



APsystems (Canada) Accessories

Rev 1.3

ALTENERGY POWER SYSTEM Inc.
global.APsystems.com

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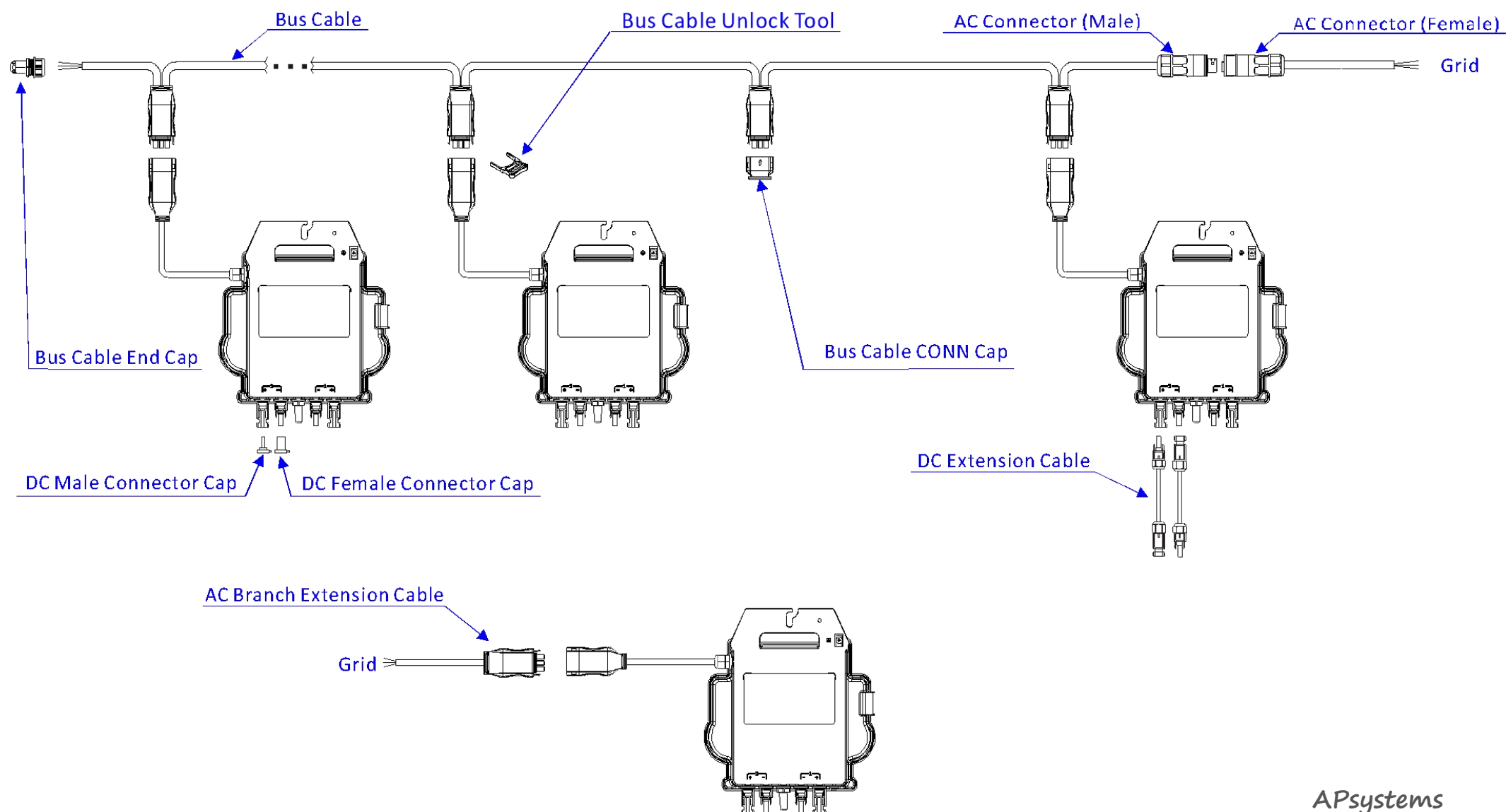
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DS3 Series Accessories

1. Wiring Diagram



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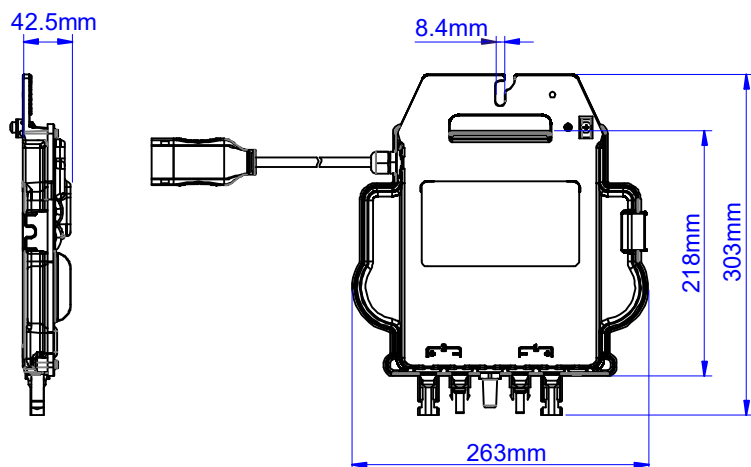
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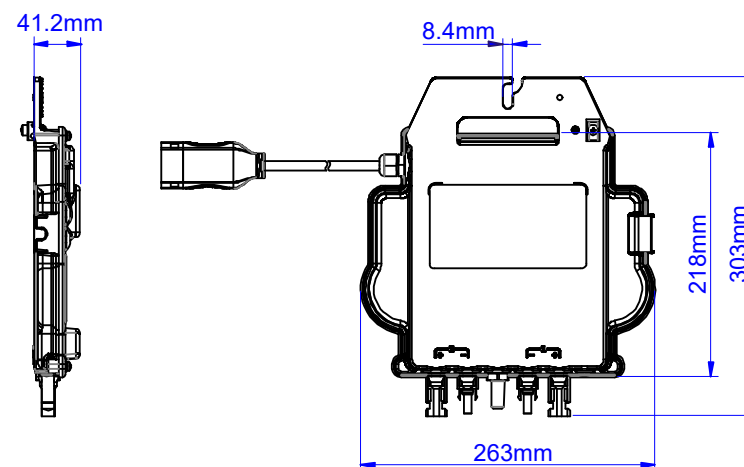
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2. Dimensions

DS3 Dimensions



DS3-L/DS3-S Dimensions



3. Accessories Summary

Region	Accessories									
	Bus Cable (Mandatory)	AC Branch Extension Cable (Optional)	Bus Cable End Cap (Mandatory)	Bus Cable CONN Cap (Optional)	Bus Cable Unlock Tool (Mandatory)	DC Male Connector Cap (Optional)	DC Female Connector Cap (Optional)	AC Connector (Male) (Optional)	AC Connector (Female) (Optional)	DC Extension Cable (Optional)
Canada -NA (117001) -L-NA (118001) -S-CA (119002)	2322301303_Split Phase Bus Cable (12AWG,TC,2m) 2322600403_Split Phase Bus Cable (10AWG,TC,2.4m) (See Pic. A)	2334075242_Split Phase Br. Ext-cable (18AWG,TC, 2m) (See Pic. B)	2060700017_ 3/4-wire Bus Cable End Cap (See Pic. C)	2061702007_ Bus Cable Y-CONN Cap (See Pic. D)	2352000001_ Y Bus Cable Unlock Tool (See Pic. E)	2060401006_ DC Male Connector Cap (MC4) (See Pic. F)	2060402006_ DC Female Connector Cap (MC4) (See Pic. G)	2300931212_ AC Connector (3 core, two seals, male) (See Pic. H)	2300932212_ AC Connector (3 core, two seals, female) (See Pic. I)	2310310274_1m DC Extension Cable (MC4) 2310360214_2m DC Extension Cable (MC4) 2310360224_3m DC Extension Cable (MC4) (See Pic. J)

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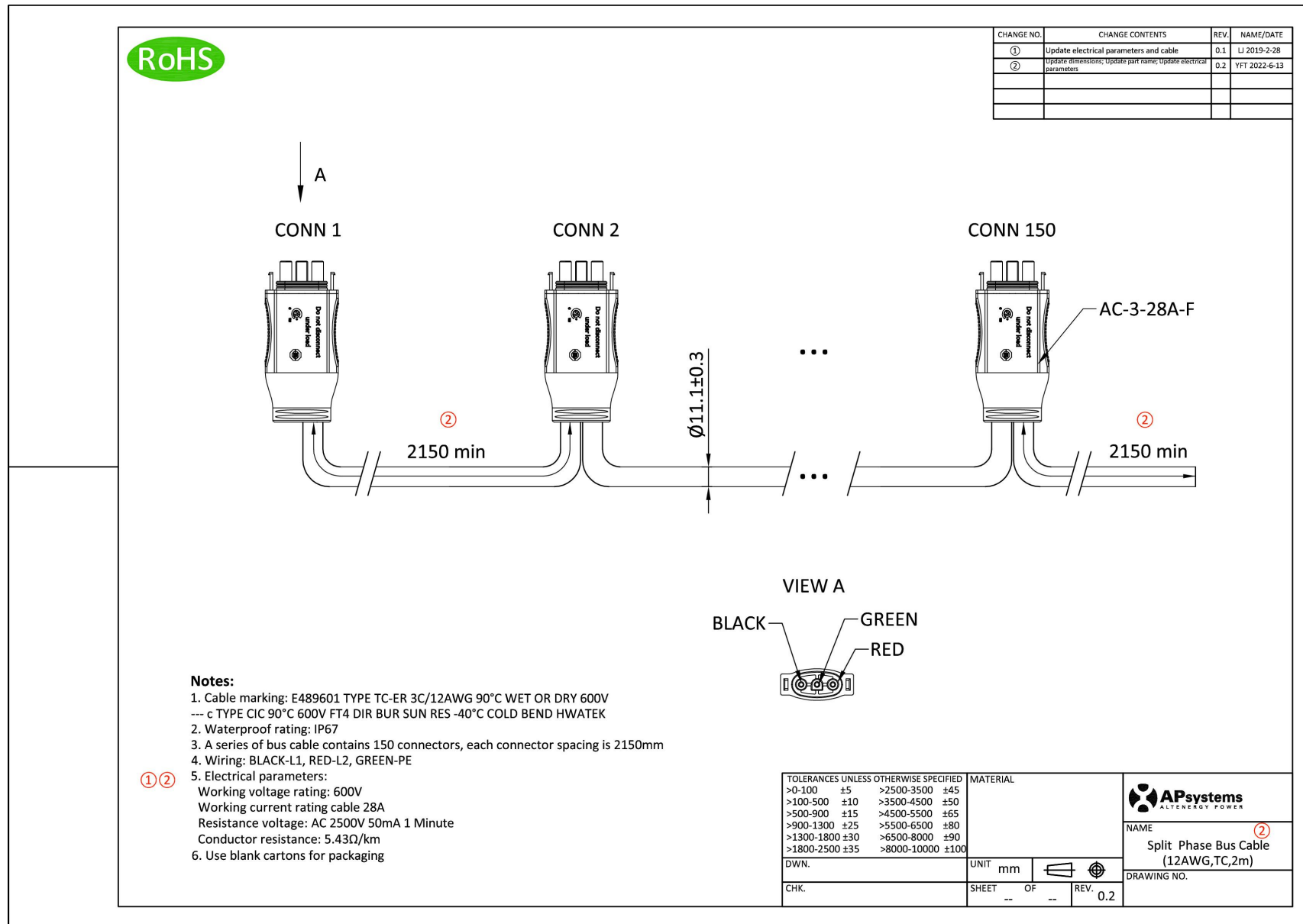
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4. Physical Picture

Bus Cable	AC Branch Extension Cable	Bus Cable End Cap	Bus Cable CONN Cap	Bus Cable Unlock Tool	DC Male Connector Cap
					
Pic. A	Pic. B	Pic. C	Pic. D	Pic. E	Pic. F
DC Female Connector Cap	AC Connector (Male)	AC Connector (Female)	DC Extension Cable		
					
Pic. G	Pic. H	Pic. I	Pic. J		

5. Accessories information

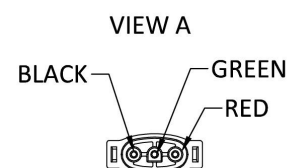
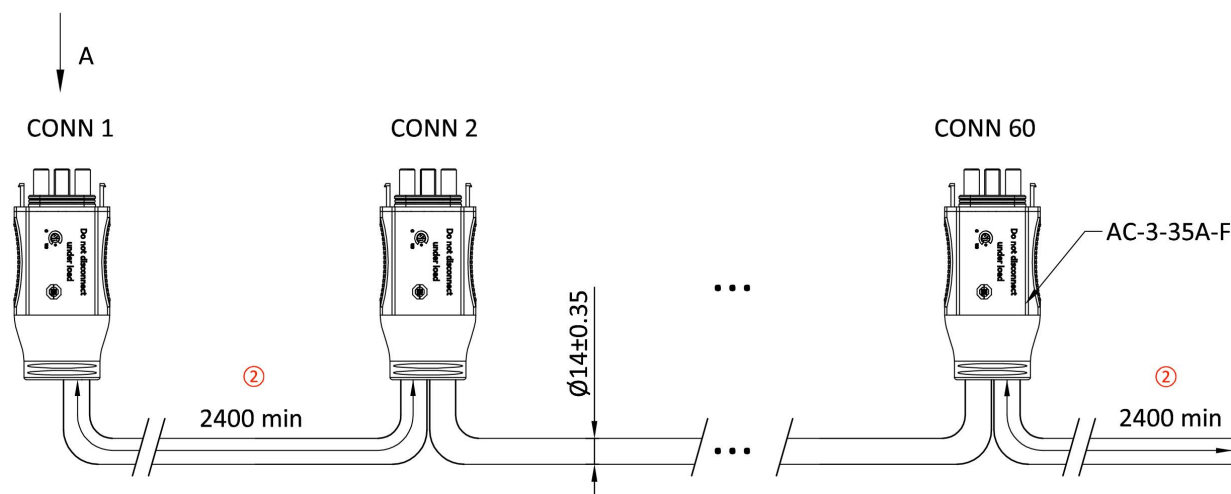
2322301303_Split Phase Bus Cable (12AWG,TC,2m)



2322600403_Split Phase Bus Cable (10AWG,TC,2.4m)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
①	Update number of connectors	0.1	YFT 2021-9-24
②	Update dimensions; Update electrical parameters	0.2	YFT 2022-4-15
③	Update part name	0.3	YFT 2022-6-13
④	Update electrical parameters	0.4	YFT 2022-6-30



Notes:

1. Cable marking: E489601 (UL)TYPE TC-ER 3C/10AWG 90°C WET OR DRY 600V
--- c(UL) TYPE CIC 90°C 600V FT1 XLPE 3C/10AWG FT4 DIR BUR SUN RES COLD BEND HWATEK CE
2. Waterproof rating: IP67
3. A series of bus cable contains 60 connectors, each connector spacing is 2400mm
4. Wiring: BLACK-L1, RED-L2, GREEN-PE
5. Electrical parameters:
Working voltage rating: 600V
Working current rating cable 35A
Resistance voltage: AC 2500V 50mA 1 Minute
Conductor resistance: 3.409Ω/km
6. Use blank cartons for packaging

TOLERANCES UNLESS OTHERWISE SPECIFIED	MATERIAL
>0-100 ±5	>2500-3500 ±45
>100-500 ±10	>3500-4500 ±50
>500-900 ±15	>4500-5500 ±65
>900-1300 ±25	>5500-6500 ±80
>1300-1800 ±30	>6500-8000 ±90
>1800-2500 ±35	>8000-10000 ±100

DWN.	UNIT	mm	REV.	0.4
CHK.	SHEET	OF	REV.	0.4



NAME
Split Phase Bus Cable ③
(10AWG,TC,2.4m)

DRAWING NO.

