

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

(Output Power: 250 W, Output Voltage: +48 VDC)

Model No. NJZ1289

Specifications
Rev.01 May 28, 2015

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New Japan Radio Co., Ltd.
Microwave Components Division

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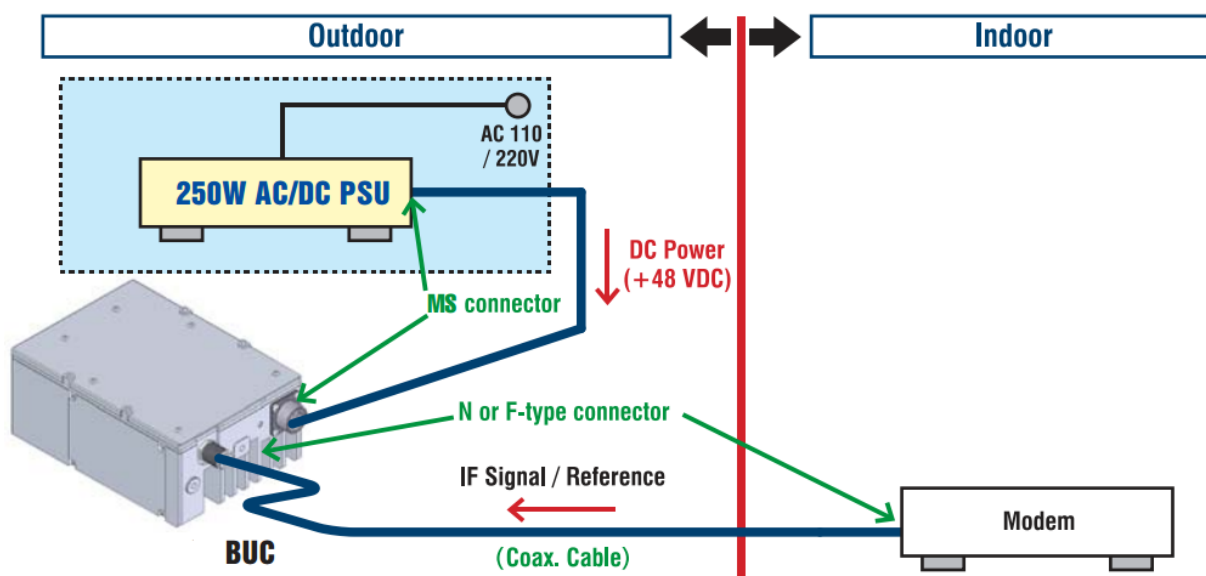
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1. Overview

The features of Outdoor 250W AC/DC Power Supply Unit (PSU) are to provide the stable +48V DC power to operate BUCs, 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 waterproof and dust-proof constructor in order to use perfectly as the outdoor unit.

In addition, the outdoor AC/DC PSU complies with EC DIRECTIVE.



2. Electrical Specifications

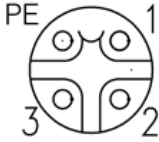
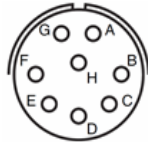
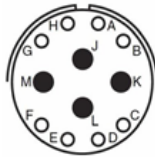
2-1.	Input AC Voltage Range [Rated Range] [Absolute Maximum Rating]	100 to 240 VAC 90 to 264 VAC
2-2.	Input AC Frequency Range	50/60 Hz
2-3.	Input AC Current	3.6 A max.
2-4.	Output Voltage	+48 VDC nom. * Note 1
2-5.	Output Current	5.5 A max.
2-6.	Efficiency	90 % typ. * Note 2
2-7.	Maximum Output Power	250 W
2-8.	Power Factor	0.94 typ. * Note 2

*Note1: Voltage ripple corresponding to output power arises.

*Note2: The condition is 100 VAC as AC voltage input and 200 W as output power load .

