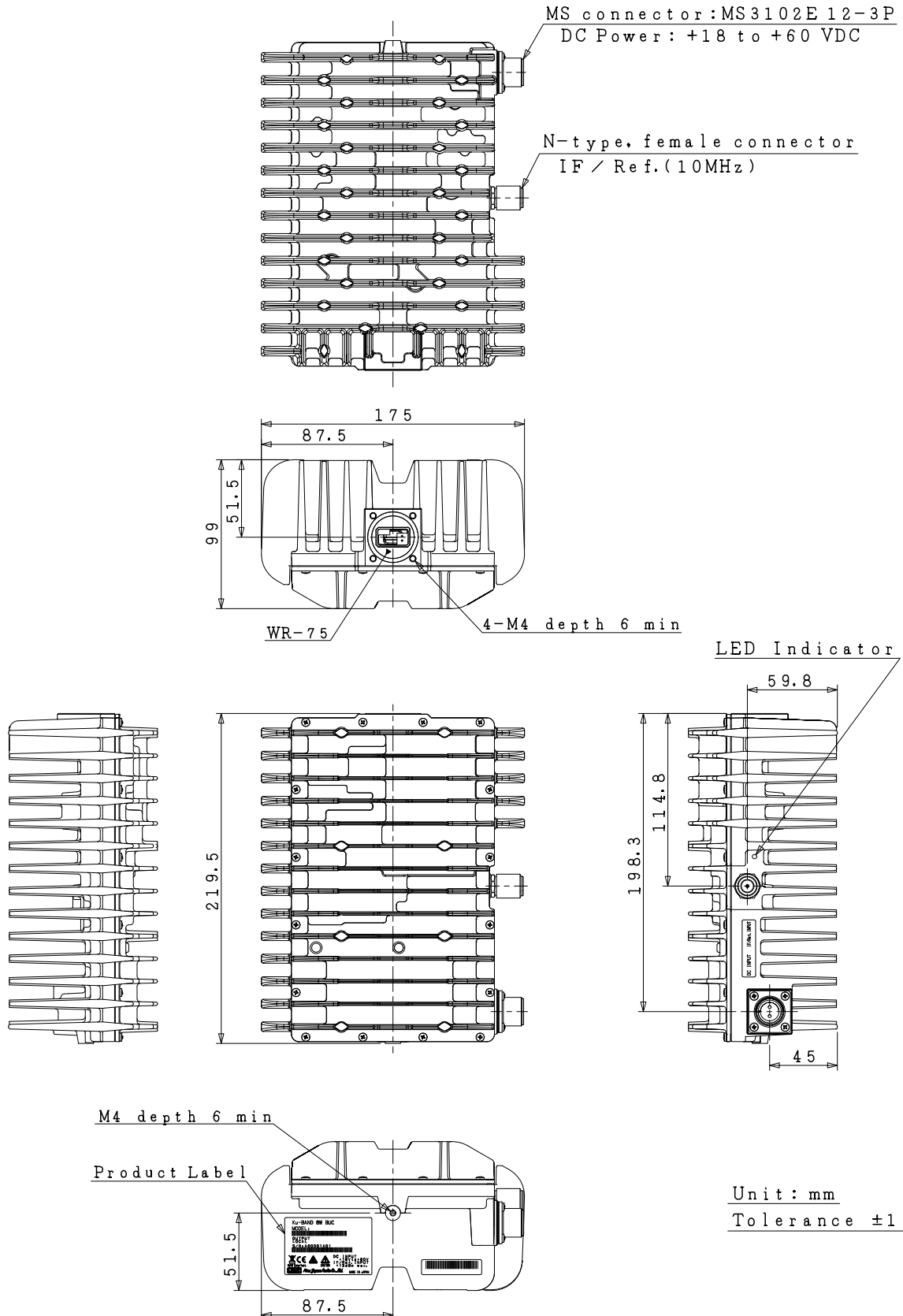
\*Note: The contents of this sheet are subject to change without notice.

