ACDC12
Optional Installation Accessories
Ordering Guide

•Cabling Topology

•2 Panel Cabling Kit
•3 Panel Cabling Kit

•2 Panel System Mount Options - Portrait
•3 Panel System Mount Options - Portrait

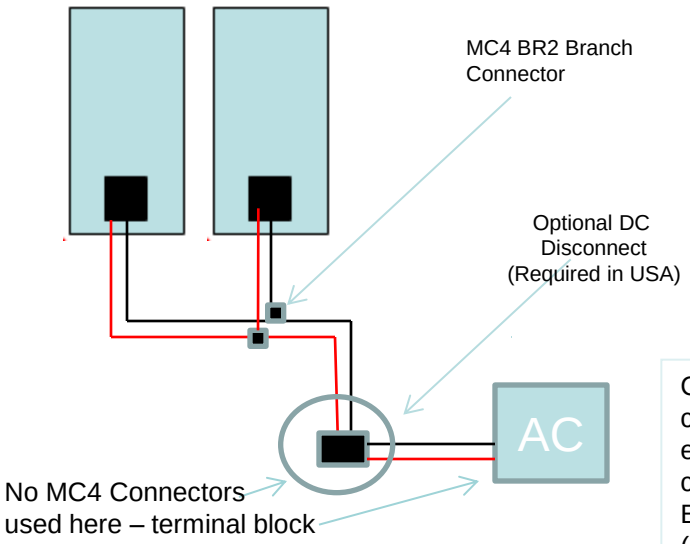
•Outside Wall Mount For ACDC12 Condenser Unit

•Solar Modules
* Note 30-39Vmp modules required

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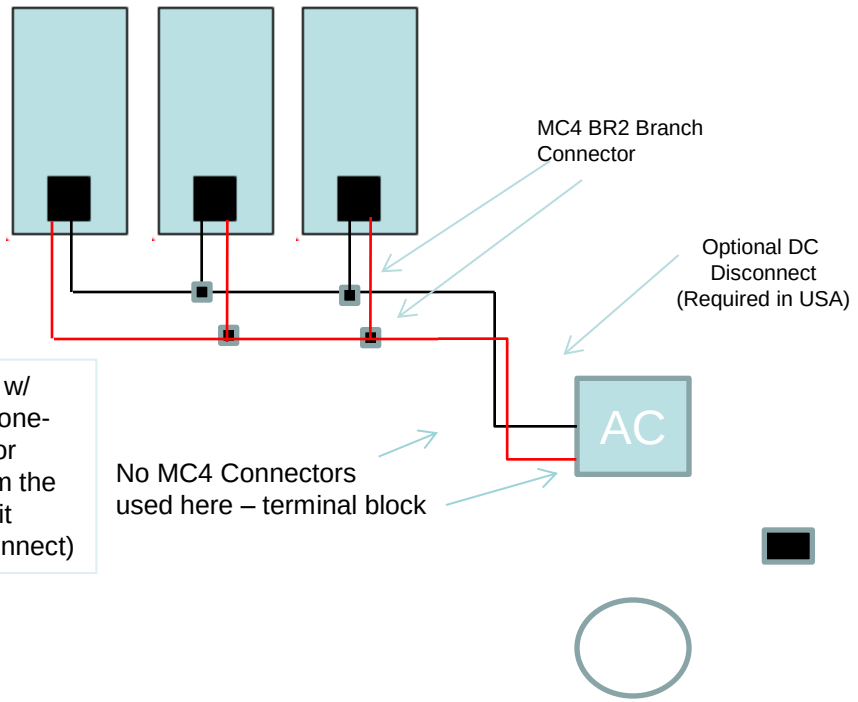
Solar Cabling Topology

2-Panel Cable Layout



Cables w/MC4 w/ connectors on one-end are used for connection from the BR2s to the unit (or to DC disconnect)

3-Panel Cable Layout



Red Lines = Positive Connection
Black Lines = Negative Connection

Cables from PV junction box to BR2 needs MC4 connector on both ends.
All cabling >/= AWG10 as needed.
BR2 connectors are TUV Listed for 30a
Max DC draw of ACDC12 Unit is 20a.
A standard solar PV combiner box can be used in place of branch connectors if desired.

Note* Please check your local codes for mounting of DC Disconnect.

