



# APsystems Microinverter Installation manual

**APsystems DS3D Microinverter**  
(For APAC)



ALTENERGY POWER SYSTEM Inc.  
[global.APsystems.com](http://global.APsystems.com)

**APsystems Shanghai:**

Rm.B305 No.188, Zhangyang Road, Pudong, Shanghai 200120,P.R.C  
EMAIL: [info.apac@APsystems.com](mailto:info.apac@APsystems.com)



Please scan this QR code to have  
access to our APPs and Products  
information

# Table of Contents

<b>1.Important Safety Instructions .....</b>	<b>2</b>
1.1 Safety Instructions .....	2
1.2 Radio Interference Statement .....	3
1.3 Symbols in lieu of words .....	4
<b>2.APsystems Microinverter System Introduction .....</b>	<b>5</b>
<b>3.APsystems Microinverter DS3D Introduction .....</b>	<b>7</b>
<b>4.APsystems Microinverter System Installation .....</b>	<b>8</b>
4.1 Additional accessories supplied by APsystems .....	8
4.2 Other required accessories not supplied by APsystems .....	8
4.3 Installation Procedures .....	9
4.3.1 Step 1 - Verify that grid voltage matches microinverter rating .....	9
4.3.2 Step 2 – Y3 AC Bus Cable distribution .....	9
4.3.3 Step 3 - Attach the APsystems Microinverters to the Racking .....	9
4.3.4 Step 4 - Ground the system .....	10
4.3.5 Step 5 - Connect the APsystems microinverter to AC bus cable .....	10
4.3.6 Step 6 - Install a Bus Cable End Cap at the end of AC bus cable .....	11
4.3.7 Step 7 - Connect APsystems Microinverters to the PV Modules .....	12
4.3.8 Step 8 - Connect APsystems Microinverters to Grid .....	13
4.3.9 Step 9 - AC Extension Cable .....	14
4.3.10 Step 10 - Complete the APsystems installation map .....	14
<b>5.APsystems microinverter system operating instructions .....</b>	<b>15</b>
<b>6.Troubleshooting .....</b>	<b>16</b>
6.1 Status Indications and Error Reporting .....	16
6.1.1 Start up LED .....	16
6.1.2 Operation LED .....	16
6.1.3 GFDI Error .....	16
6.2 ECU_APP .....	16
6.3 Installer EMA (web portal or EMA Manager APP) .....	16
6.4 Trouble Shooting Guide .....	16
6.5 APsystems Technical Support .....	17
6.6 Maintenance .....	17
<b>7.Replace a microinverter .....</b>	<b>18</b>
<b>8.Technical Data .....</b>	<b>19</b>
8.1 DS3D Microinverter Datasheet .....	20
<b>9. DS3D - Wiring Diagram .....</b>	<b>21</b>
9.1 Sample Wiring Diagram - Single Phase .....	21
<b>10. DS3D Accessory .....</b>	<b>22</b>
10.1 Dimensions .....	22
10.2 Wiring Diagram .....	23
<b>11. APsystems Microinverter Installation Map .....</b>	<b>24</b>







