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3. Mechanical Specifications

3-1.	<p>Input Interface</p> <p>[AC Input]</p> <p>[Option Port]</p>	<p>AC Connector: C016 20C003 200 12 Mating Connector: C016 20D003 210 12 (Amphenol eco mate connector)</p> <p>Assignment:</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Pin 1: Live AC input Pin 2: Nutral AC input Pin 3: N.C. Pin PE: Frame Ground (GND)</p> </div> </div> <p>MS Connector: PT02E-12-8P(025) Mating Connector: PT06E-12-8S(470) (Amphenol connector)</p> <p>Assignment:</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Pin A: Through Pin A in Output MS cnnector Pin B: Through Pin B in Output MS cnnector Pin C: Through Pin C in Output MS cnnector Pin D: Through Pin D in Output MS cnnector Pin E: Through Pin E in Output MS cnnector Pin F: Through Pin F in Output MS cnnector Pin G: Through Pin G in Output MS cnnector Pin H: Through Pin H in Output MS cnnector</p> </div> </div>
3-2.	<p>Output Interface</p> <p>[DC & Option Output]</p>	<p>MS Connector: PT02E-14-12S(025) Mating Connector: PT06E-14-12P(470) (Amphenol connector)</p> <p>Assignment:</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Pin A: Through Pin A in Input MS cnnector Pin B: Through Pin B in Input MS cnnector Pin C: Through Pin C in Input MS cnnector Pin D: Through Pin D in Input MS cnnector Pin E: Through Pin E in Input MS cnnector Pin F: Through Pin F in Input MS cnnector Pin G: Through Pin G in Input MS cnnector Pin H: Through Pin H in Input MS cnnector Pin J: DC Output (+) / Prime Pin K: DC Output (-) / Return Pin L: N.C. Pin M: N.C.</p> </div> </div>
3-3.	<p>Dimension & Housing</p>	<p>186(L) x 133(W) x 60(H) mm [7.33" (L) x 5.24" (W) x 2.36" (H)] without interface connectors</p>
3-4.	<p>Weight</p>	<p>1.6 kg [3.5 lbs.]</p>
3-5.	<p>Surface Finish</p> <p>[Protective & Conformal Coating] [Finish Paint]</p>	<p>Trivalent Chromate Treatment</p> <p>Acrylic Paint, Ivory Color</p>
3-6.	<p>Cooling</p>	<p>Convection air cooling</p>

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4. Environmental Specifications