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2 Module Cabling Kit MC2K
For Single Floor Structure

Includes:

(1) Pair 2:1 T Branch Adapters (#BR2)
(1) Home Run To Unit or Disconnect - Pair 26 Ft. Cables AWG10, MC4 connectors on one end.
(1) MC4 Tool Set (#MC4T)

Optional: Extensions w/ MC4 both ends

Home Run Extender - Pair of 26 Ft. AWG10 Cables – MC4 connectors both ends.
Home Run Extender2 - Pair of 12 Ft. AWG12 Cables – MC4 connectors both ends.
For custom cables, extra MC4 connectors can be ordered (MC4 crimping tool needed)

Optional: DC Disconnect

Required for USA installations
Reference GE TG3221R (Order from Home Depot if needed)
http://www.homedepot.com/p/GE-30-amp-240-Volt-Fusible-Outdoor-General-Duty-Safety-Switch-TG3221R/202978633#.UlWAABDPtI0 Order 20a fuses with the GE TG3221R
You will need a cable pair to connect DC Disconnect to AC unit AWG10, 9.8 FT. (No MC4 connectors needed)

*Note
- Check your distances carefully!
- Cabling options are designed to comply with most jurisdictions in the U.S. Consult your local licensed electrician to ensure local compliance for your area.
- Check your local codes for mounting of DC Disconnect.

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3 Module Cabling Kit MC3K
For Single Floor Structure

Includes:

(2) Pair 2:1 T Branch Adapters (#BR2)
(1) Home Run To Unit or Disconnect - Pair 26 Ft. Cables AWG10, MC4 connectors on one end.
(1) MC4 Tool Set (#MC4T)

Optional: Extensions w/ MC4 both ends

Home Run Extender - Pair of 26 Ft. AWG10 Cables – MC4 connectors both ends.
Home Run Extender2 - Pair of 12 Ft. AWG12 Cables – MC4 connectors both ends.
For custom cables, extra MC4 connectors can be ordered (MC4 crimping tool needed)

Optional: DC Disconnect

Required for USA installations
Reference GE TG3221R (Order from Home Depot if needed)
http://www.homedepot.com/p/GE-30-amp-240-Volt-Fusible-Outdoor-General-Duty-Safety-Switch-TG3221R/202978633#.UlWAABDPtI0 Order 20a fuses with the GE TG3221R
You will need a cable pair to connect DC Disconnect to AC unit AWG10, 9.8 FT. (No MC4 connectors needed)

*Note
- Check your distances carefully!
- Cabling options are designed to comply with most jurisdictions in the U.S. Consult your local licensed electrician to ensure local compliance for your area.
- Check your local codes for mounting of DC Disconnect.

Cables & Connectors TUV Listed



MC4 Branch Connectors



MC4 Cable



Individual MC4 Connectors for AWG10
*Note – a MC4 crimping tool is needed
to attach these to a cable.



MC4 Tools
*For connecting
MC4 to MC4



DC Disconnect
General Electric TG3221R

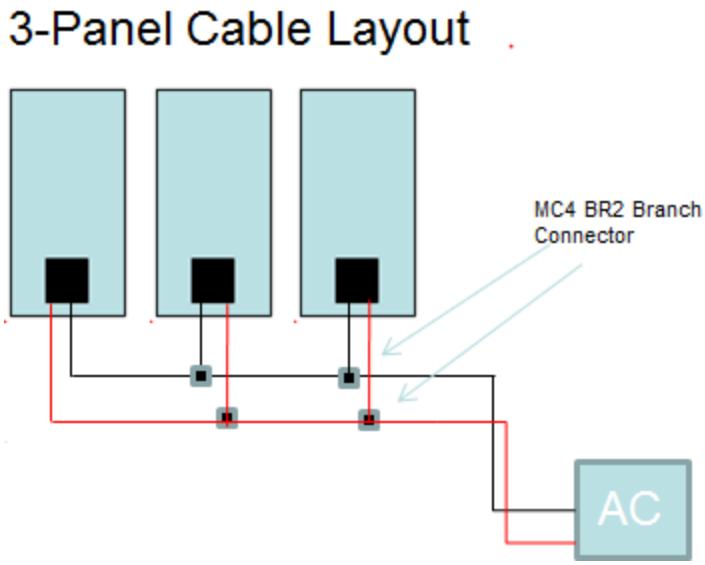
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TÜV