## 9. DS3D - Wiring Diagram

### 9.1 Sample Wiring Diagram - Single Phase

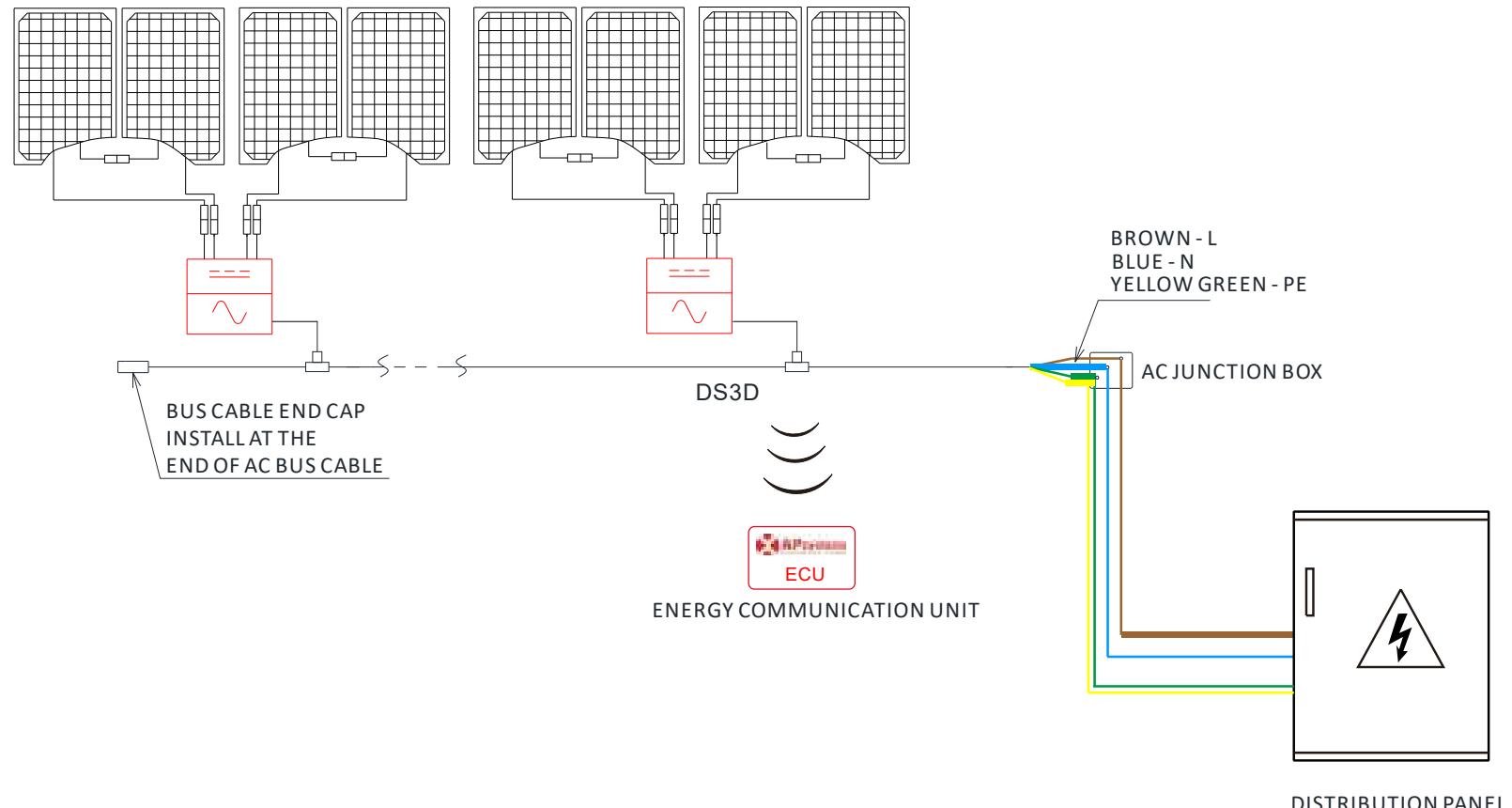
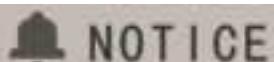


Figure 14



Each channel connects 2 PV modules in series (For PV modules with  $V_{oc} < 60V$ ). The input channel will not work if connects to a single module( $V_{oc} < 60V$ ).

That means the quantity of PV modules in the system is even number.