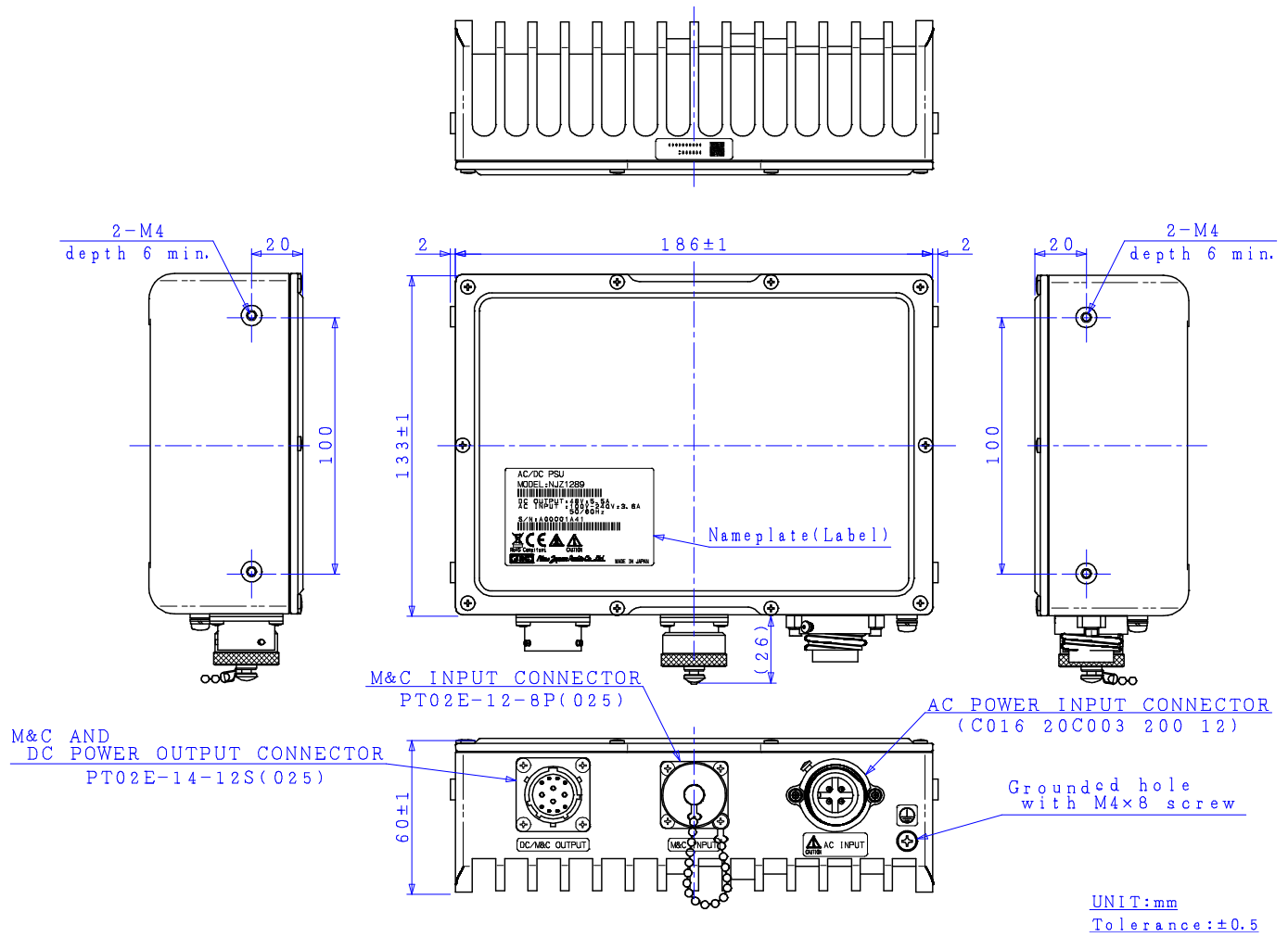
4-1.	Temperature Range (ambient) [Operating] [Storage]	-40 to +55 °C -40 to +75 °C
4-2.	Humidity	0 to 100 % Rh
4-3.	Dust/Waterproof	IP67
4-4.	Vibration	5 G [49.03 m/s ²] (3 axis, 50 Hz to 2 kHz) 1 mm p-p (3 axis, 5 to 50 Hz)
4-5.	Shock	30 G [294.20 m/s ²] (3 axis)
4-6.	Regulations	EU Directive (CE Marking) EMC (2004/108/EC) Low Voltage (2006/95/EC)
4-7.	Standard [Safety] [EMC]	IEC60950-1:2005 (2 nd Edition) EN60950-1:2006 EN61000-3-2 (Harmonic Current Emission Test) EN61000-3-3 (Voltage Fluctuations and Flicker Test) EN61000-4-2 (ESD Test) EN61000-4-3 (Radio-Frequency Electromagnetic Field Test) EN61000-4-4 (Electrical Fast Transient/Burst Test) EN61000-4-5 (Surge Test) EN61000-4-6 (Conducted Disturbance Radio-Frequency Test) EN61000-4-8 (Power Frequency Magnetic Field Test) EN61000-4-11 (Voltage Dips and Interruptions Test)
4-8.	Comply with RoHS (Restricting the use of Hazardous Substances) directives	