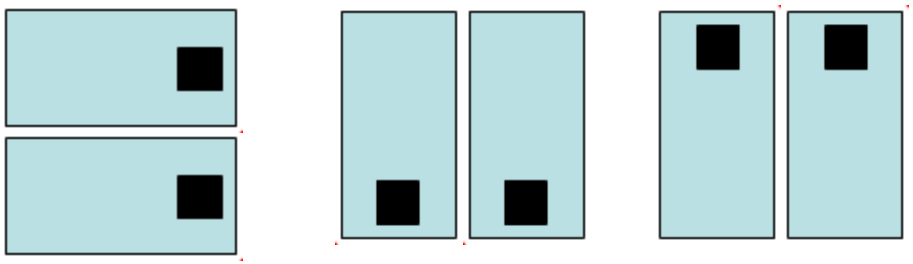
Using Piggybacked BR2 Branch Connectors For 3 panel cabling





BR2 Connectors TUV Listed for 30a. Use for DC loads =/< 20a per NEC

Roof Mount Kit For 2 Modules
Layout Options



■ = **PV Panel Junction Box**

2MP Kit Includes:

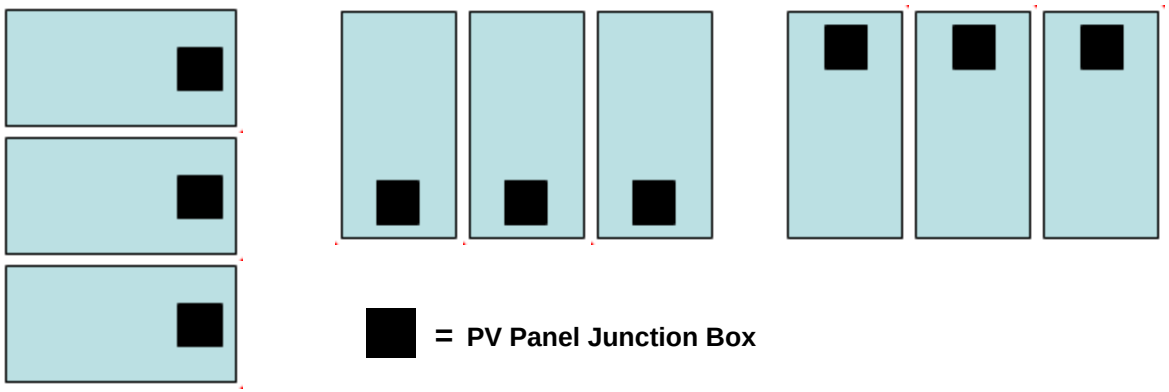
2 - TWOXRSRAIL-7FT XRS Rail, 7 Foot Section
1 - TWOXRS297000017 L-Foot Kit (4 Pack) for All XRS Systems
1 - TWOXRS297000101 XRS Mid Clamp Kit (4 Pack) C,D,J, E
1 - TWOXRS297000157 XRS End Clamp Kit (4 Pack) C
1 - 2 Panel WEEB Grounding Kit

*Note – Standard module racking configurations & kits are for flush mount on a normal residential shingled roof. Please contact us for other roof options.

**Note 2 – check your distances and make sure to order correct cabling.

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Roof Mount Kit For 3 Modules (3MP)
Layout Options



3MP Kit Includes:

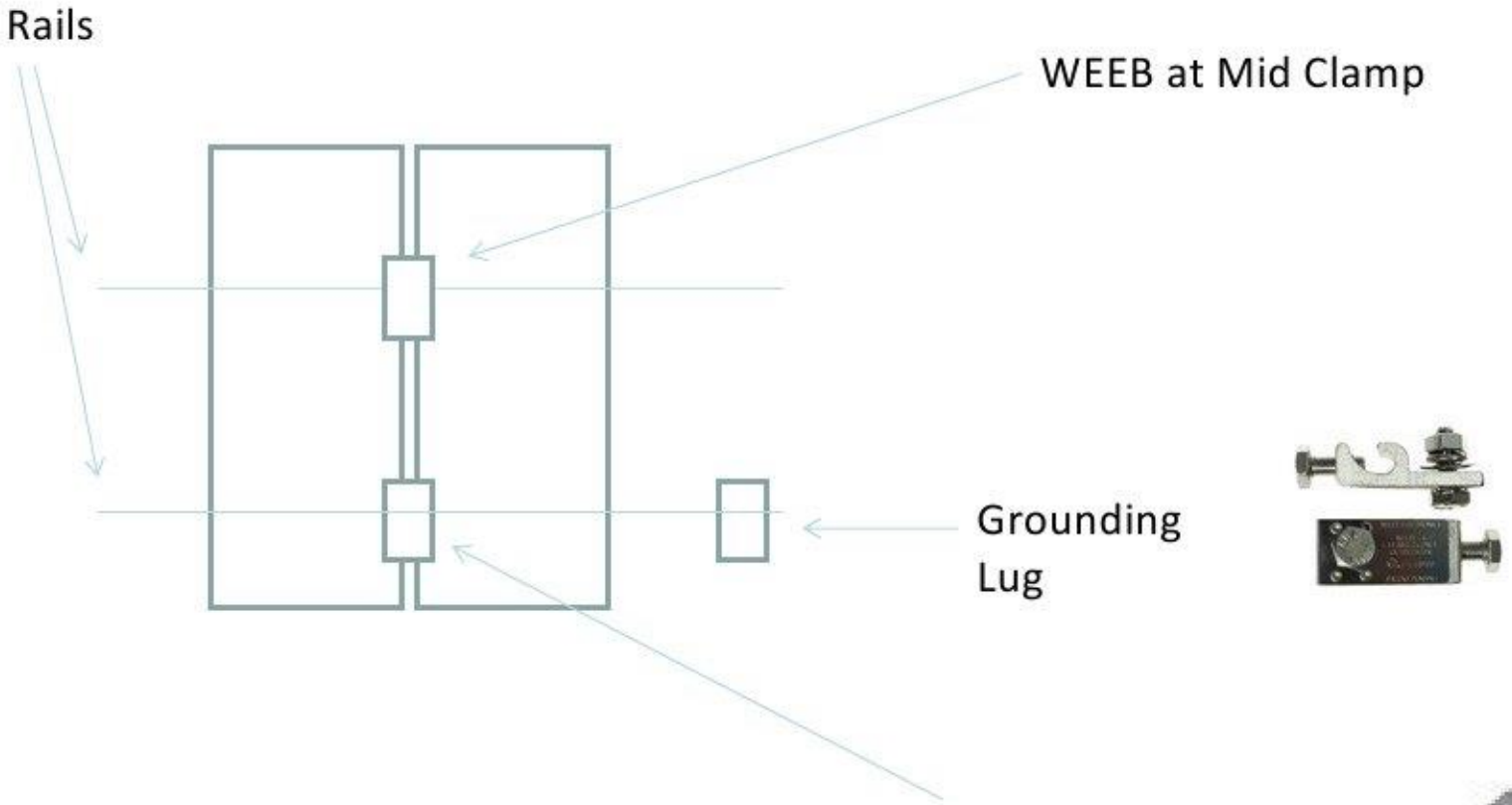
4 - TWOXRSRAIL-7FT XRS Rail, 7 Foot Section
2 - TWOXRS297000017 L-Foot Kit (4 Pack) for All XRS Systems
2 - TWOXRS297000010 Splice Kit for All XRS Mounting Systems
1 - TWOXRS297000101 XRS Mid Clamp Kit (4 Pack) C,D,J, E
1 - TWOXRS297000157 XRS End Clamp Kit (4 Pack) C
1- 3 Panel WEEB Grounding Kit

*Note – Standard module racking configurations & kits are for flush mount on a normal residential shingled roof. Please contact us for other roof options.

**Note 2 – check your distances and make sure to order correct cabling.

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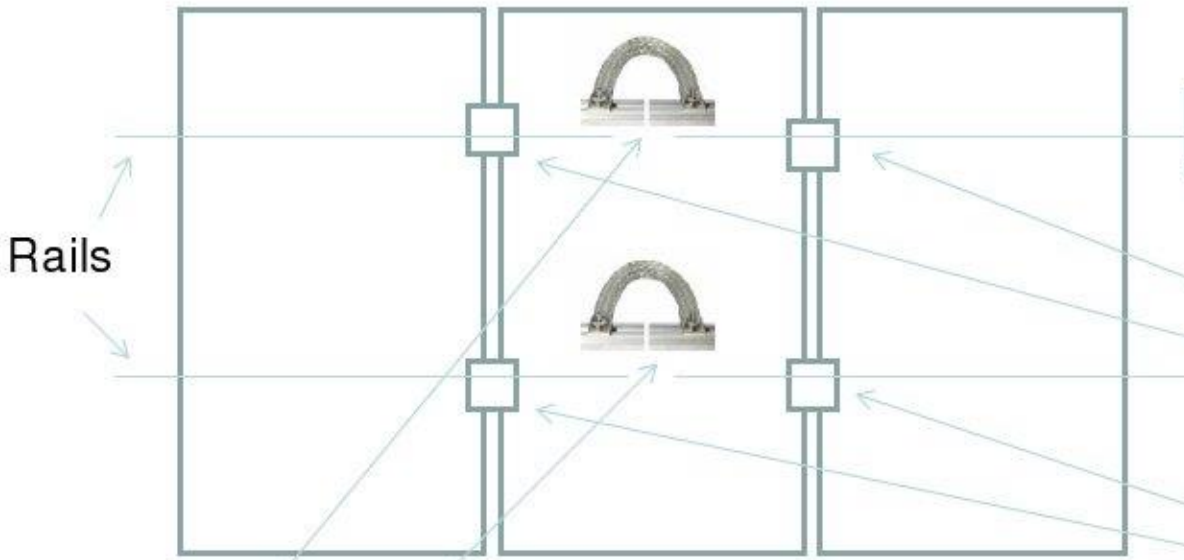
2 Panel Grounding