Standard Ku-band **8W** BUC

MODEL No. **NJT5118** series

< **Outline Drawing** >

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



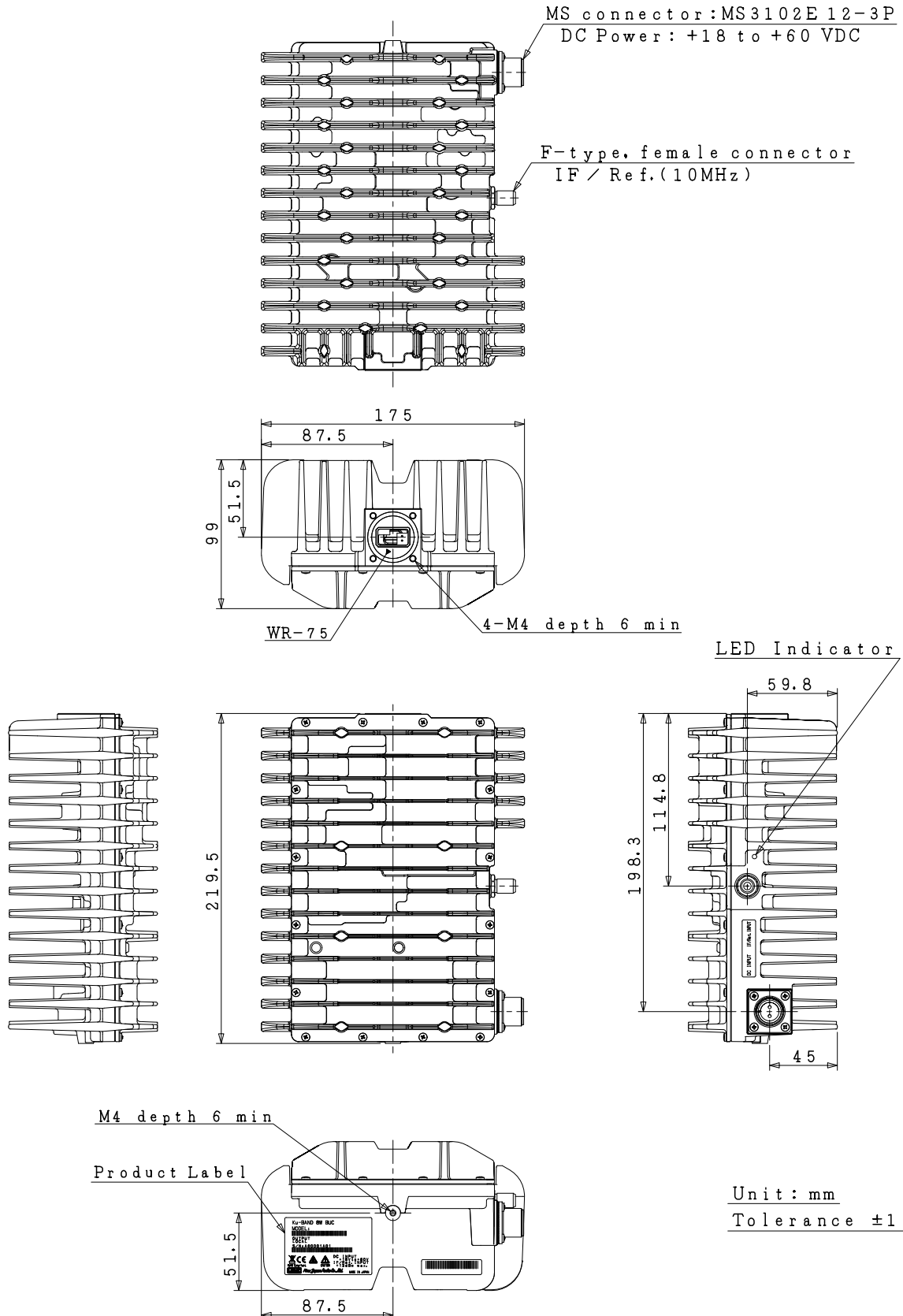
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Standard Ku-band **8W** BUC