5. Accessories

- AC Connector (Plug socket) , Qty (1), Mating connector:
C016 20D003 210 12 (Amphenol)
- MS Connector (Plug pin) , Qty (1), Mating connector: PT06E-14-12P (470) (Amphenol)

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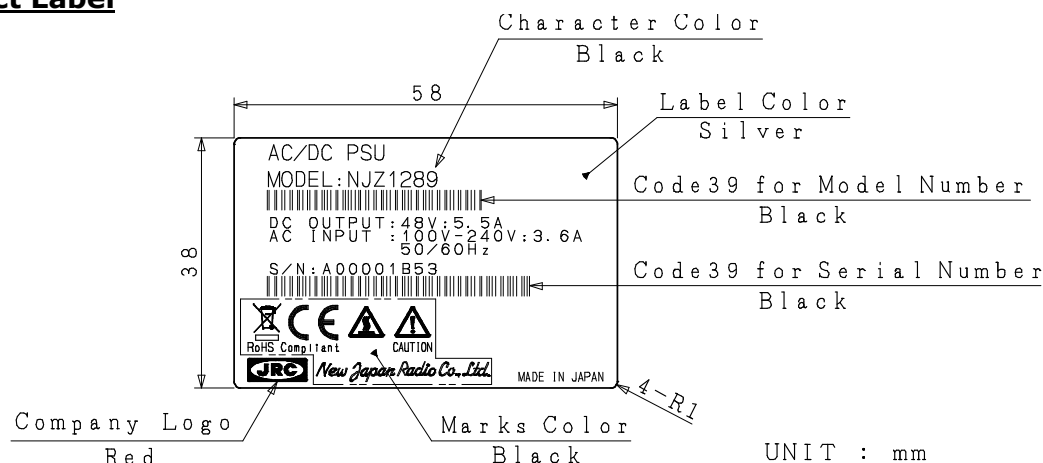
6. Outline Drawing



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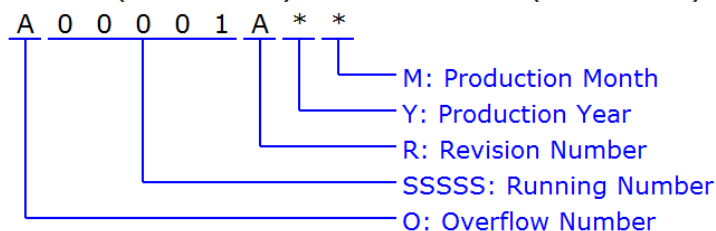
7. Label

Product Label



Definition of Serial Number

Serial Number (OSSSSSRYM) - ALPHANUMERIC (9 characters)



O: Overflow Number - ALPHABET (1 character)

"A" to "Z", e.g.: A99999 ⇒ B00001

SSSSS: Running Number - NUMBER (5 digits)

"00001" to "99999"

R: Revision Number - ALPHABET (1 character)

"A" to "Z"

Y: Production Year - NUMBER (1 digit)