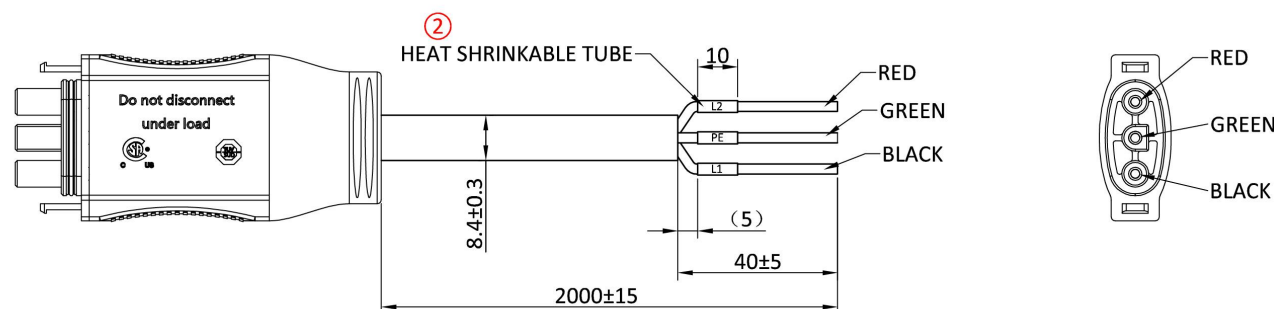
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2334075242_Split Phase Br. Ext-cable (18AWG,TC, 2m)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
①	Update electrical parameters and cable	0.1	LJ 2019-2-28
②	Change the label to heat shrinkable tube	0.2	YFT 2020-5-22
③	Update part name; Update electrical parameters	0.3	YFT 2022-6-13



WIRE RUN LIST		
AWG	COLOR	LABEL
18	BLACK	L1
	RED	L2
	GREEN	PE

Notes:

- ① Cable: E489601 TYPE TC-ER 3C/18AWG 90°C WET OR DRY 600V OIL RES
--- c TYPE CIC 90°C 600V FT4 DIR BUR SUN RES -40°C COLD IMPACT AND COLD BEND HWATEK
- ② Waterproof rating: IP67;
- ③ Wiring: BLACK-L1, RED-L2, GREEN-PE;
- ①③ 4. Electrical parameters:
Working voltage rating: 600V
Working current rating cable 10A
Resistance voltage: AC 2500V 50mA 1 Minute
Conductor resistance: 21.8Ω/km
5. Use blank cartons for packaging

TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		 NAME Split Phase Br. Ext-cable (18AWG,TC,2m) ③
>0-100	±5	>2500-3500	±45	
>100-500	±10	>3500-4500	±50	
>500-900	±15	>4500-5500	±65	
>900-1300	±25	>5500-6500	±80	
>1300-1800	±30	>6500-8000	±90	
>1800-2500	±35	>8000-10000	±100	
DWN.		UNIT	mm	
CHK.		SHEET	OF	REV. 0.3

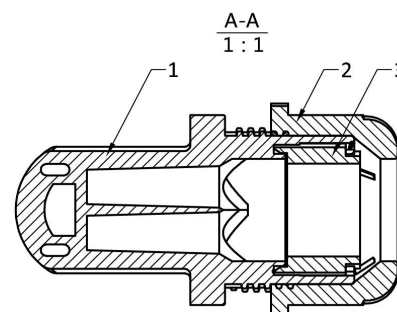
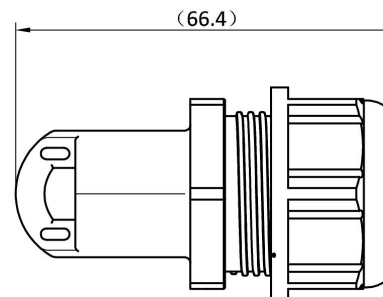
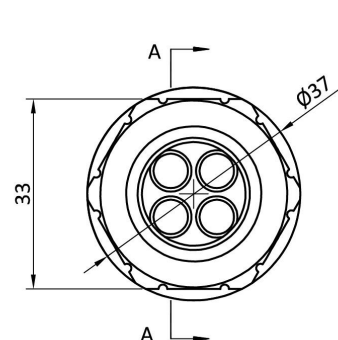
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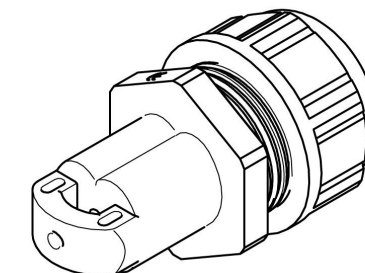
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2060700017_ 3/4-wire Bus Cable End Cap

RoHS



CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



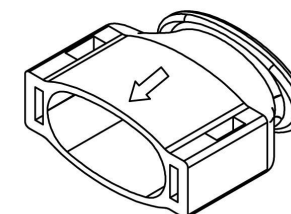
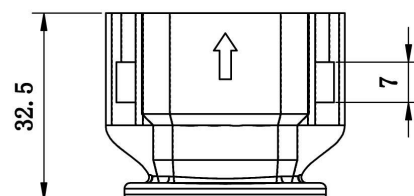
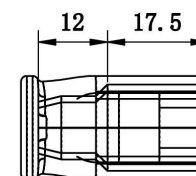
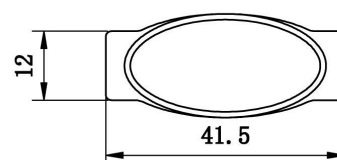
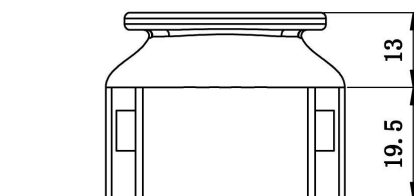
- Notes:
1. Cable Size: 10~16mm;
 2. Nut Torque: 3.0~5.0N·m;
 3. Waterproof Rating: IP68;
 4. Operating Temperature Range: -40~105°C;
 5. Packaging: Blank Cartons

3	Sealing bushing		Rubber	1	
2	Round nut		PA6	1	
1	Joint body		PA6	1	
NO.	NAME	TYPE	MAT.	QTY.	REMARK
TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL			
±0.5		-			
DWN.	UNIT	mm	 NAME 3/4-wire Bus Cable End Cap DRAWING NO. -		
CHK.	SHEET	OF			
			REV.	2.0	

2061702007_Bus Cable Y-CONN Cap

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



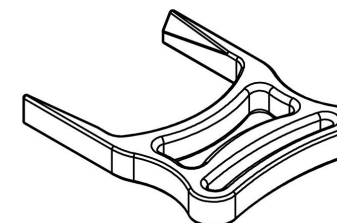
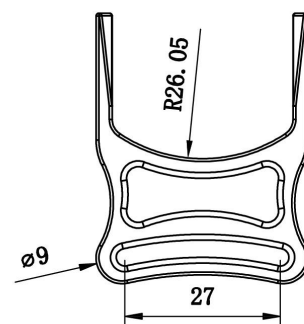
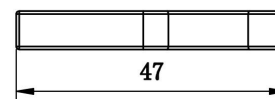
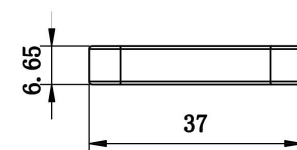
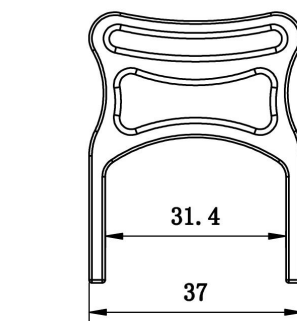
- Notes:
1. Part Number: DUO0050
 2. Undimensioned Features Are Derived From 3D Database
 3. Molded Part Must Meet Rohs
 4. Use Blank Cartons For Packaging

TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		 APsystems ALTENERGY POWER
> 0.5~3 : ±0.15 > 3~6 : ±0.2 > 6~30 : ±0.5 > 30~120 : ±0.8 > 120~315 : ±1.2 ANGLES: ±1°		PPE		
DWN.		UNIT	mm	NAME Bus Cable Y-CONN Cap
CHK.	SHEET	OF	REV.	DRAWING NO.
			0.0	-

2352000001_Y Bus Cable Unlock Tool

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



- Notes:
1. Part Number: PPO
 2. Undimensioned Features Are Derived From 3D Database
 3. Molded Part Must Meet Rohs
 4. Use Blank Cartons For Packaging

TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		 APsystems ALTERNERGY POWER
> 0.5~3 : ±0.15 > 3~6 : ±0.2 > 6~30 : ±0.5 > 30~120 : ±0.8 > 120~315 : ±1.2 ANGLES: ±1°		PPE		
DWN.		UNIT	mm	NAME Y Bus Cable Unlock Tool
CHK.		SHEET	OF	DRAWING NO.
		--	--	-
			REV.	
			0.0	

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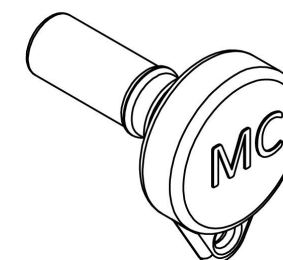
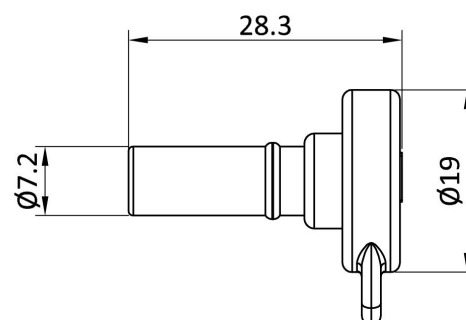
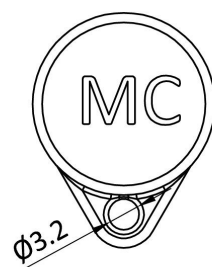
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2060401006_DC Male Connector Cap (MC4)

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CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



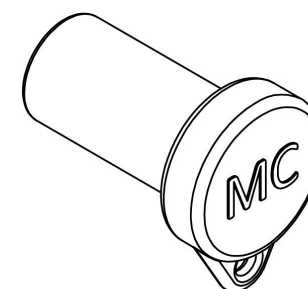
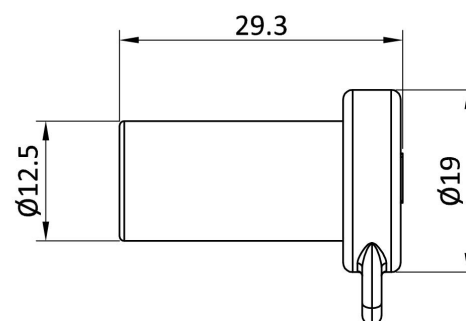
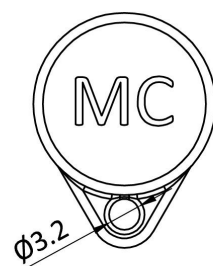
- Notes:
1. Type: PV-SVK4;
 2. Degree of protection: IP67;
 3. Use blank cartons for packaging

TOLERANCES UNLESS OTHERWISE SPECIFIED ±0.5		MATERIAL TPE		 NAME DC Male Connector Cap (MC4) DRAWING NO. -
DWN.	UNIT mm			
CHK.	SHEET -- OF --	REV.	0.0	

2060402006_DC Female Connector Cap (MC4)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



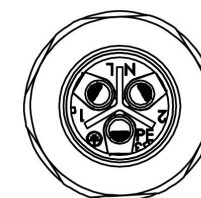
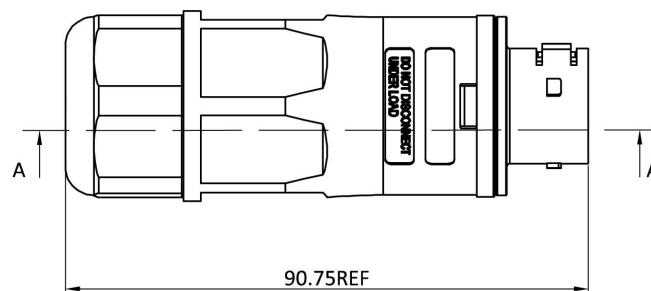
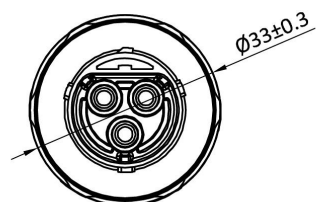
- Notes:
1. Type: PV-BVK4;
 2. Degree of protection: IP67;
 3. Use blank cartons for packaging