MODEL No. **NJT5118** series

< **Outline Drawing** >

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



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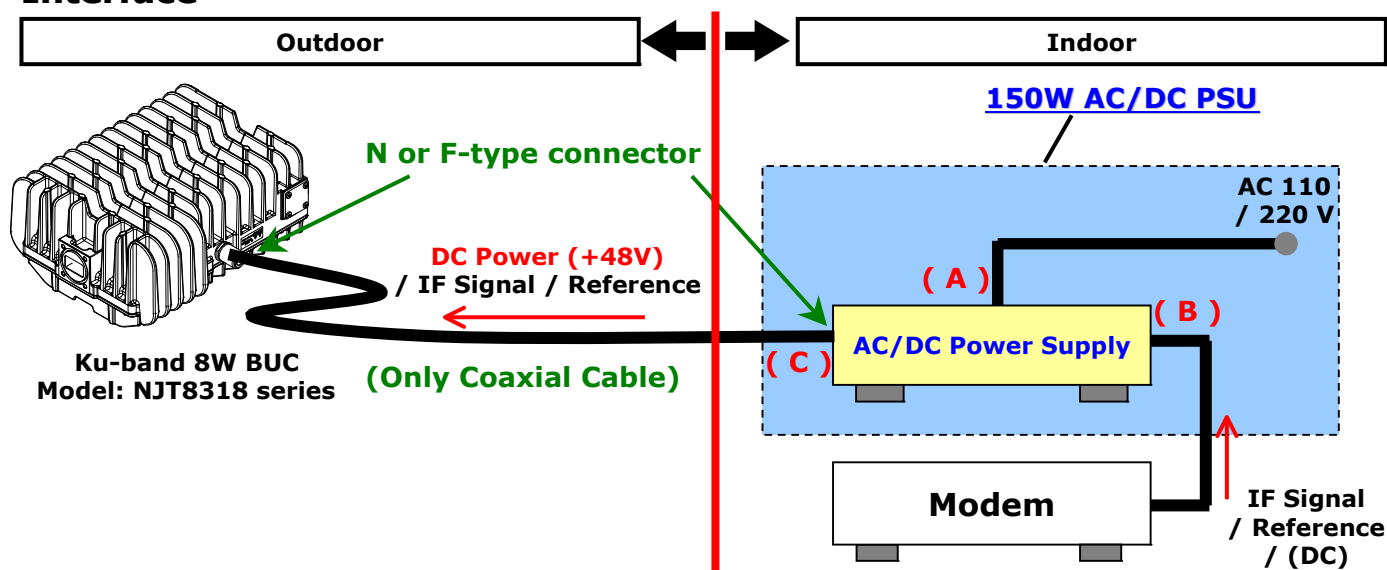
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# Standard Ku-band 8W BUC

## AC Power Option: Indoor 150W AC/DC Power Supply Unit (PSU)

### < Overview of AC Power Option >

#### - Interface -



#### - 150W AC/DC PSU -

\* The features of 150W AC/DC Power Supply Unit (PSU) is to provide the stable +48V DC power to operate Ku-band 8W BUCs, even if inner power supply of the modem is not capable enough to operate these BUCs.

\* The AC/DC box, which is having enough power supply of 150W as well as having the bias-tee which enable to pass 10MHz reference signal and L-band IF signal from the modem, is operated by AC Power and enable to operate these BUCs.

\* In addition, the aluminum housing with corrosion-proof treatment on the surface is employed with the box to use perfectly as the indoor unit.



### < Specifications >

| Item  | Specifications  |   |
|---|---|---|
| Interface   | AC Input  | IEC320-C14 inlet                                  |
|   | IF/Ref./ (DC) Input   | N-type, female (50 ohm) / F-type, female (75 ohm) |
|   | IF/Ref./DC Output   | N-type, female (50 ohm) / F-type, female (75 ohm) |
| Input AC Voltage Range  | Rated Range   | 100 to 240 VAC                                    |
|   | Absolute Maximum Rating   | 90 to 264 VAC                                     |
| Input AC Frequency Range  | 50 / 60 Hz  |   |
| Output Voltage / Power  | +48 VDC +/- 10 % / 150 W max.   |   |
| Efficiency  | 80 % typical at 120 VAC, full load  |   |
| Power Factor  | 0.98 typical at 120 VAC, full load  |   |
| IF Frequency  | 950 to 1,700 MHz  |   |
| IF Insertion Loss   | 1 dB max.   |   |
| IF Input/Output VSWR  | 1.5 : 1 max.  |   |
| Standard  | EN55022, EN55024, EN60950-1, EN61000-3-2/3, EN62311                         |   |
| Temperature Range (ambient)                                     | 0 to +50 C (operating), -30 to +85 C (storage)                              |   |
| Cooling   | Forced Air by Fan   |   |
| Dimension & Housing<br>( without Interface Connectors / Switch) | 290 mm (W) x 230 mm (D) x 44 mm (H)<br>[11.41" (W) x 9.06" (D) x 1.73" (H)] |   |
| Weight (without Cable)  | 1.6 kg [3.5 lbs]  |   |
| Accessories   | Coaxial cable of 1 m, AC power cable of 1 m, 1U rack mount kit (Option)     |   |