Calendar Number, e.g.: 2009:9, 2010:0, 2011:1, 2012:2

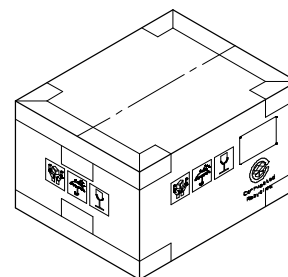
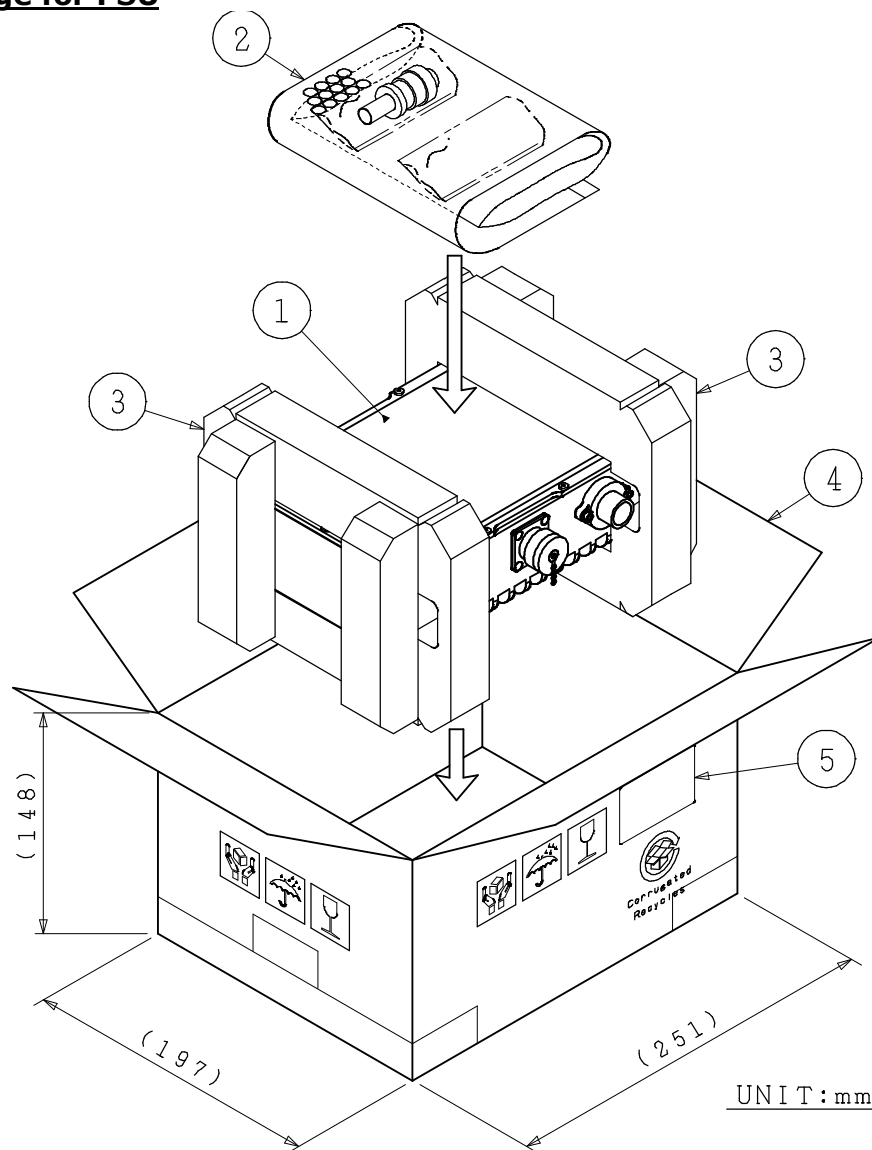
M: Production Month - ALPHANUMERIC (1character)