TOLERANCES UNLESS OTHERWISE SPECIFIED ±0.5		MATERIAL TPE		 APsystems ALTENERGY POWER	
DWN.		UNIT mm	 		NAME DC Female Connector Cap (MC4)
CHK.	SHEET -- OF --	REV.	0.0		DRAWING NO. -

2300931212_AC Connector (3 core, two seals, male)

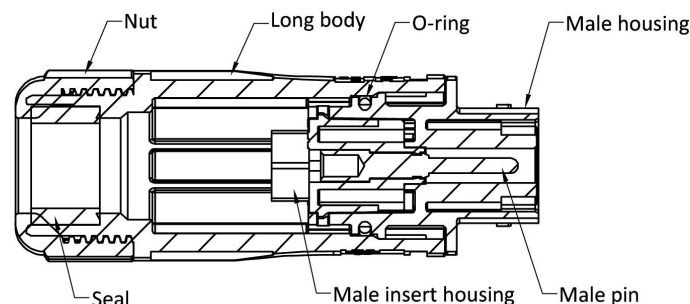
RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
①	Add seal; update Cable O.D; update current; update name	1.0	YFT 2022-8-9



Single-phase connect to L/N/PE
Three-phase connect to 1/2/3

A-A
1:1



Notes:

Electrical

1. Rated Voltage: 250V AC;
2. Rated Impulse Voltage: 4000V;
3. Rated Current: CSA 32A, TUV 35A;
4. Contact Resistance: ≤5mΩ;
5. Insulation Resistance: ≥500MΩ;

Mechanical:

1. Mating Cycle: ≥500;
2. Cable Retention Force: ≥120N;
3. Pin Retention Force: ≥80N;
4. Cable O.D: 10~15mm;
5. Wire Size: ≤6.0mm² (10AWG);

Environmental:

1. Waterproof Rate: IP68 1m24H;
2. Application Temperature: -40°C~+105°C;
3. Flaming Level: UL94-V0;

Material:

1. Plastic Material: PC&PBT(f1)
2. Pin Material: Copper Alloy, Silver Plating;
3. Sealing Material: Silicone Rubber;
4. Screw Material: SUS, Torque 0.8N.m

Others:

1. Type No.: EN034-2103-101;
2. Packaging: Blank Cartons

① Two seals
Seal inner diameter $\phi 17$ (black)
For cable size : 4mm² or 10AWG

Seal inner diameter $\phi 13$ (grey)
For cable size : 2.5mm² or 12AWG

TOLERANCES UNLESS OTHERWISE SPECIFIED				MATERIAL		 APsystems ALTERNATIVE POWER
X.:	±0.20	X*:	±2.00°			
.X:	±0.10	.X*:	±1.00°			
.XX:	±0.05	.XX*:	±0.50°			
.XXX:	±0.03	.XXX*:	±0.30°			
DWN.				UNIT	mm	AC Connector (3 core,two seals,male)
CHK.				SHEET	OF	
						DRAWING NO.
						-

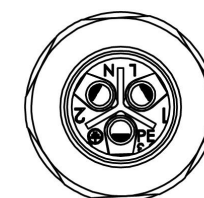
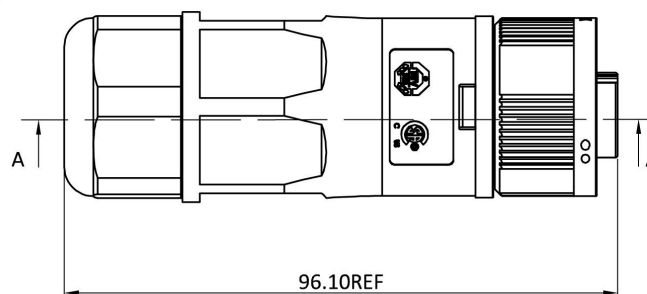
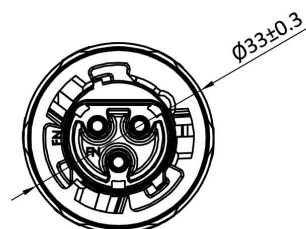
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2300932212_AC Connector (3 core, two seals, female)

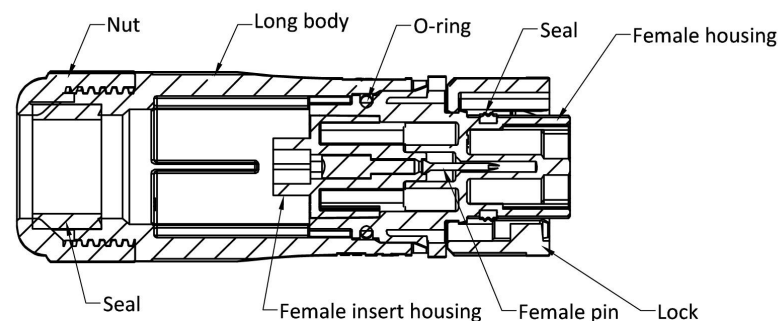
RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
①	Add seal; update Cable O.D; update current; update name	1.0	YFT 2022-8-9



Single-phase connect to L/N/PE
Three-phase connect to 1/2/3

A-A
1:1



- ① Two seals
Seal inner diameter $\phi 17$ (black)
For cable size : 4mm² or 10AWG

Seal inner diameter $\phi 13$ (grey)
For cable size : 2.5mm² or 12AWG

Notes:

Electrical

1. Rated Voltage: 250V AC;
2. Rated Impulse Voltage: 4000V;
3. Rated Current: CSA 32A, TUV 35A;
4. Contact Resistance: $\leq 5m\Omega$;
5. Insulation Resistance: $\geq 500M\Omega$;

Mechanical:

1. Mating Cycle: ≥ 500 ;
2. Cable Retention Force: $\geq 120N$;
3. Pin Retention Force: $\geq 80N$;
4. Cable O.D: 10~15mm;
5. Wire Size: $\leq 6.0mm^2$ (10AWG);

Environmental:

1. Waterproof Rate: IP68 1m24H;
2. Application Temperature: -40°C~+105°C;
3. Flaming Level: UL94-V0;

Material:

1. Plastic Material: PC&PBT(f1)
2. Pin Material: Copper Alloy, Silver Plating;
3. Sealing Material: Silicone Rubber;
4. Screw Material: SUS, Torque 0.8N.m

Others:

1. Type No.: EN034-2203-101;
2. Packaging: Blank Cartons

TOLERANCES UNLESS OTHERWISE SPECIFIED				MATERIAL		 NAME AC Connector (3 core,two seals,female) DRAWING NO. -
X.: ± 0.20	X*: $\pm 2.00^\circ$					
.X: ± 0.10	.X*: $\pm 1.00^\circ$					
.XX: ± 0.05	.XX*: $\pm 0.50^\circ$					
.XXX: ± 0.03	.XXX*: $\pm 0.30^\circ$					
DWN.	UNIT	mm				
CHK.	SHEET	OF	REV.	1.0		

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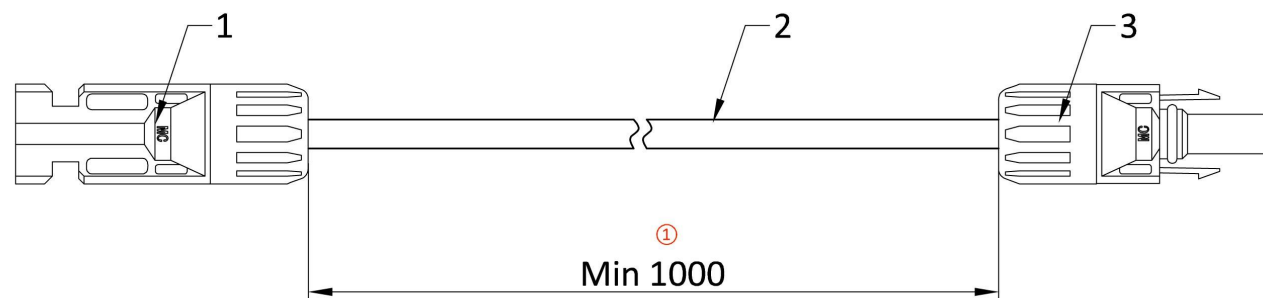
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2310310274_1m DC Extension Cable (MC4)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
①	Update cable type; Update dimensions	0.1	YFT 2022-9-14
②	Update cable type; change manufacturer	1.0	YFT 2022-11-16



③	DC Connector (female)	MC4 PV-KBT4/6II		1	Female, STAUBLI	
②	DC Cable	H1Z2Z2-K /PV wire		1	4.0mm ² /12AWG, TUV/UL certification	
①	DC Connector (male)	MC4 PV-KST4/6II		1	Male, STAUBLI	
NO.	NAME	TYPE	MAT.	QTY.	DESCRIPTION	REMARK
TOLERANCES UNLESS OTHERWISE SPECIFIED			MATERIAL			
>0-100 ±5			>2500-3500 ±45			
>100-500 ±10			>3500-4500 ±50			
>500-900 ±15			>4500-5500 ±65			
>900-1300 ±25			>5500-6500 ±80			
>1300-1800 ±30			>6500-8000 ±90			
>1800-2500 ±35			>8000-10000 ±100			
DWN.		UNIT		mm		
CHK.		SHEET		OF	REV.	1.0
					DRAWING NO.	
					 APsystems ALTERNATIVE POWER	
					NAME	
					1m DC Extension Cable (MC4)	

Notes:

1. The DC cable and connector connect firmly, can sustain 100N-60s tension.
2. The pin concentric with plastic parts, ensure that there is no contradict phenomenon when male connector inserts into female connector.
3. Use Blank Cartons For Packaging.

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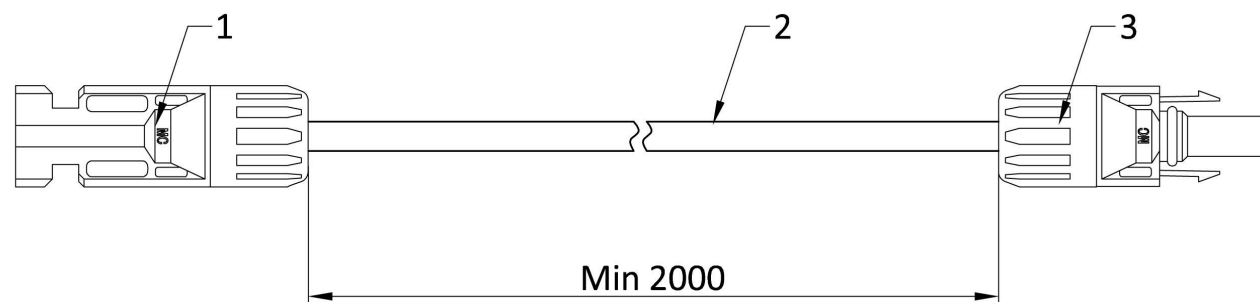
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Tel: 400-100-8470 | global.APsystems.com

2310360214_2m DC Extension Cable (MC4)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
②	Add alternative cable	0.2	YFT 2022-9-14
③	Add alternative cable	0.3	YFT 2022-11-24



Notes:

1. The DC cable and connector connect firmly, can sustain 100N-60s tension.
2. The pin concentric with plastic parts, ensure that there is no contradict phenomenon when male connector inserts into female connector.
3. Use Blank Cartons For Packaging.

②③

3	DC Connector (female)	MC4 PV-KBT4/6II		1	Female, STAUBLI	
2	DC Cable	FLEX-SOL-EVO-DX 4.0		1	4.0mm²/12AWG, TUV/UL certification	
		62930 IEC 131/PV				
		H1Z2Z2-K /PV wire				
1	DC Connector (male)	MC4 PV-KST4/6II		1	Male, STAUBLI	
NO.	NAME	TYPE	MAT.	QTY.	DESCRIPTION	REMARK
TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL				APsystems ALTERNERY POWER NAME 2m DC Extension Cable (MC4) DRAWING NO.
> 0-100 ±5		> 2500-3500 ±45				
> 100-500 ±10		> 3500-4500 ±50				
> 500-900 ±15		> 4500-5500 ±65				
> 900-1300 ±25		> 5500-6500 ±80				
> 1300-1800 ±30		> 6500-8000 ±90				
> 1800-2500 ±35		> 8000-10000 ±100				
DWN.	UNIT		mm			
CHK.	SHEET		OF	REV.	0.3	

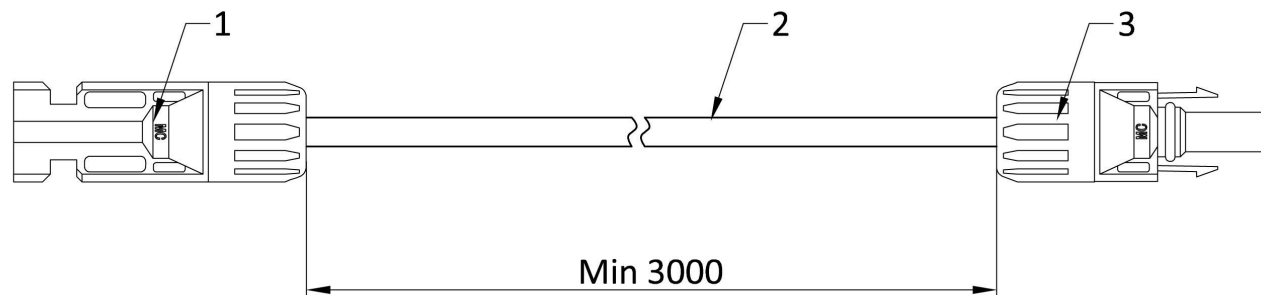
KM.B305 NO. 188, Zhangyang Road, Pudong, Shanghai 200120, P.R.C

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2310360224_3m DC Extension Cable (MC4)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE
①	Add alternative cable	0.1	YFT 2022-9-14
②	Update cable type; change manufacturer	1.0	YFT 2022-11-16



