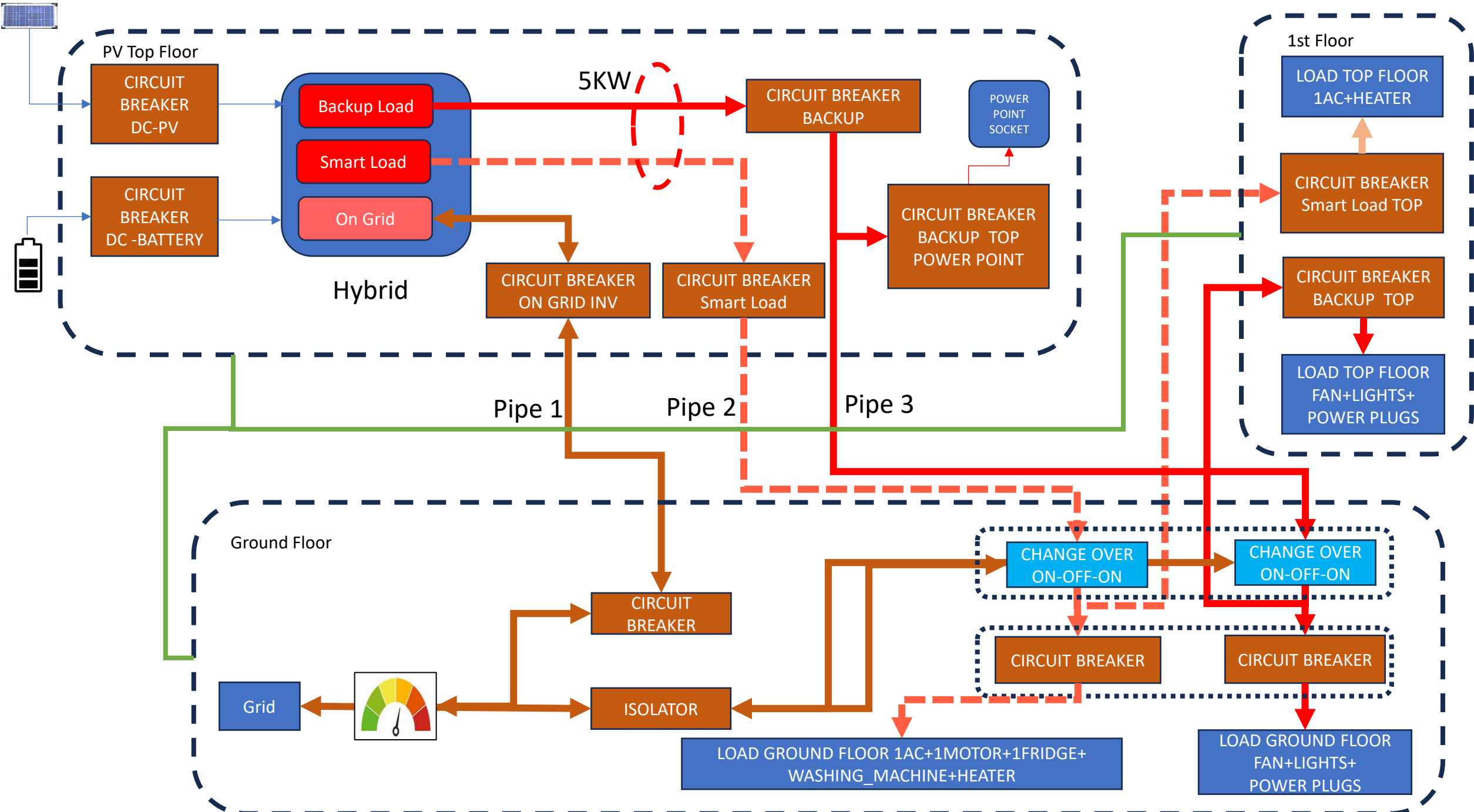