"1" to "9", "X" as October, "Y" as November, "Z" as December

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8. Package

Package for PSU

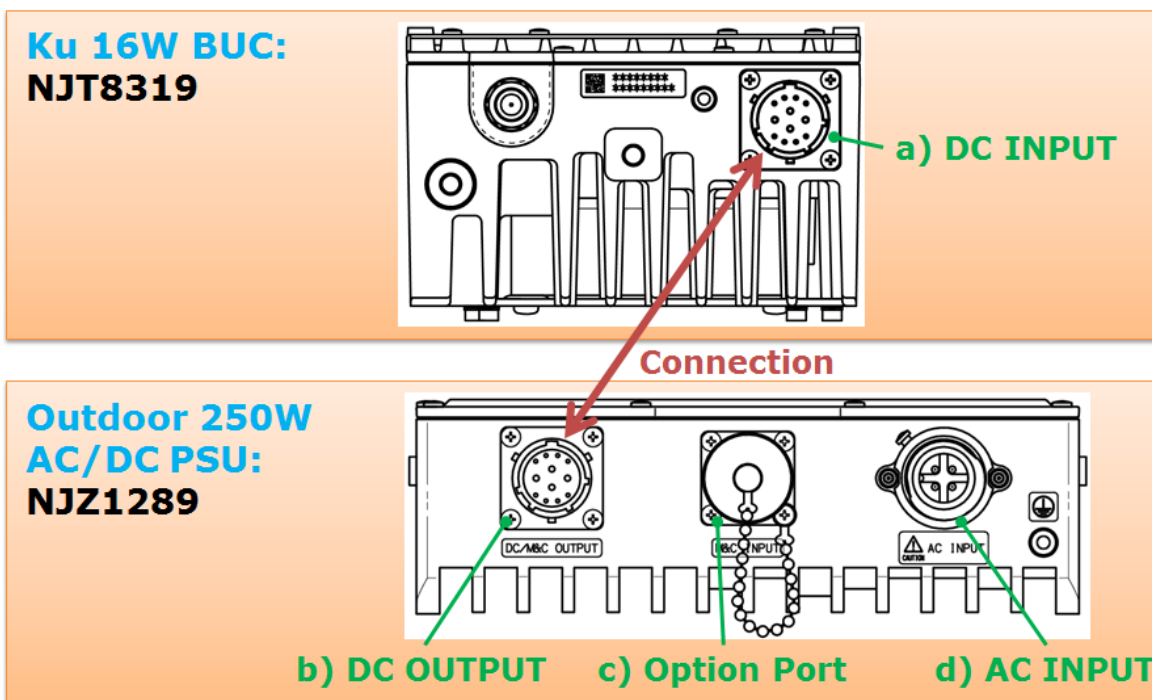


- ①: BUC
- ②: Accessories
 - MS mating connector
PT06E-14-12P-470: 1 piece
 - AC mating connector
C016 20D003 210 12: 1 piece
- ③: Polyethylene foam for package cushioning
- ④: Double-faced corrugated fiberboard
- ⑤: Label

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9. Connection Overview between BUC and 250W AC/DC PSU

ex.) for Ku 16W BUC: NJT8319 series



a) DC INPUT at NJT8319 (Ku 16W BUC)

- Product connector: PT02E-14-12P(025) [Amphenol / 12 pins, male]
 - Mating connector: PT06E-14-12S(470) [Amphenol / 12 sockets, female]
- * Mating connector is enclosed in the shipping package of NJT8319*



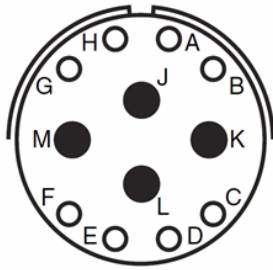
Pin No.	Item	Description
A	N.C.	-
B	N.C.	-
C	N.C.	-
D	N.C.	-
E	N.C.	-
F	N.C.	-
G	RS-232C Tx	
H	RS-232C Rx	
J	DC Input (+)	Prime: +36 to +60 V / DC Voltage
K	DC Input (-)	Return: GND
L	RS-232C GND	
M	N.C.	-

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b) DC OUTPUT at NJZ1289 (AC/DC PSU)

- Product connector: PT02E-14-12S(025) [Amphenol / 12 sockets, male]
- Mating connector: PT06E-14-12P(470) [Amphenol / 12 pins, female]