①②

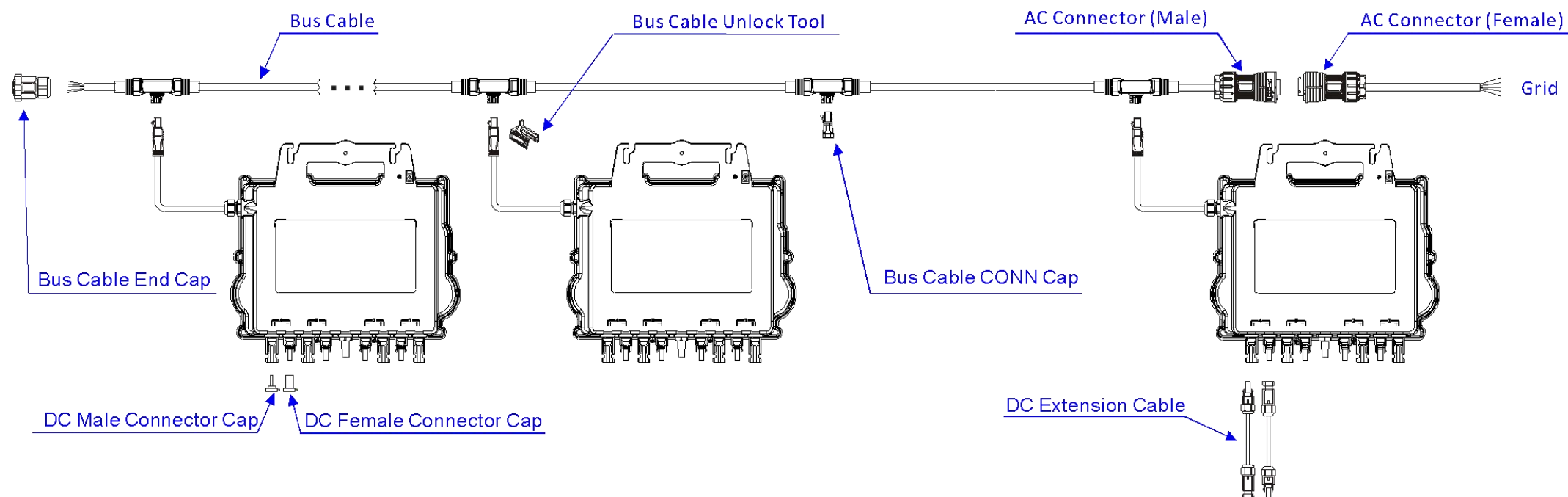
3	DC Connector (female)	MC4 PV-KBT4/6II		1	Female, STAUBLI	
2	DC Cable	H1Z2Z2-K /PV wire		1	4.0mm ² /12AWG, TUV/UL certification	
1	DC Connector (male)	MC4 PV-KST4/6II		1	Male, STAUBLI	
NO.	NAME	TYPE	MAT.	QTY.	DESCRIPTION	REMARK
TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL				
>0-100	±5	>2500-3500	±45	 NAME 3m DC Extension Cable (MC4) DRAWING NO.		
>100-500	±10	>3500-4500	±50			
>500-900	±15	>4500-5500	±65			
>900-1300	±25	>5500-6500	±80			
>1300-1800	±30	>6500-8000	±90			
>1800-2500	±35	>8000-10000	±100			
DWN.			UNIT	mm		
CHK.			SHEET	OF		
				REV.	1.0	

Notes:

1. The DC cable and connector connect firmly, can sustain 100N-60s tension.
2. The pin concentric with plastic parts, ensure that there is no contradict phenomenon when male connector inserts into female connector.
3. Use Blank Cartons For Packaging.

QT2 Accessories

1. Wiring Diagram



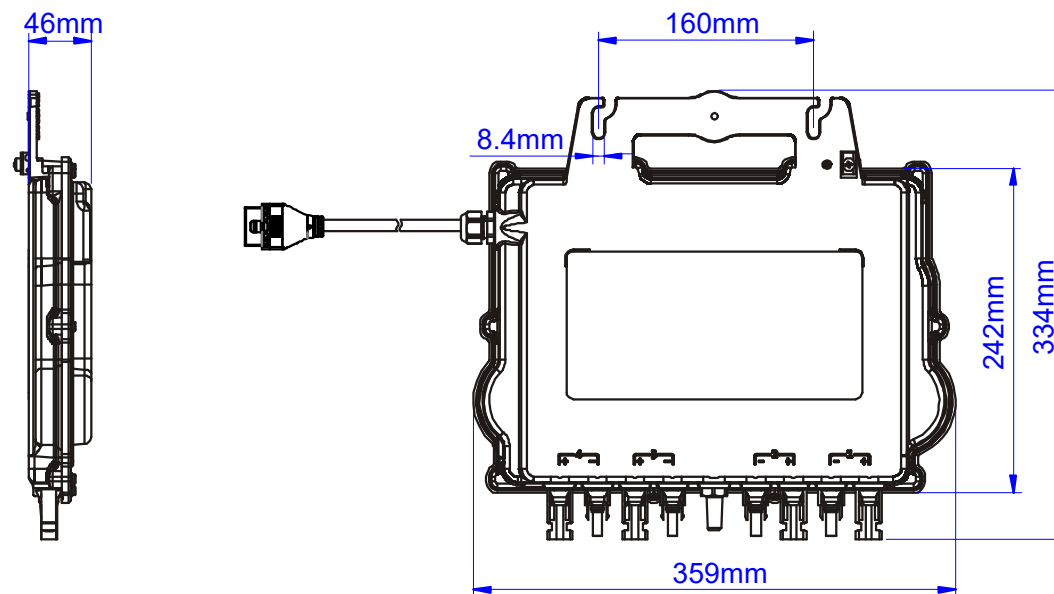
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2. QT2 Dimensions



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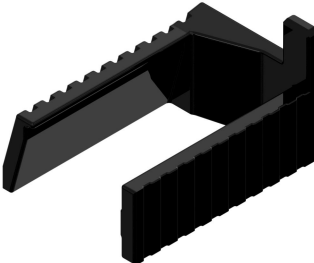
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3. Accessories Summary

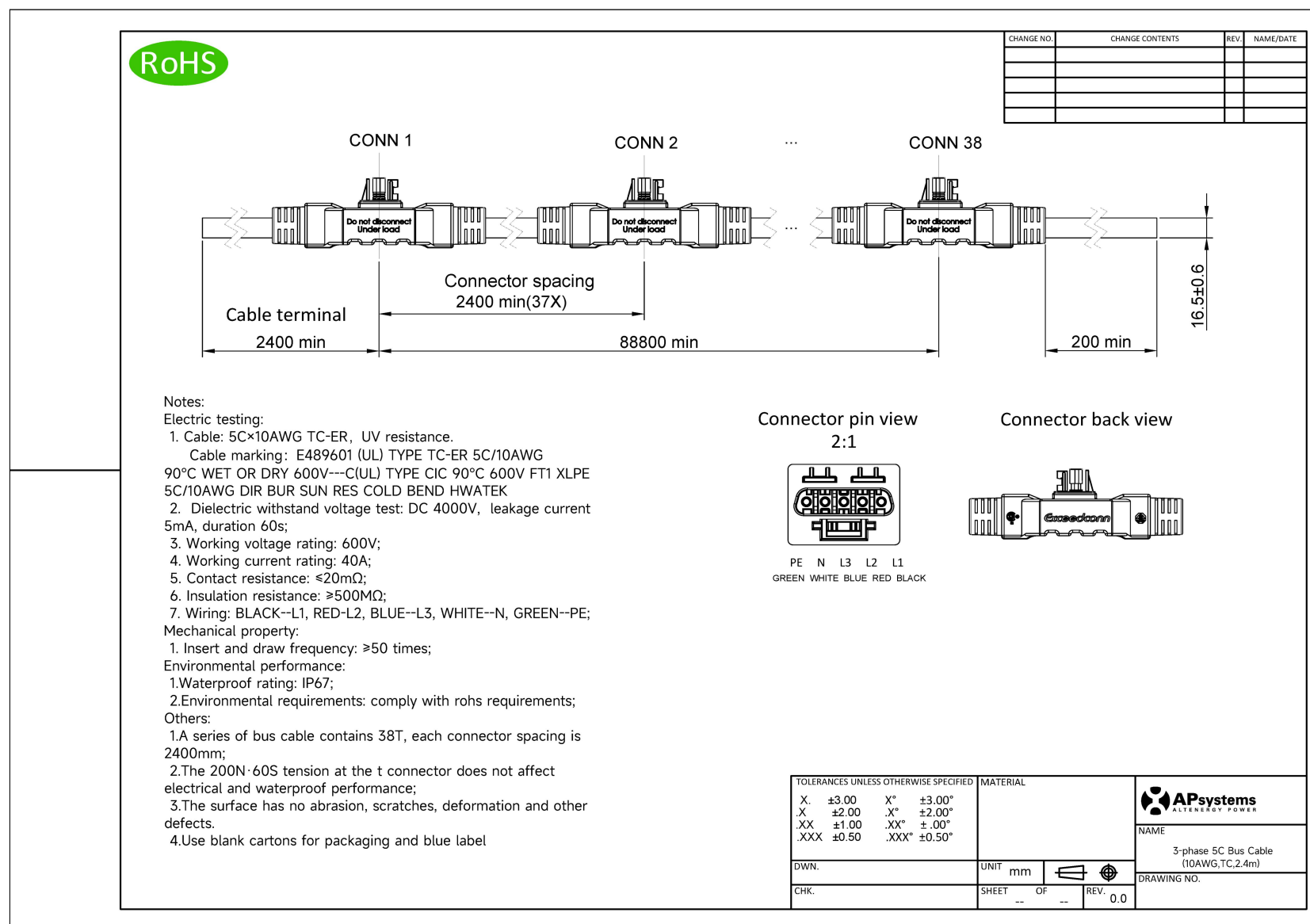
Region	Accessories								
	Bus Cable (Mandatory)	Bus Cable End Cap (Mandatory)	Bus Cable CONN Cap (Optional)	DC Male Connector Cap (Optional)	Bus Cable Unlock Tool (Mandatory)	DC Female Connector Cap (Optional)	AC Connector (Male) (Optional)	AC Connector (Female) (Optional)	DC Extension Cable (Optional)
Canada -208 (124062) -480 (124063)	2322609202_3-phase 5C Bus Cable (10AWG,TC,2.4m) 2322959232_ 3-phase 5C Bus Cable (10AWG,TC, 9.5m) (See Pic. A)	2062050002_5-wire Bus Cable End Cap (See Pic. B)	2061252032_5-wire Bus Cable T-CONN Cap (See Pic. C)	2060401006_DC Male Connector Cap (MC4) (See Pic. D)	2353000002_ 5C Bus Cable Unlock Tool (See Pic. E)	2060402006_DC Female Connector Cap (MC4) (See Pic. F)	2301511002_40A AC Male Connector (EN,5-wire) (See Pic. G)	2301512002_40A AC Female Connector (EN,5-wire) (See Pic. H)	2310310274_1m DC Extension Cable (MC4) 2310360214_2m DC Extension Cable (MC4) 2310360224_3m DC Extension Cable (MC4) 2310370236_4m DC Extension Cable (MC4) (See Pic. I)

4. Physical Picture

Bus Cable	Bus Cable End Cap	Bus Cable CONN Cap	Bus Cable Unlock Tool	DC Male Connector Cap	DC Female Connector Cap
					
Pic. A	Pic. B	Pic. C	Pic. D	Pic. E	Pic. F
AC Connector (Male)	AC Connector (Female)	DC Extension Cable			
					
Pic. G	Pic. H	Pic. I			

5. Accessories information

2322609202_3-phase 5C Bus Cable (10AWG,TC,2.4m)



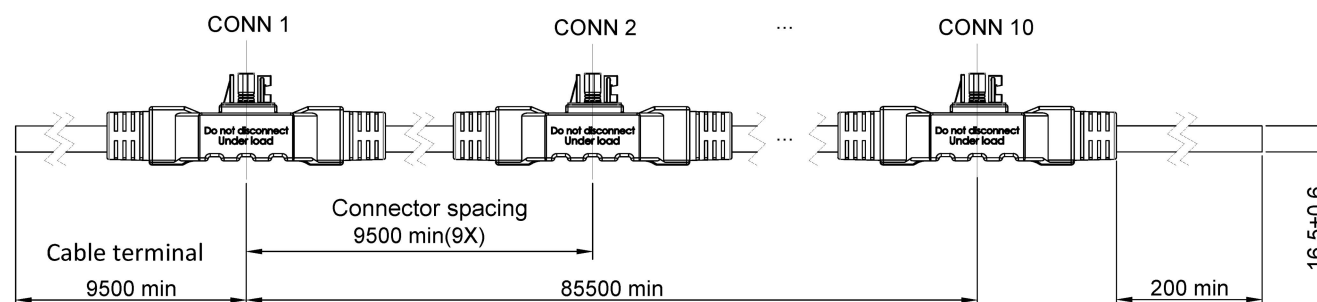
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2322959232_ 3-phase 5C Bus Cable (10AWG,TC, 9.5m)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



Notes:

Electric testing:

1. Cable: 5C×10AWG TC-ER, UV resistance.
Cable marking: E489601 (UL) TYPE TC-ER 5C/10AWG 90°C WET OR DRY 600V---C(UL) TYPE CIC 90°C 600V FT1 XLPE 5C/10AWG FT4 DIR BUR SUN RES COLD BEND HWATEK
2. Dielectric withstand voltage test: DC 4000V, leakage current 5mA, duration 60s;
3. Working voltage rating: 600V;
4. Working current rating: 40A;
5. Contact resistance: ≤20mΩ;
6. Insulation resistance: ≥500MΩ;
7. Wiring: BLACK--L1, RED-L2, BLUE--L3, WHITE--N, GREEN--PE;

Mechanical property:

1. Insert and draw frequency: ≥50 times;

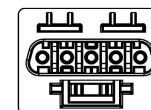
Environmental performance:

1. Waterproof rating: IP67;
2. Environmental requirements: comply with rohs requirements;

Others:

1. A series of bus cable contains 10T, each connector spacing is 9500mm;
2. The 200N·60S tension at the t connector does not affect electrical and waterproof performance;
3. The surface has no abrasion, scratches, deformation and other defects.
4. Use blank cartons for packaging and blue label

Connector pin view 2:1



PE N L3 L2 L1
GREEN WHITE BLUE RED BLACK

Connector back view

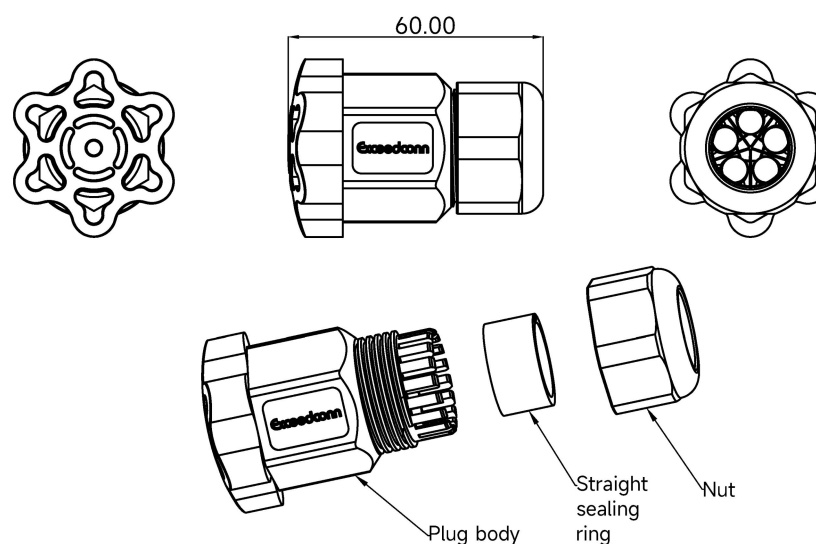


TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		APsystems ALTENERGY POWER	
X.	±3.00	X°	±3.00°	NAME 3-phase 5C Bus Cable (10AWG,TC,9.5m)	
.X	±2.00	.X°	±2.00°		
.XX	±1.00	.XX°	±1.00°		
.XXX	±0.50	.XXX°	±0.50°		
DWN.		UNIT	mm	DRAWING NO.	
CHK.		SHEET	OF		
		REV.		0.0	

2062050002_5-wire Bus Cable End Cap

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



Notes:

Mechanical property:

1. Cable Gauge:14-17.5mm

Environmental performance:

1. Protection class: IP68 1m-2H(After mating);
2. Operating Temperature: -40°C~105°C

Others:

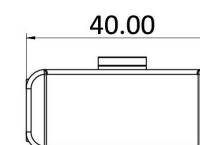
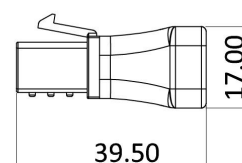
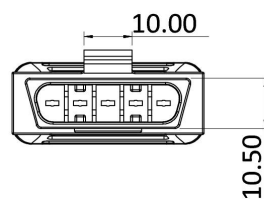
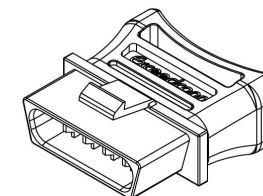
- 1.Type No:EN050-1423-00

TOLERANCES UNLESS OTHERWISE SPECIFIED				MATERIAL		 APsystems ALTERNATE POWER	NAME 5-wire Bus Cable End Cap
X.	±3.00	X°	±3.00°				
.X	±2.00	.X°	±2.00°				
.XX	±1.00	.XX°	±.00°				
.XXX	±0.50	.XXX°	±0.50°				
DWN.	UNIT	mm				DRAWING NO.	
CHK.	SHEET	OF	REV.	0.0			

2061252032_5-wire Bus Cable T-CONN Cap

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



- Notes:
1. PART No.: MIH-1-01;
 2. Waterproof Rate: IP67;
 3. Mating Cycle: ≥50;
 4. Part Retention Force: 100N;
 5. Packaging: Blank Cartons

TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		 NAME 5-wire Bus Cable T-CONN Cap	
X.	±2.00				
.X	±1.00			DRAWING NO.	
.XX	±0.64			-	
.XXX	±0.38				
DWN.		UNIT	mm		
CHK.		SHEET	OF		
				REV.	0.0

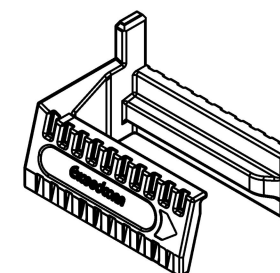
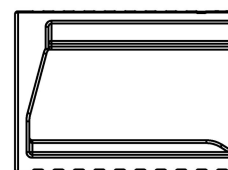
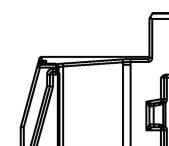
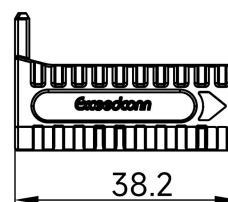
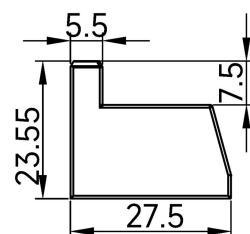
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2353000002_5C Bus Cable unlock tool

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



Technical Data :
 1.Material: PBT;
 2.Color :black
 3.Packaging : Blank Cartons

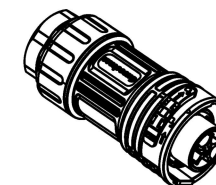
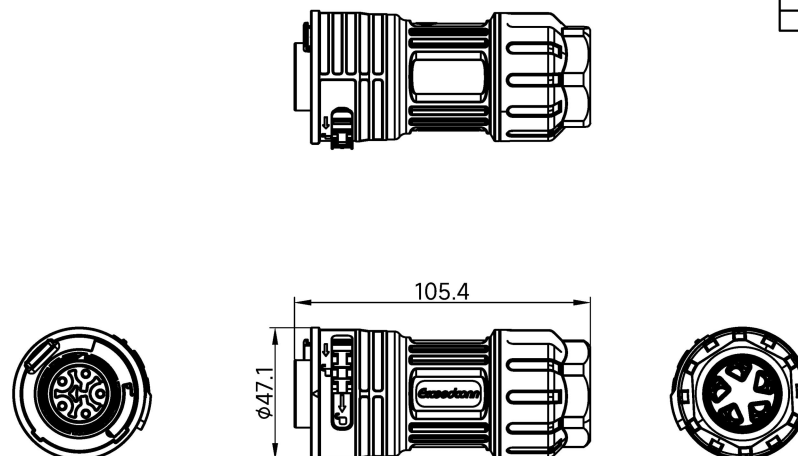
TOLERANCES UNLESS OTHERWISE SPECIFIED				MATERIAL		 APsystems ALTERNATIVE POWER
X.	±1.00	X°	±3.00°	-		
.X	±0.50	.X°	±2.00°			
.XX	±0.20	.XX°	±.00°			
.XXX	±0.10	.XXX°	±0.50°			
DWN.	UNIT		mm			NAME 5C Bus Cable Unlock Tool
CHK.	SHEET		OF	REV.		DRAWING NO.
				0.0		-

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2301511002_AC Connector(5C,40A,male)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



Notes:

Electric testing:

1. Rated Voltage:600V;
2. Rated Current:40A;
3. Contact Resistance:≤50mΩ;
4. Dielectric Withstanding Voltage:3000V
5. Insulation resistance: ≥500MΩ;

Mechanical property:

1. Mating Cycle: ≥500次;
2. Cable Gauge:2.5-10mm²

Environmental performance:

1. Protection class: IP67 1m-30min(After mating);
2. Operating Temperature: -40°C~105°C

Others:

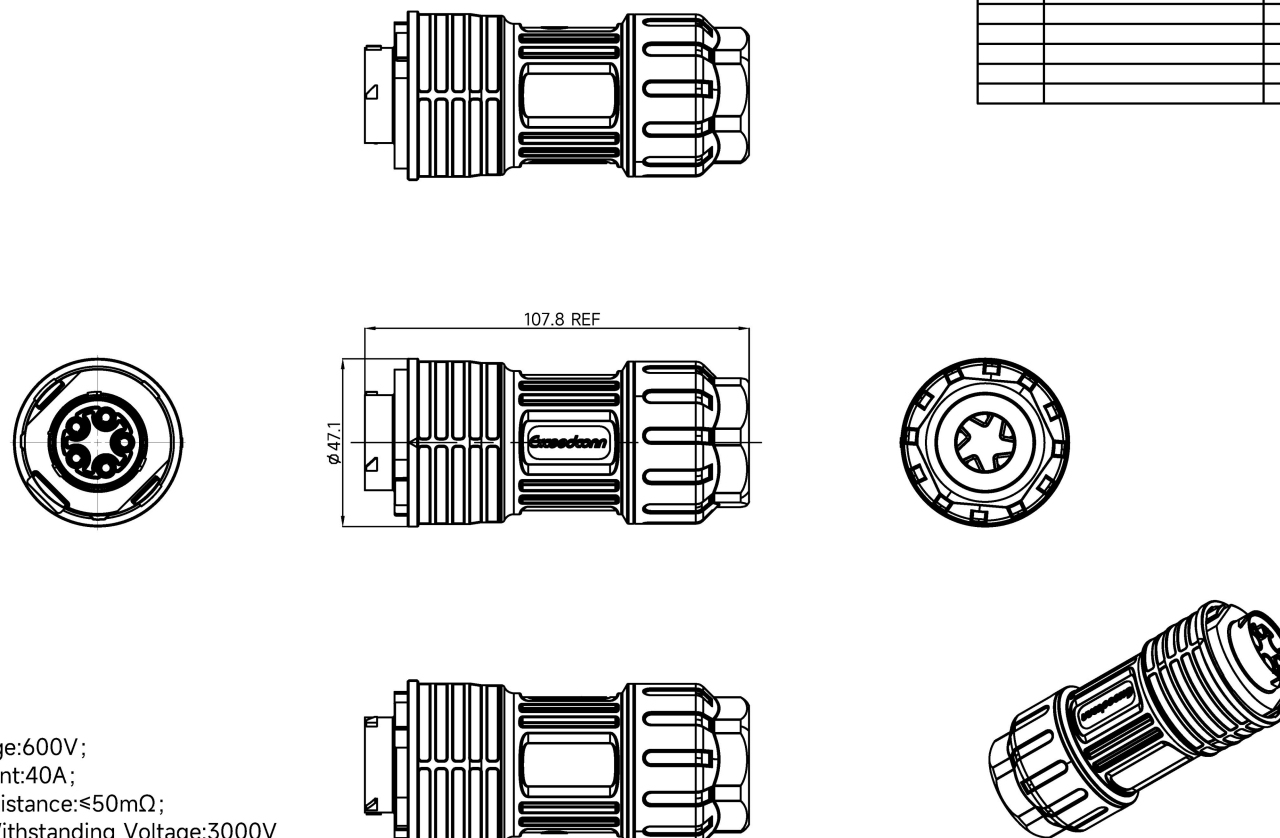
- 1.Type No:EN200-2105-101-02

TOLERANCES UNLESS OTHERWISE SPECIFIED				MATERIAL		 NAME AC Connector (5C 40A,male)
.X	±3.00	.X°	±3.00°			
.X	±2.00	.X°	±2.00°			
.XX	±1.00	.XX°	±.00°			
.XXX	±0.50	.XXX°	±0.50°			
DWN.		UNIT	mm			
CHK.		SHEET	OF	REV.		DRAWING NO.

2301512002_AC Connector(5C,40A,female)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



Notes:

Electric testing:

1. Rated Voltage:600V;
2. Rated Current:40A;
3. Contact Resistance:≤50mΩ;
4. Dielectric Withstanding Voltage:3000V
5. Insulation resistance: ≥500MΩ;

Mechanical property:

1. Mating Cycle: ≥500次;
2. Cable Gauge:2.5-10mm²

Environmental performance:

1. Protection class: IP67 1m-30min(After mating);
2. Operating Temperature: -40°C~105°C

Others:

- 1.Type No:EN200-2205-101

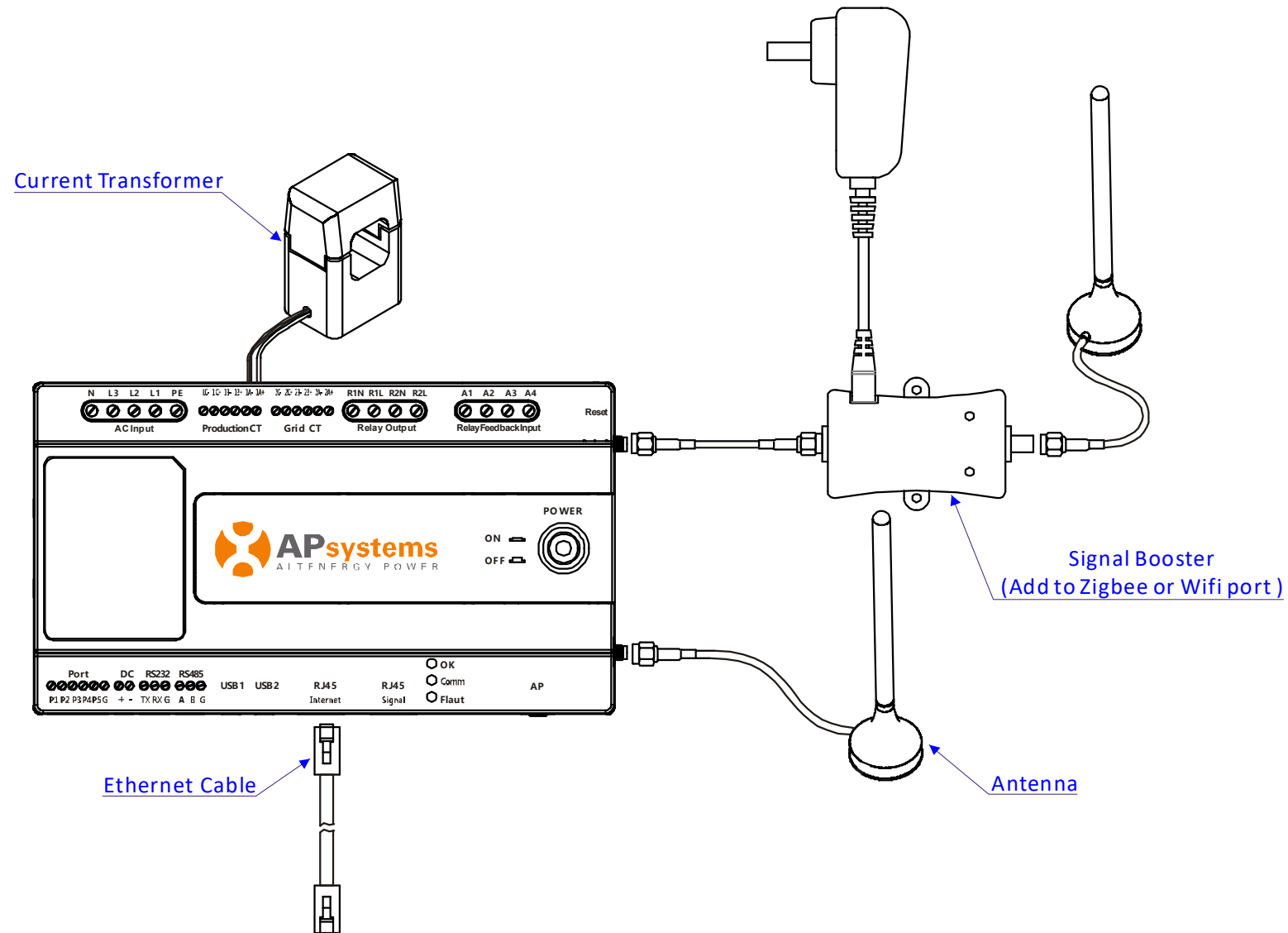
TOLERANCES UNLESS OTHERWISE SPECIFIED				MATERIAL		 APsystems ALTERNATE POWER
X.	±3.00	X°	±3.00°			
.X	±2.00	.X°	±2.00°			
.XX	±1.00	.XX°	±1.00°			
.XXX	±0.50	.XXX°	±0.50°			
DWN.				UNIT	mm	DRAWING NO.
CHK.				SHEET	OF	

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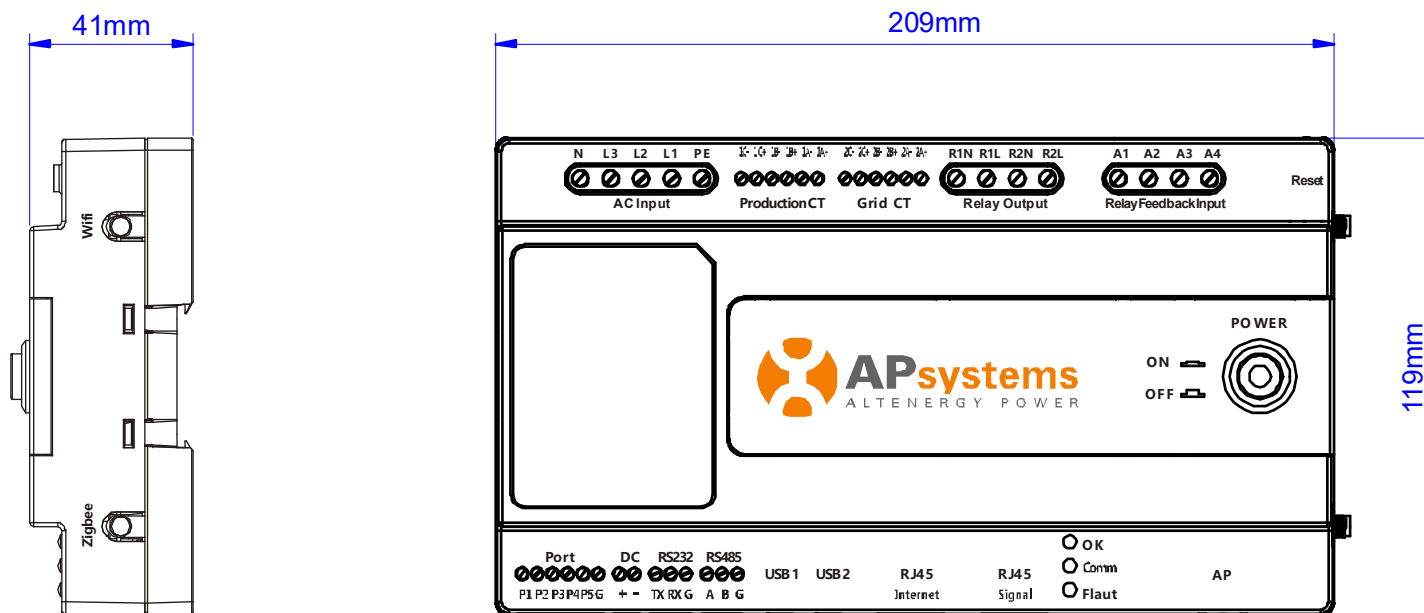
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ECU-C Accessories

1. Wiring Diagram



2. ECU-C Dimensions



3. Accessories Summary

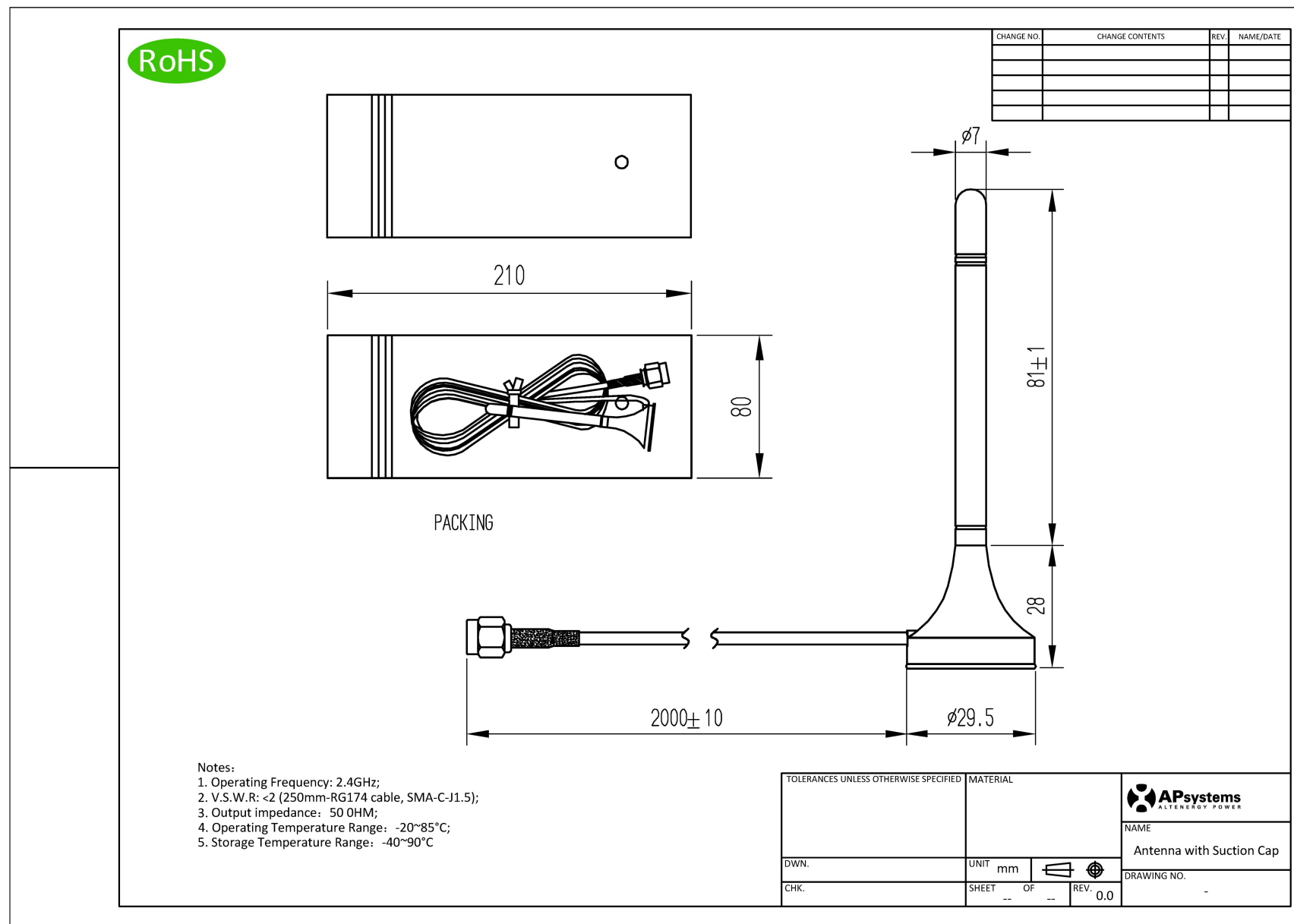
Region	Accessories			
	Antenna (Supply)	Ethernet Cable (Supply)	Current Transformer (Optional)	Signal Booster (Optional)
Canada -NA (205001)	Antenna with Suction Cap (See Pic. A)	Ethernet cable (See Pic. B)	18083020112_Current Transformer (80A/26.6mA) (See Pic. C) 18083020012_Current Transformer (200A/66.6mA) (See Pic. D)	2376000003_Signal Booster (American Standard) (See Pic. E)

4. Physical Picture

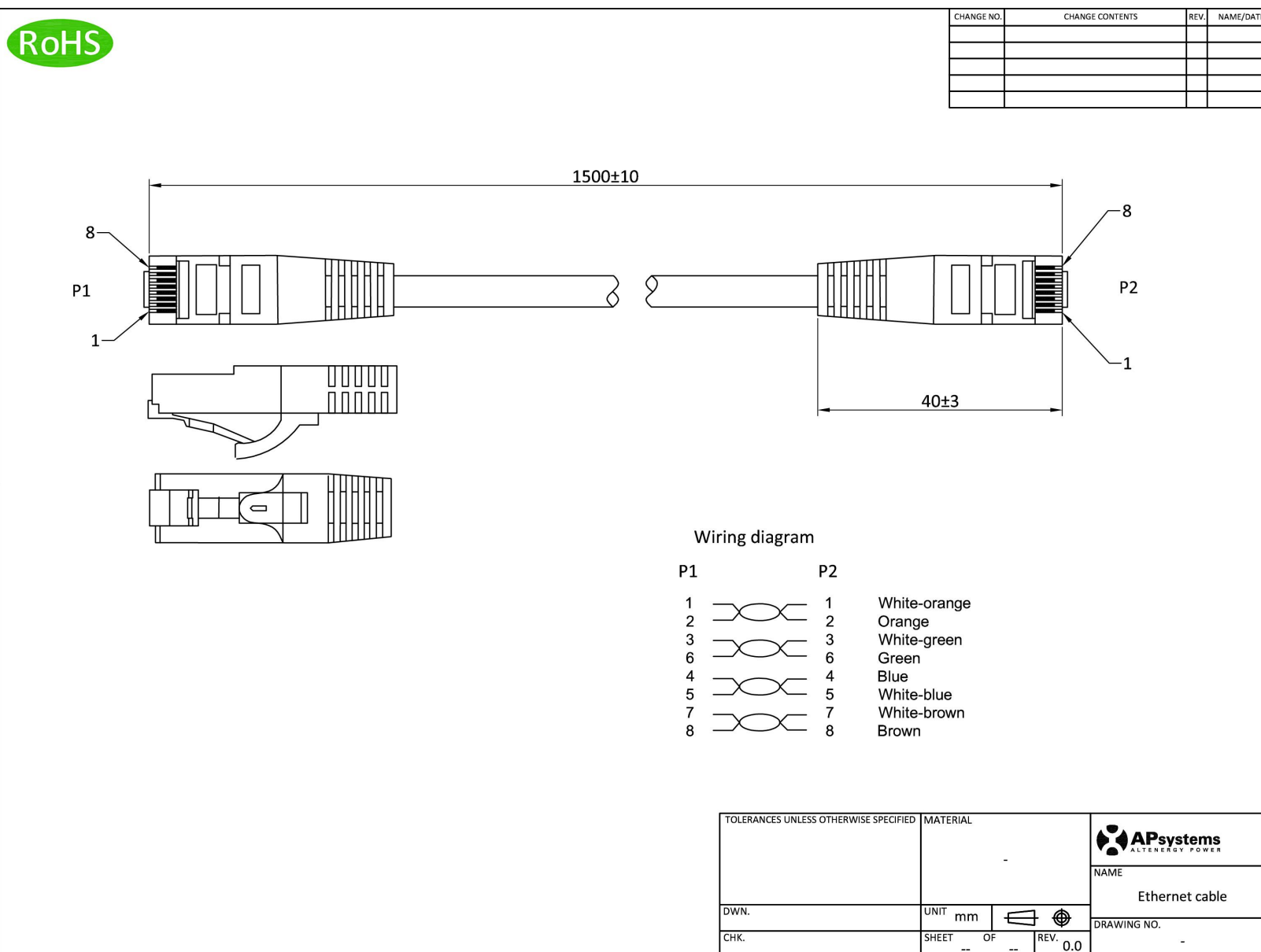
Antenna	Ethernet Cable	Current Transformer		Signal Booster
 Pic. A	 Pic. B	 Pic. C	 Pic. D	 Pic. E

5. Accessories information

Antenna with Suction Cap



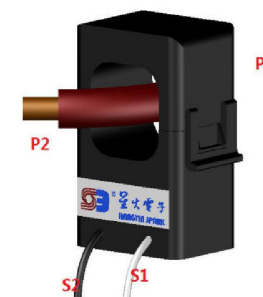
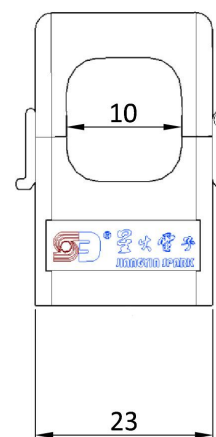
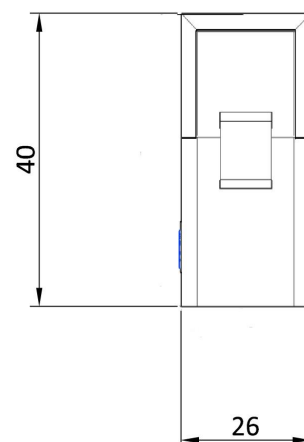
Ethernet cable