2- Panel Grounding Kit:
2 ea. WEEB Mid Clamp, WEEB – DMC
1 ea. GND Lug 6.7
Not Included: 10AWG Ground Wire



3 Panel Grounding




Grounding Lug

4 WEEBs Needed
at Mid Clamps


WEEB-DMC

3-Panel Grounding Kit
4 ea. WEEB Mid Clamp, WEEB – DMC
2 ea. WEEB Bonding Jumper 6.7
1 ea. GND Lug 6.7
Not Included: 10AWG Ground Wire

Optional Exterior Wall Mount For ACDC12 Air Conditioner Condensing Unit

Used to mount the outdoor air conditioning unit on an exterior wall to protect unit from snowdrift, flood, or for installation convenience.

All Stainless Steel





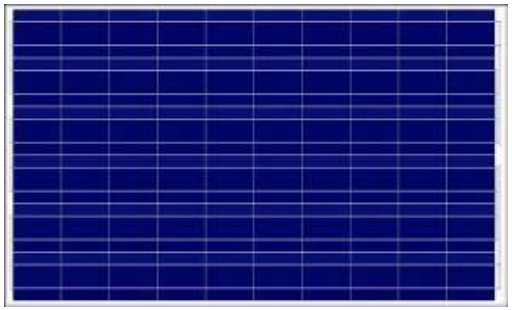
Item EWMSS18

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Solar PV Modules
~30 VDC 230/235 Watt
Model PV230

Poly Crystalline Solar Panel 220-240W
Cell Size:156mm*156mm
Dimension:1650mm*990mm*40mm
Weight:19.5Kg
Power Tolerance:±3%
Junction Box leads - 3 Ft.



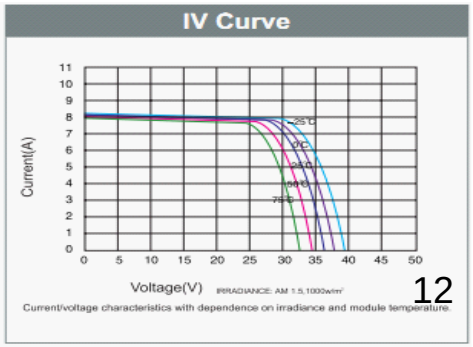
Warranty:5-year limited warranty on material and workmanship
12-year and 25-year limited warranty on minimum power output.

Model		HSE230	HSE235
Peak Power (±3%)	Pmax	230W	235W
Rated Voltage	Vmp	29.7V	29.7V
Rated Current	Imp	7.74A	7.91A
Open Circuit Voltage	Voc	36.23V	36.2V
Short Circuit Current	Isc	8.70A	8.80A
Max Series Fuse Rating		15A	15A
Module Efficiency		14.08%	14.39%
Maximum System Voltage	IEC, UL	1000V, 600V	1000V, 600V
Temperature Coefficient	NOCT (Normal Operating Cell Temp.) 48°C±2°C		
	Pmax	-.45%/K	
	Voc	-.35%K	
	Isc	+.05%K	
STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25°C, AM (Air Mass) = 1.5			

Solar Cell Size	156mm*156mm (6.14"*6.14")
No. of Cells	6*10=60
Dimension(L*W*T)	1650mm*990mm*40mm(65.0"*39.0"*1.6")
Weight	19.5kg (43.3 lbs)
Cable Length	900mm (35.4") for positive (+) and negative (-)
Pieces per 40' CL	598
Pallets per 40' CL	26
Pieces Per Pallet	23
Weight Per Pallet	989.6 lbs
Gross Weight Per Pallet	1051.4 lbs
Operating Temperature	-40°C to +85°C
Impact Resistance	Diameter of 28mm with impact speed of 86km/h

ACDC12 Requires
~30-39V Panels

Contact Us For Current PV Pricing
www.hotspotenergy.com
1-800-916-2067
1-757-410-8640



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