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

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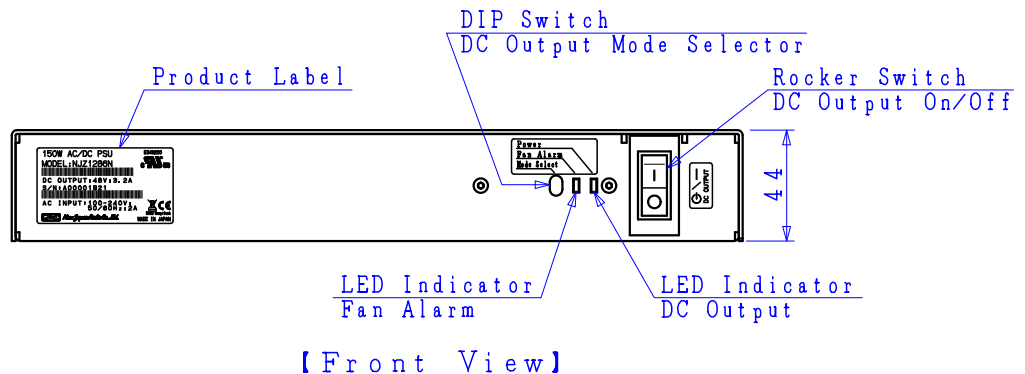
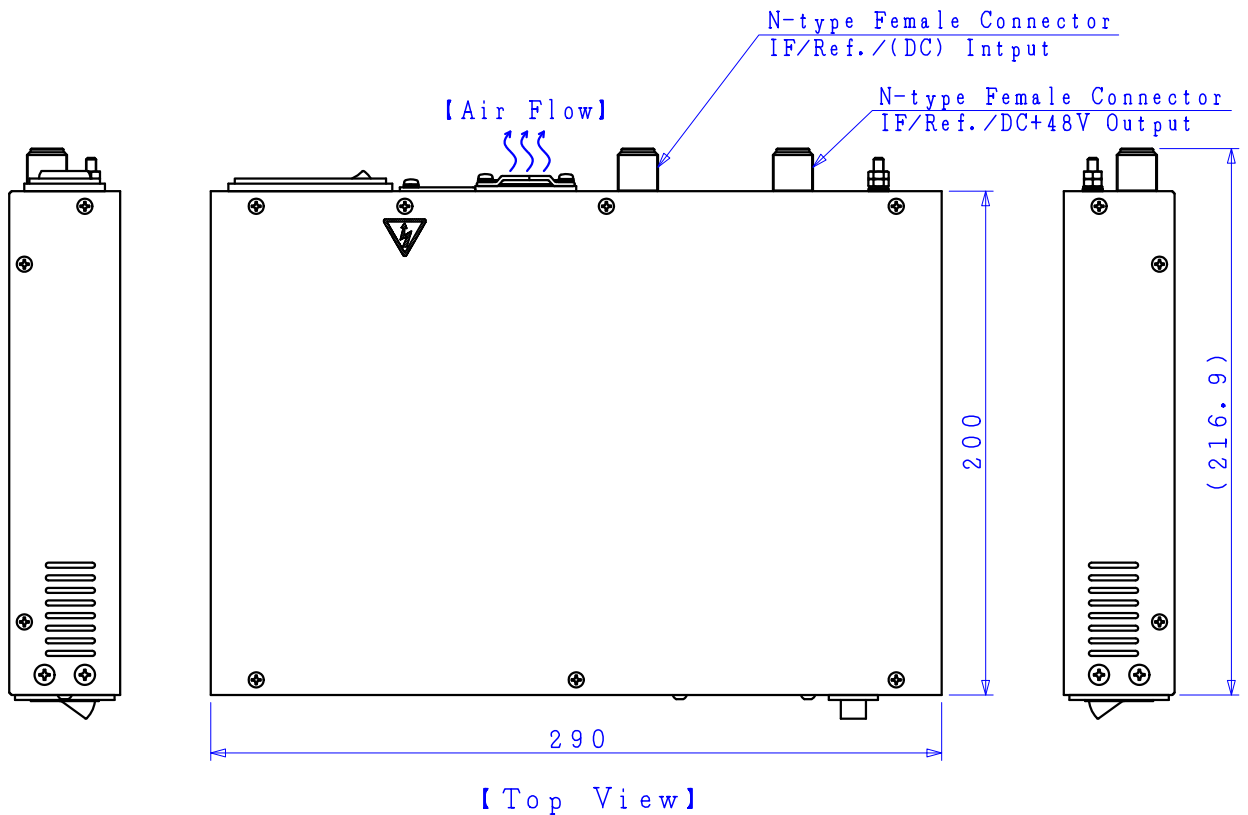
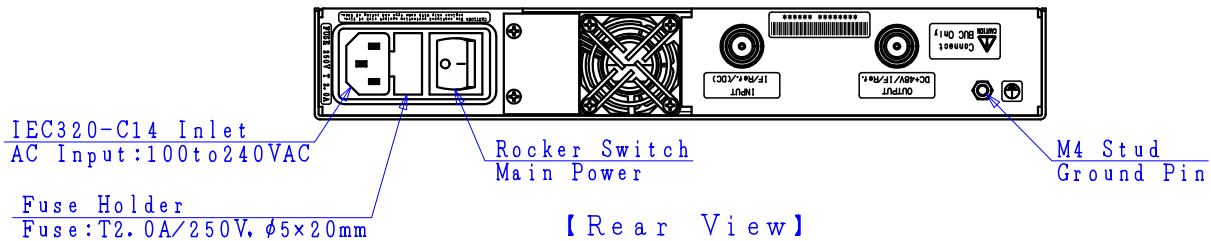
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# Standard Ku-band 8W BUC