18083020112_Current Transformer (80A/26.6mA)

RoHS

CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



SCT-T10		
Input current(A)	Turn ratio(T)	output voltage(mV)
5-80	1000-3000 Recommended value 3000	333-5000 Recommended value 333

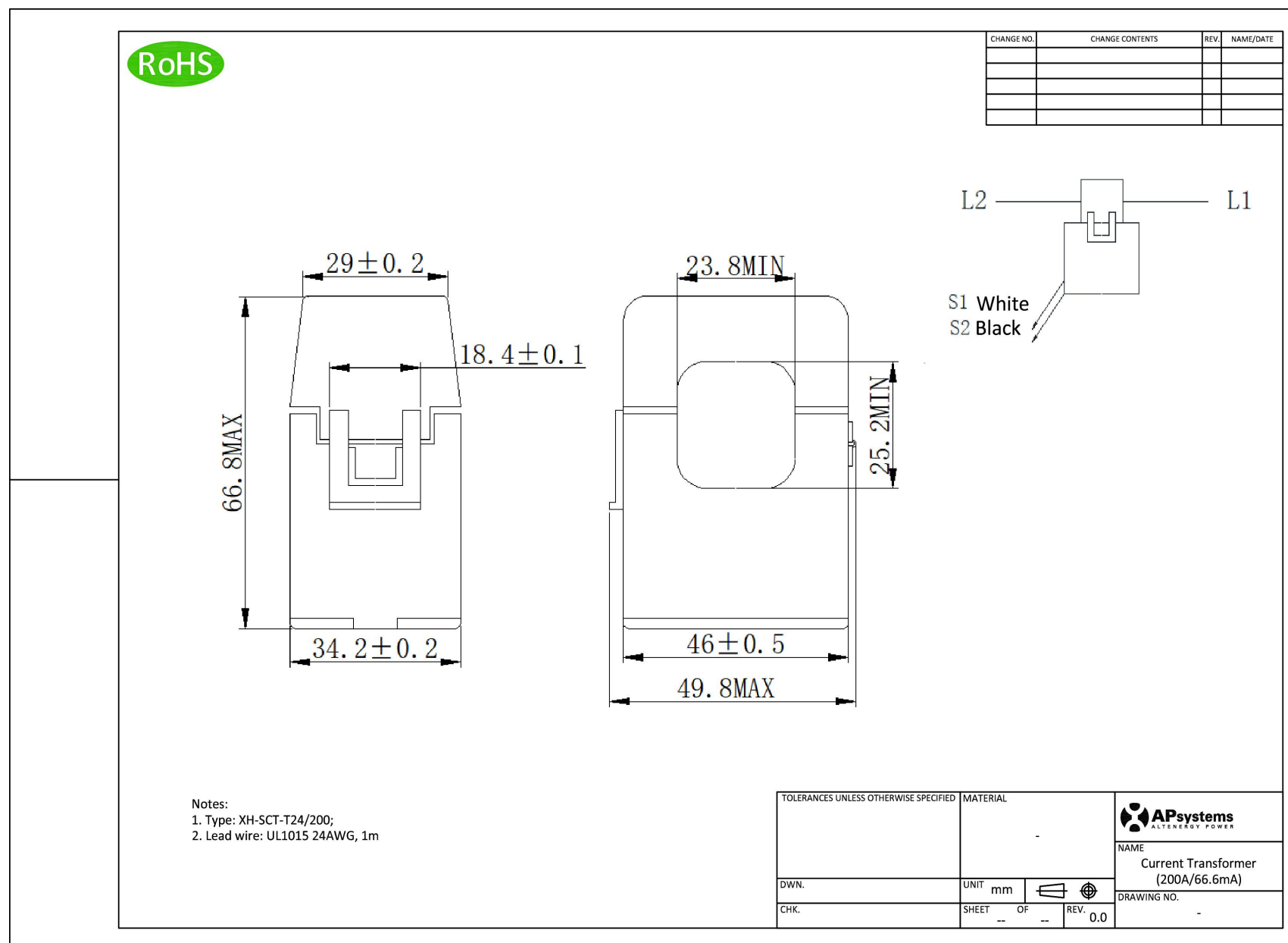
Notes:
 1. Type: SCT-T10;
 2. Primary current range: 10-3000Arms;
 3. Lead wire: UL1007 24AWG, 1m;
 4. Working temperature: -25°C~50°C;
 5. Certification: UL, CE, ETL, ROHS

TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		APsystems ALTERNATE POWER	
DWN.	UNIT mm			NAME	Current Transformer (80A/26.6mA)
CHK.	SHEET OF	REV.	0.0	DRAWING NO.	-

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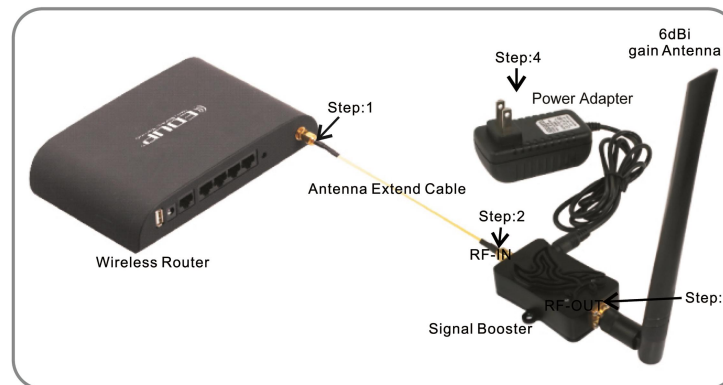
18083020012_Current Transformer (200A/66.6mA)



2376000003_Signal Booster (American Standard)

Wifi booster instruction Manual

- 1.Support Standards:IEEE 802.11b/g/n
- 2.Frequency:2400~2500MHz
- 3.Working Pattern:TDD
- 4.RF Output Power:36dBm[4W]
- 5.Input Trigger Power:Min:3dBm Max:20dBm
- 6.Transmit Gain:13 dB $\pm$ 1
- 7.Receiver Gain:10 dB $\pm$ 1
- 8.TX/RX Switch Time Delay: < 1us
- 9.Noise Figure: < 2.5dB(typical)
- 10.Operating Temp:-40°C~+70°C
- 11.Working Voltage:6-18VDC
- 12.Operating Humidity:up to 95% rel humidity



- Step1:Remove the Antenna from the wireless Router (Access Point)
- Step2:Use cable to connect the Booster and AP
- Step3:Connect the Antenna to the other end of Booster
- Step4:Plug in the Power Adapter

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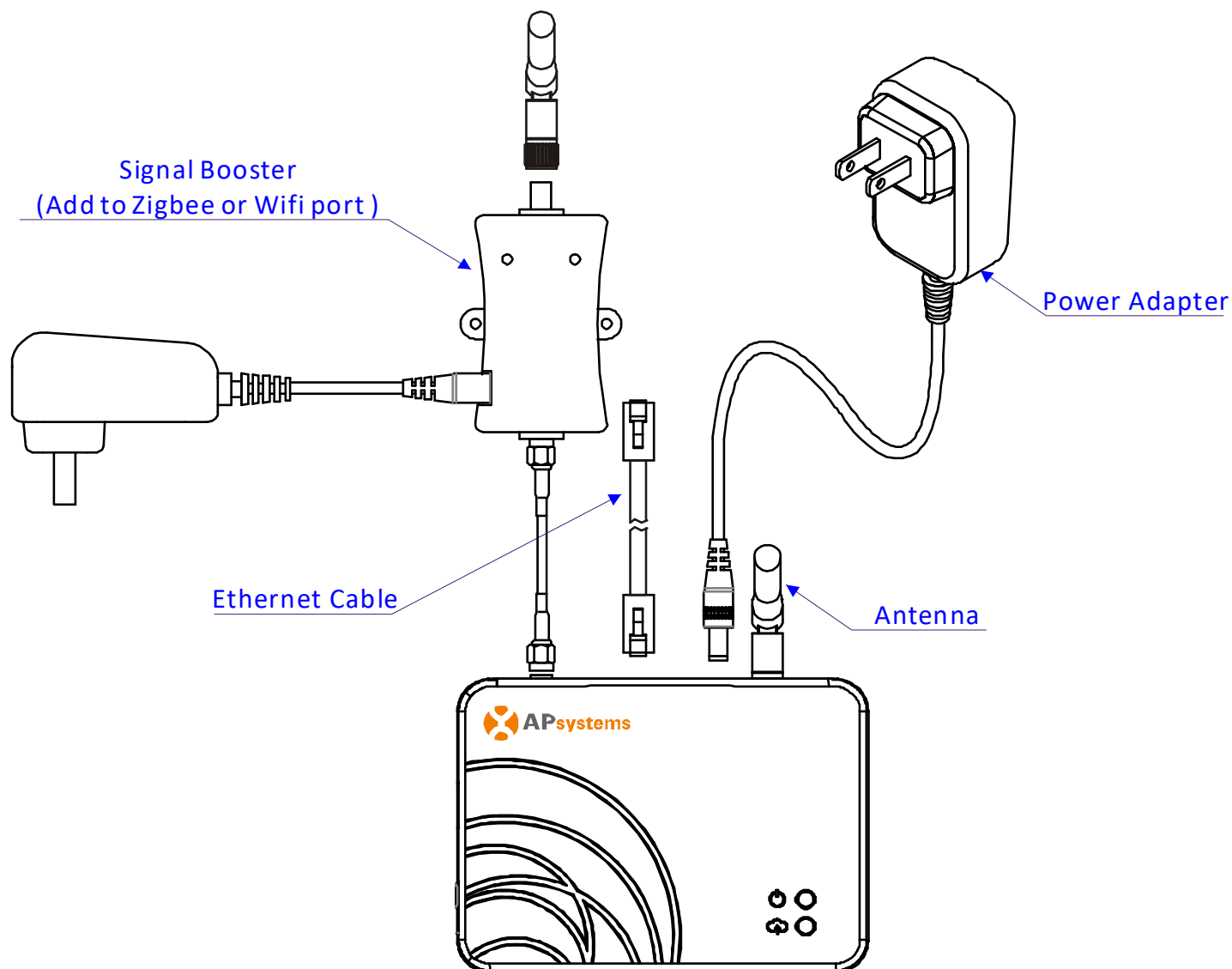
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ECU-R Accessories

1. Wiring Diagram



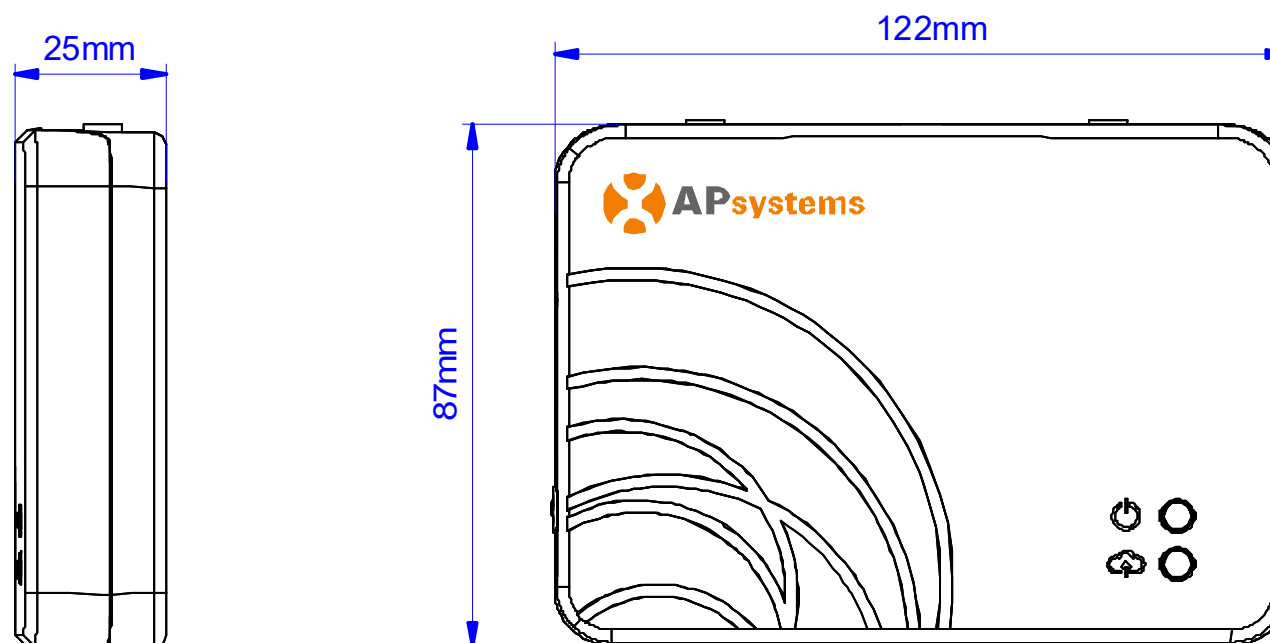
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2. ECU-R Dimensions