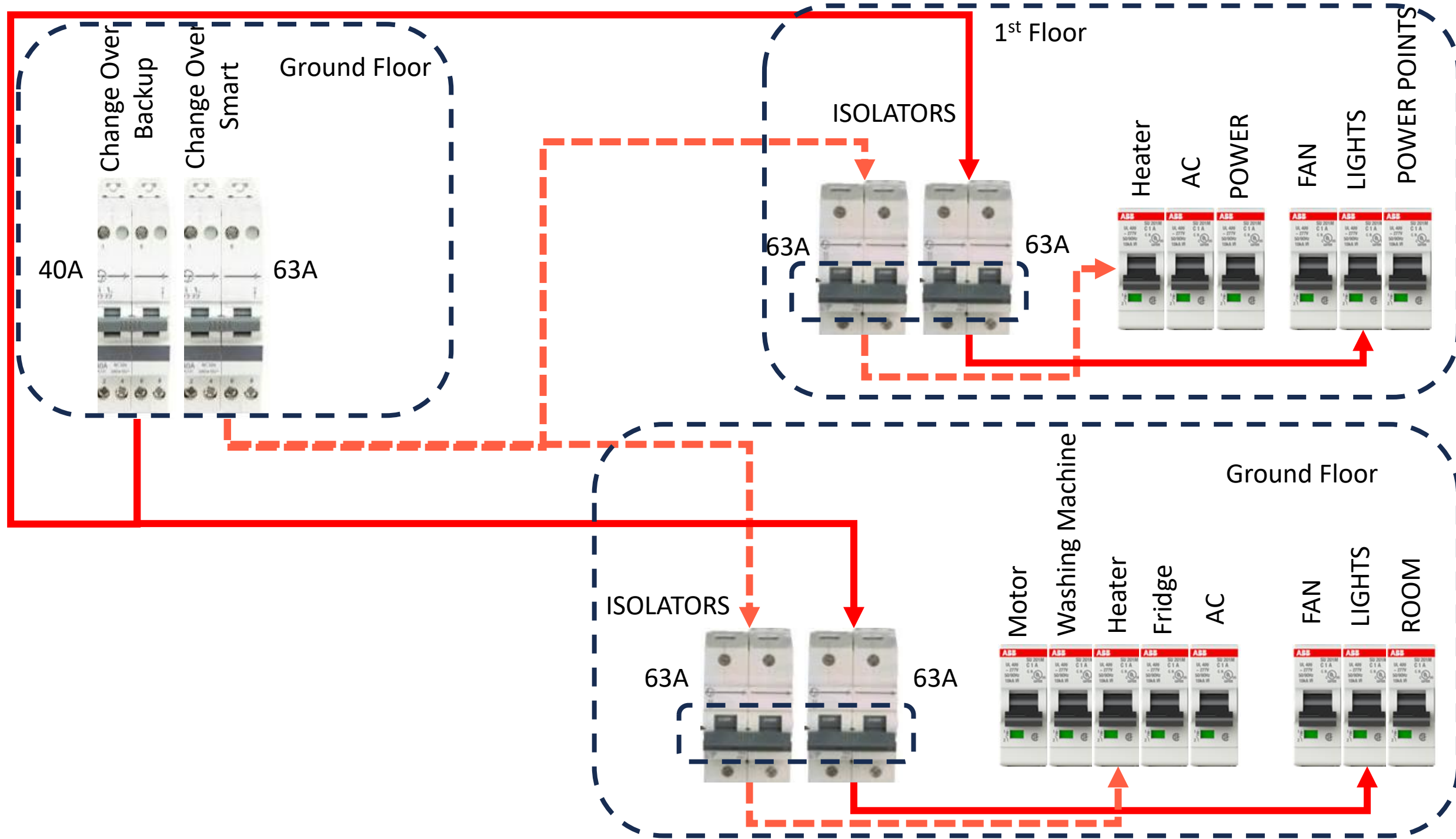
Smart Load (Conditional Load)