## 10. DS3D Accessory

### 10.1 Dimensions

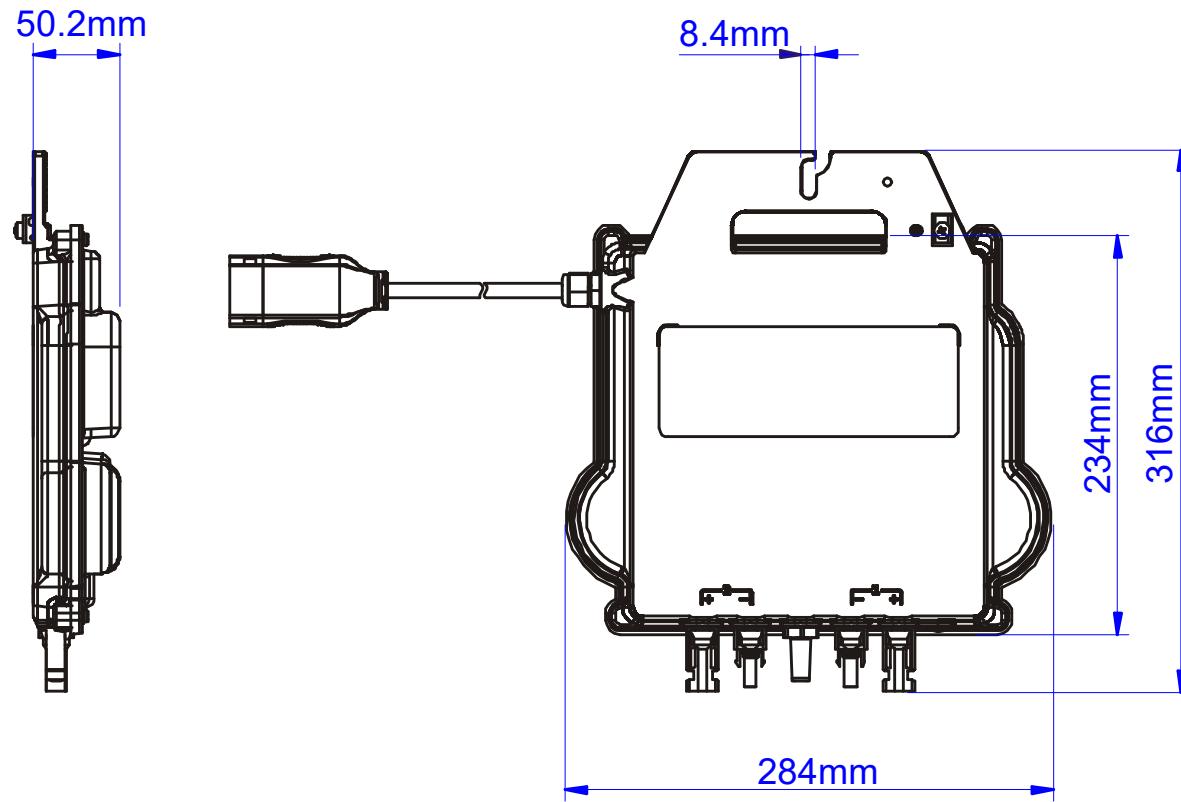


Figure 15

## 10. DS3D Accessory

### 10.2 Wiring Diagram

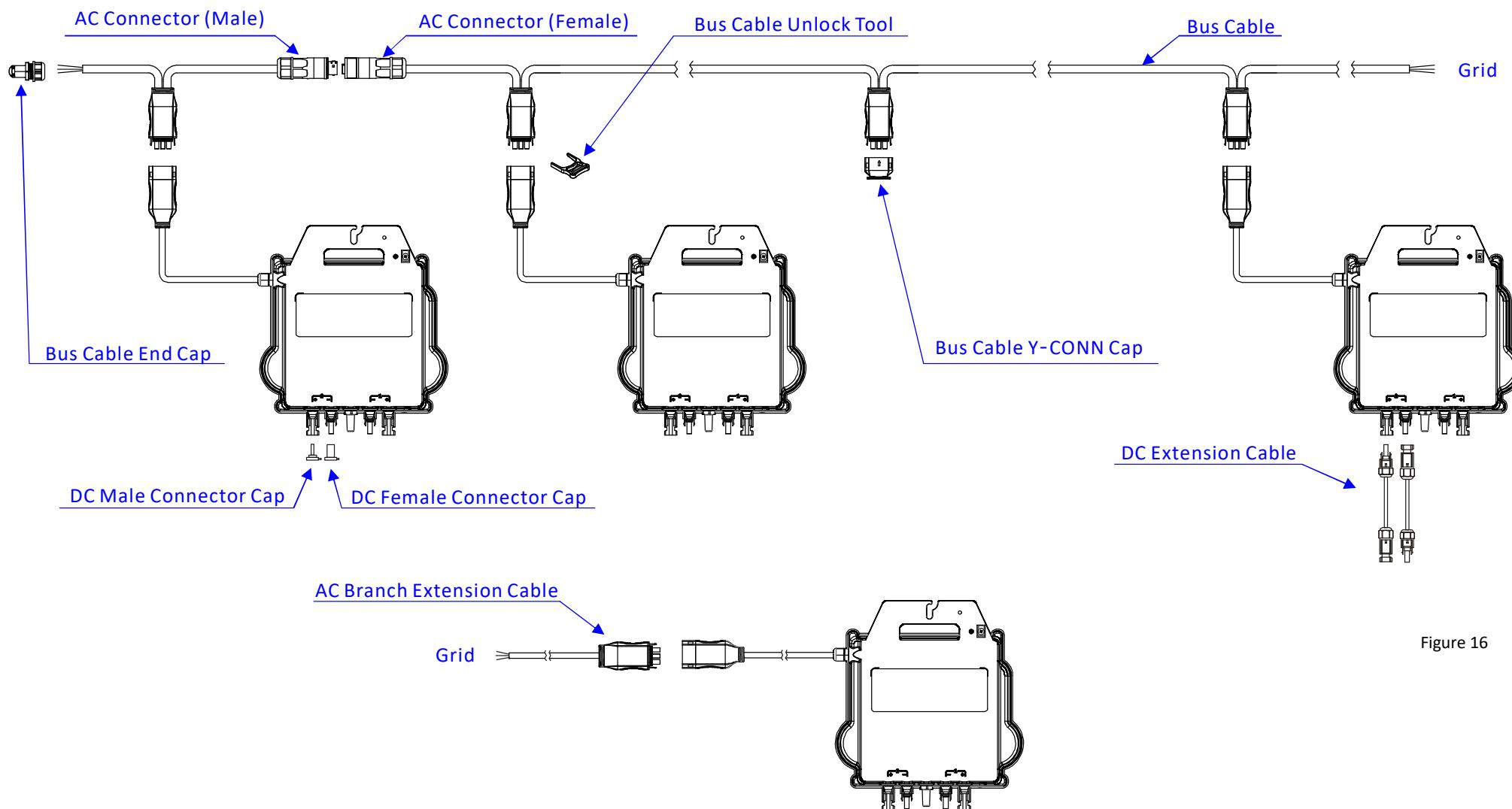


Figure 16

## 11. APsystems Microinverter Installation Map

The APsystems Installation Map is a diagram of the physical location of each microinverter in your PV installation. Each APsystems microinverter has two serial number labels. Peel the one label and affix it to the respective location on the APsystems installation map.

Installation Map Template

Installer:		PV module type:		Qty:		Sheet ____ of ____	N 
Owner:		Microinverter type:		Qty:			
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Row 1							
Row 2							
Row 3							
Row 4							
Row 5							
Row 6							
Row 7							
Row 8							
Row 9							
Row 10							