3. Accessories Summary

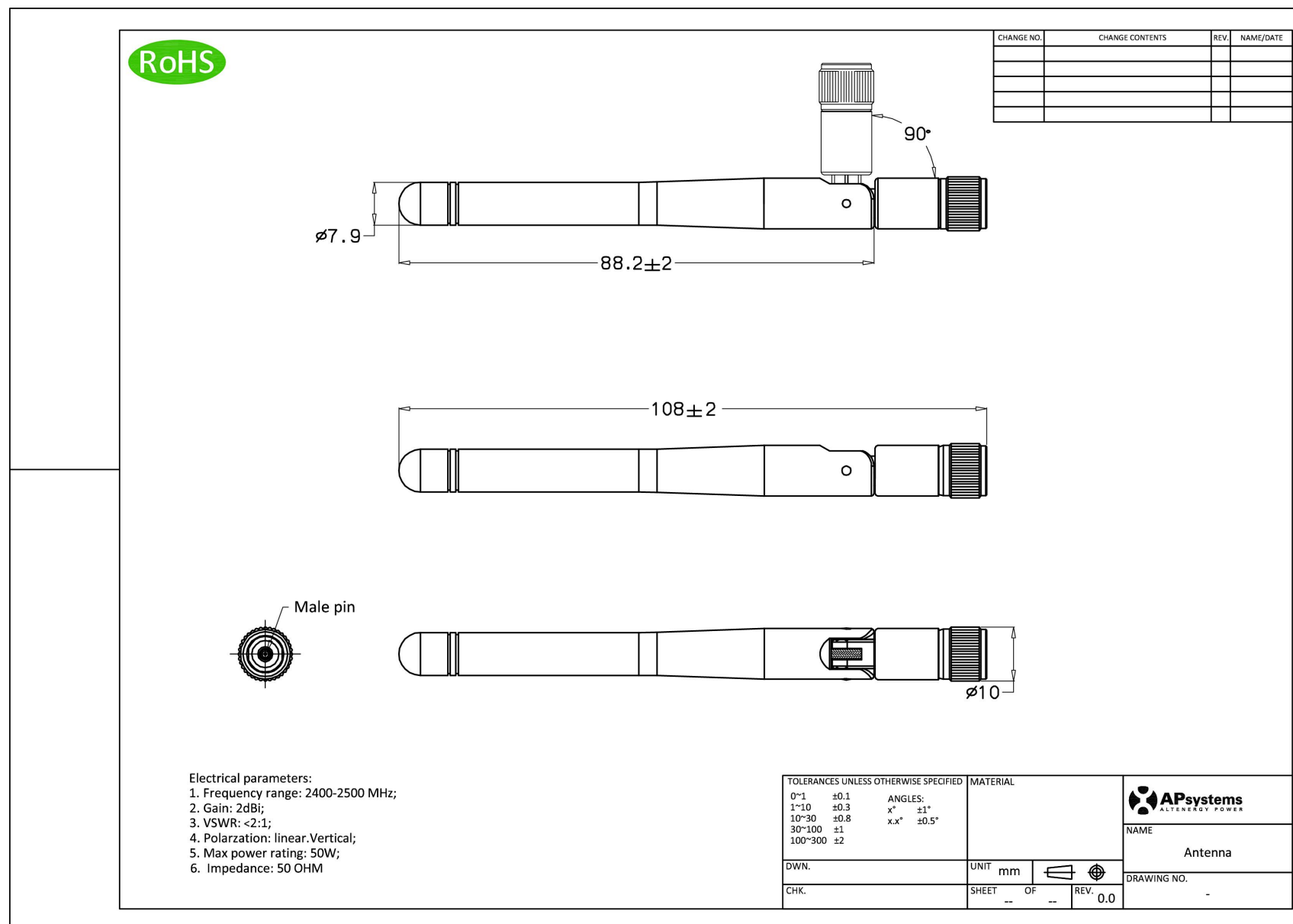
Region	Accessories			
	Antenna (Supply)	Ethernet Cable (Supply)	Power Adapter (Supply)	Signal Booster (Optional)
Canada -NA (209001)	Antenna (See Pic. A)	Ethernet cable (See Pic. B)	Power Adapter (US) (See Pic. C)	2376000003_Signal Booster (American Standard) (See Pic. D)

4. Physical Picture

Antenna	Ethernet Cable	Power Adapter	Signal Booster
 Pic. A	 Pic. B	 Pic. C	 Pic. D

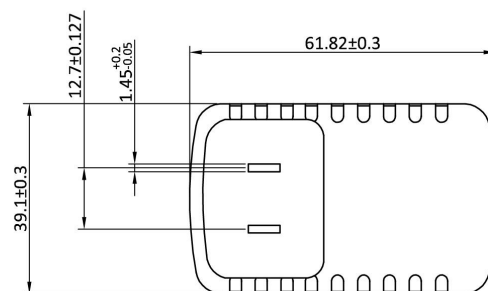
5. Accessories information

Antenna

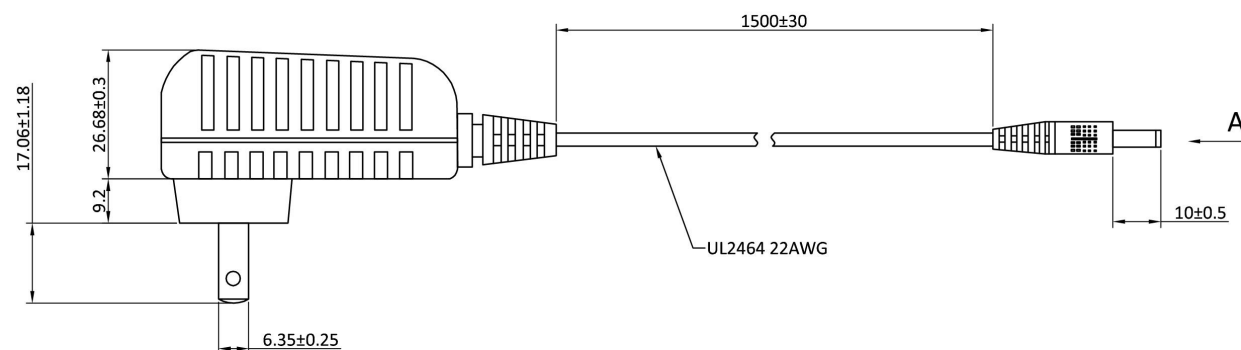
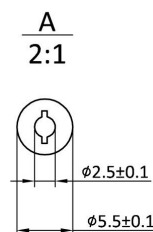


Power Adapter (US)

RoHS



CHANGE NO.	CHANGE CONTENTS	REV.	NAME/DATE



Notes:

1. Type: GA01-0502000US;
2. Rated input voltage: 100-240Vac;
3. Rated input frequency: 50-60Hz;
4. Rated input current: 0.5A max;
5. Nominal DC output voltage: 5.0V;
6. Rating load current: 2.0A;
7. Rating output power: 10W

TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL		 APsystems ALTERNERGY POWER	NAME Power Adapter(US)
±0.3		-			
DWN.	UNIT	mm		DRAWING NO. -	
CHK.	SHEET	OF	REV. 0.0		

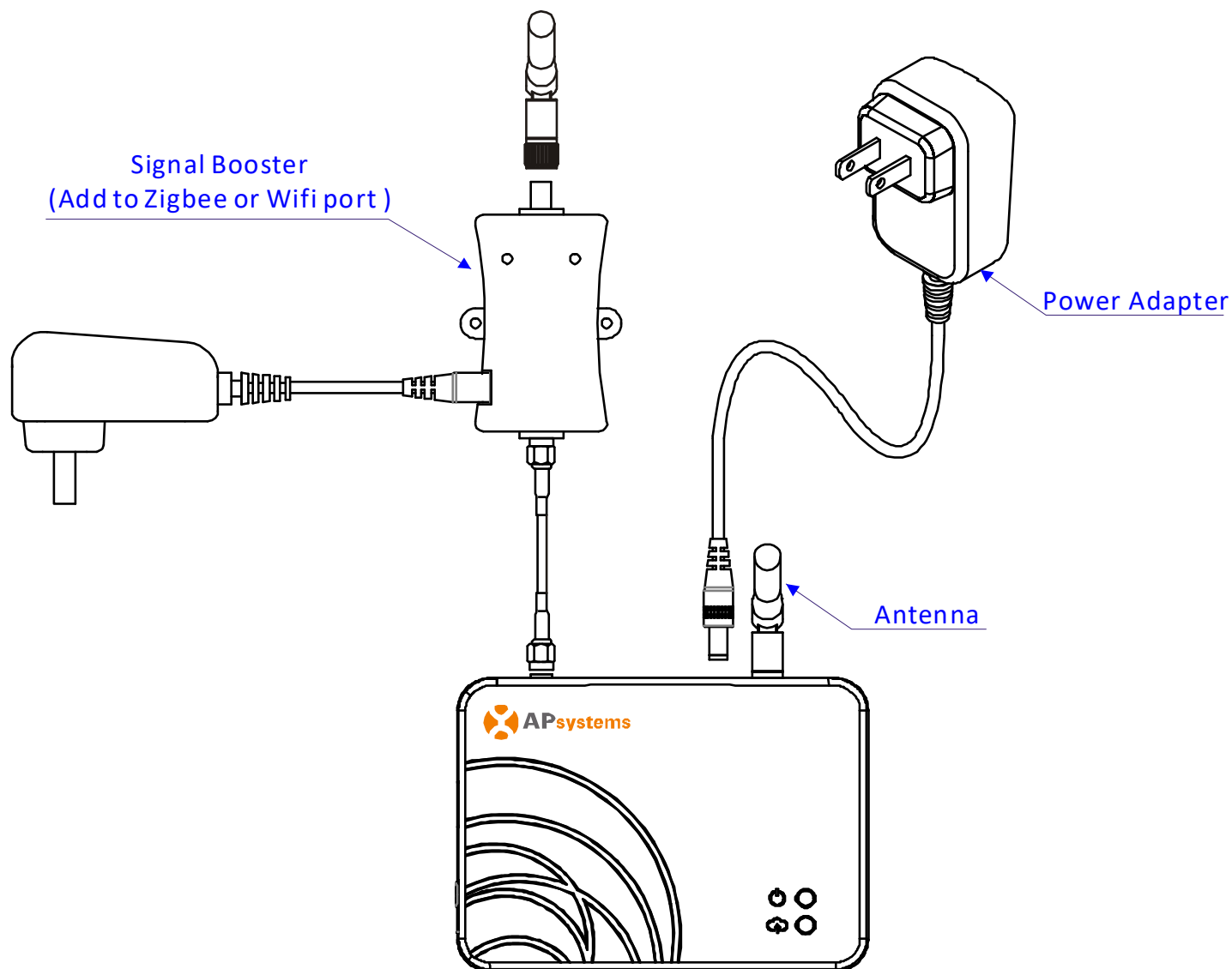
APsystems
Shanghai China

Rm.B305 No. 188, Zhangyang Road, Pudong, Shanghai 200120,P.R.C

Tel: 400-100-8470 | global.APsystems.com

ECU-B Accessories

1. Wiring Diagram



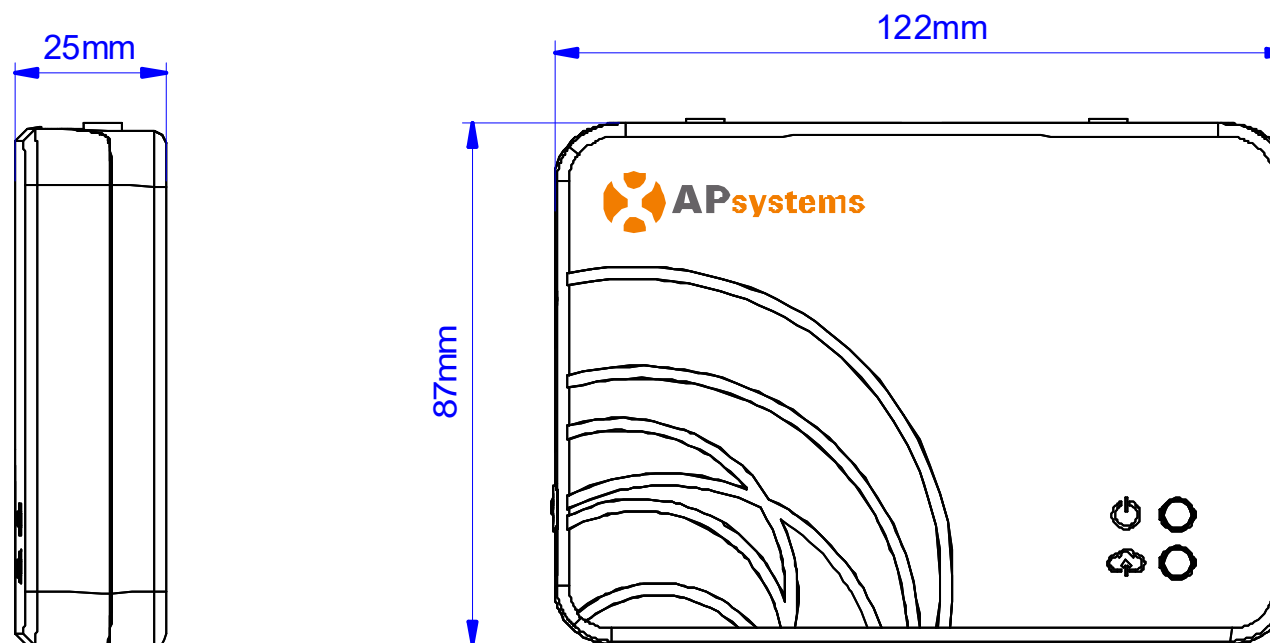
APsystems

APsystems Shanghai China

Rm.B305 No. 188, Zhangyang Road, Pudong, Shanghai 200120, P.R.C

Tel: 400-100-8470 | global.APsystems.com

2. ECU-B Dimensions



3. Accessories Summary

Region	Accessories		
	Antenna (Supply)	Power Adapter (Supply)	Signal Booster (Optional)
Canada -NA (211001)	Antenna (See Pic. A)	Power Adapter (US) (See Pic. B)	2376000003_Signal Booster (American Standard) (See Pic. C)

4. Physical Picture

Antenna	Power Adapter	Signal Booster
 Pic. A	 Pic. B	 Pic. C

Revision history		
Version	Change contents	Date
REV1.0	First edition	2022-08-23
REV1.1	Update DS3 wiring diagram; DS3 add AC branch extension cable; DS3/QT2 add DC extension cable(MC4); Update Tel	2022-12-03
REV1.2	Update DS3 dimensions; Delete QT2 6m DC extension cable(MC4); Update ECU-C/ECU-R/ECU-B wiring diagram	2022-12-08
REV1.3	Update QT2 accessories; Update DS3/QT2 wiring diagram	2023-02-25
Compile: Fanting		Date: 2023-02-25
Audit: Tianxing		Date: 2023-02-25