## AC Power Option: Indoor 150W AC/DC Power Supply Unit (PSU)

### < Outline Drawing >

#### N-type, female Connector Model (AC/DC PSU)



UNIT : mm

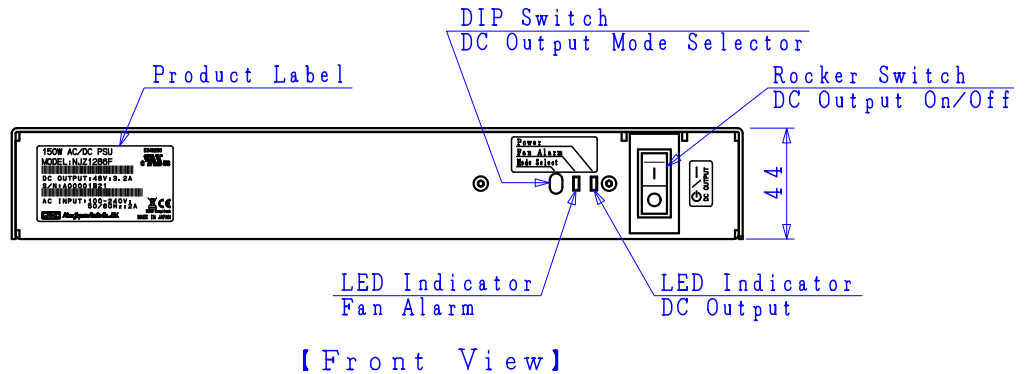
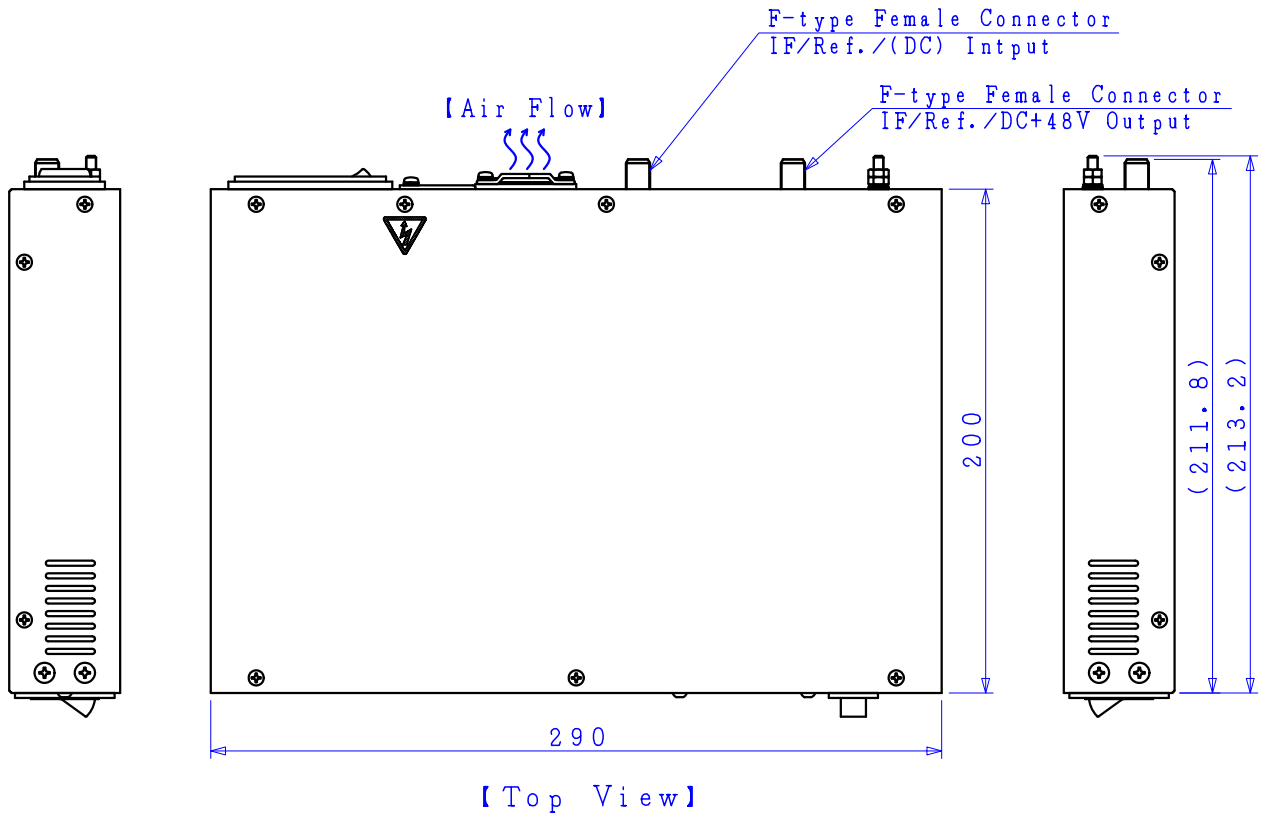
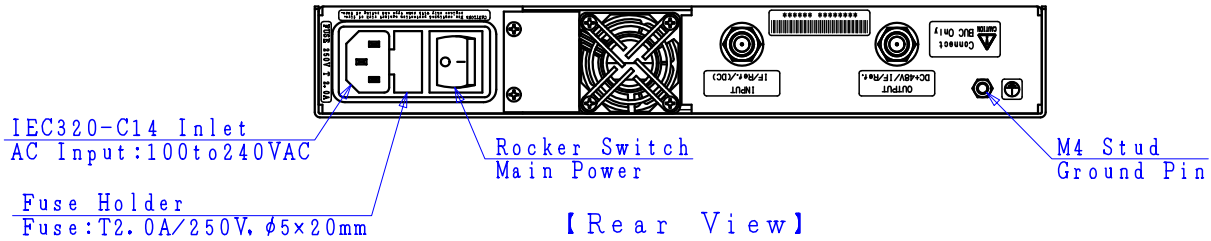
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# Standard Ku-band 8W BUC

## AC Power Option: Indoor 150W AC/DC Power Supply Unit (PSU)

### < Outline Drawing >

#### F-type, female Connector Model (AC/DC PSU)



UNIT : mm

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