** Mating connector is enclosed in the shipping package of NJZ1289*

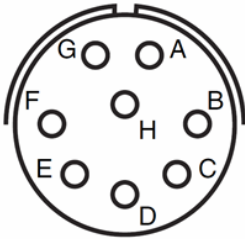


Pin No.	Item	Description
A	By-pass Port	Through Pin A in (c)'s MS connector
B	By-pass Port	Through Pin B in (c)'s MS connector
C	By-pass Port	Through Pin C in (c)'s MS connector
D	By-pass Port	Through Pin D in (c)'s MS connector
E	By-pass Port	Through Pin E in (c)'s MS connector
F	By-pass Port	Through Pin F in (c)'s MS connector
G	By-pass Port	Through Pin G in (c)'s MS connector
H	By-pass Port	Through Pin H in (c)'s MS connector
J	DC Output (+)	Prime: +48V typical, DC Voltage
K	DC Output (-)	Return: GND
L	N.C.	-
M	N.C.	-

c) Option Port at NJZ1289 (AC/DC PSU)

- Product connector: PT02E-12-8P(025) [Amphenol / 8 pins, male]
- Mating connector: PT06E-12-8S(470) [Amphenol / 8 sockets , female]

** Product connector is covered by the waterproof cap.*



Pin No.	Item	Description
A	By-pass Port	Through Pin A in (b)'s MS connector
B	By-pass Port	Through Pin B in (b)'s MS connector
C	By-pass Port	Through Pin C in (b)'s MS connector
D	By-pass Port	Through Pin D in (b)'s MS connector
E	By-pass Port	Through Pin E in (b)'s MS connector
F	By-pass Port	Through Pin F in (b)'s MS connector
G	By-pass Port	Through Pin G in (b)'s MS connector
H	By-pass Port	Through Pin H in (b)'s MS connector

d) AC INPUT at NJZ1289 (AC/DC PSU)

- Product connector: C016 20C003 200 12 [Amphenol / 3 pins + PE, male]
- Mating connector: C016 20D003 210 12 [Amphenol / 3 sockets + PE, female]

** Mating connector is enclosed in the shipping package of NJZ1289*



Pin No.	Item	Description
1	L (Live)	100 to 240 V, AC Voltage
2	N (Neutral)	100 to 240 V, AC Voltage
3	N.C.	-
PE	FG	GND

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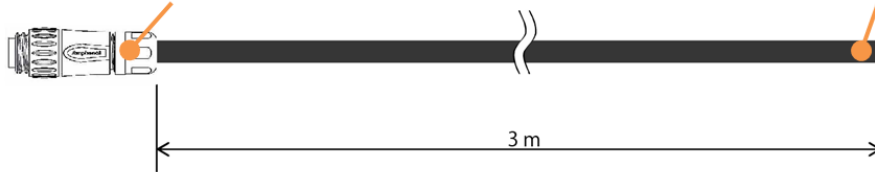
Cable Option

- **Model No. NJZ1290A01**

Cable between NJZ1289 (250W AC/DC PSU) and AC Outlet
 Weatherized Cable / Length: 3m / AC Mating Connector assembled
 / No assembly in AC Outlet Side

Mating Connector of "d) AC INPUT (NJZ1289)"
P/N: C016 20D003 210 12

No assembly for AC Outlet

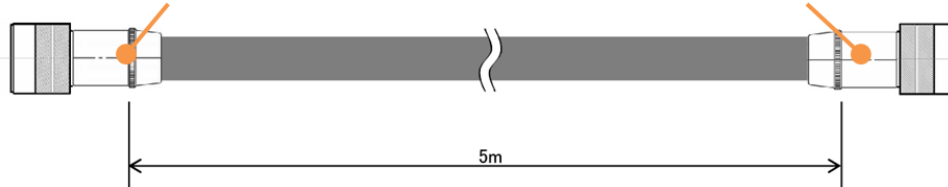


- **Model No. NJZ1290A02**

Connection Cable between NJT8319 (Ku 16W BUC) and NJZ1289 (250W AC/DC PSU)
 Weatherized Cable / Length: 5m / Two Mating Connectors assembled

Mating Connector of "a) DC INPUT (NJT8319)"
P/N: PT06W-14-12S(470)

Mating Connector of "b) DC OUTPUT (NJZ1289)"
P/N: PT06W-14-12P(470)



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