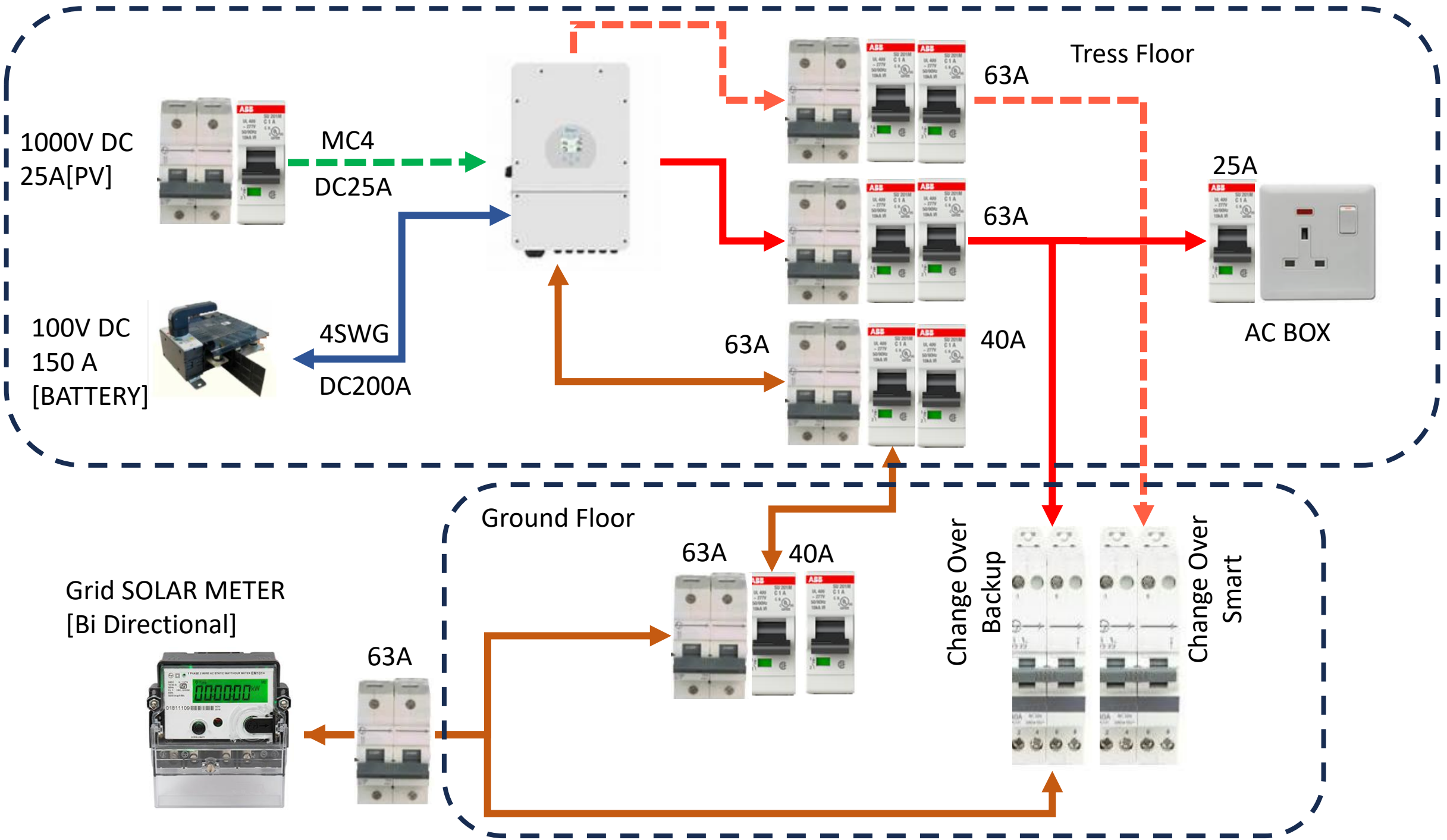


Backup Load (Emergency Load)





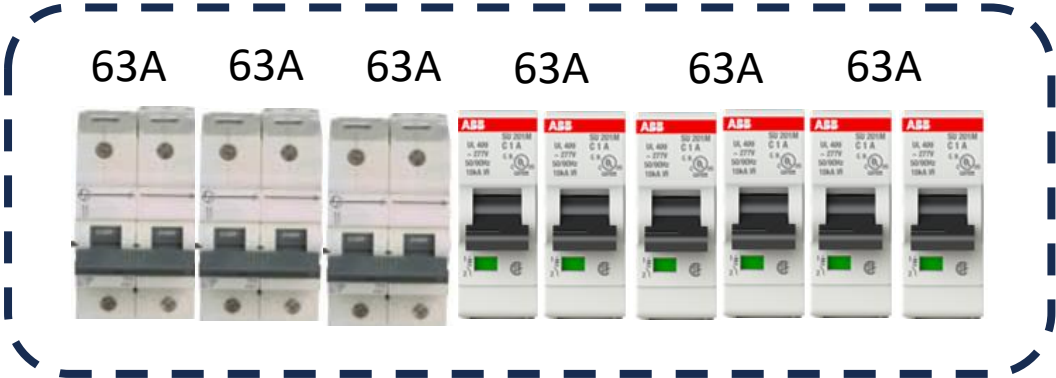




Tress Floor



SUN-5K-SG04LP1-EU



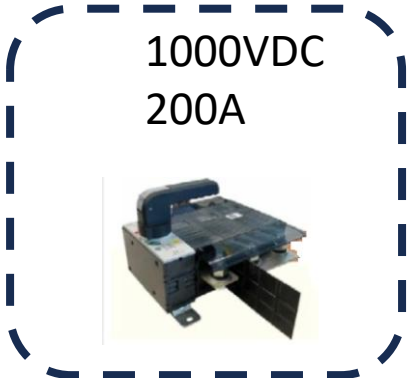
MCB Box with Cover 12 (AC)



1000VDC
25A



MCB Box with Cover 8 (DC)



DC Isolator for Battery

1st Floor

40A 40A 6A 6A 6A 20A 20A 20A



MCB Box with Cover 12

Grid

Smart Load

Backup Load

Ground Floor

63A 63A



MCB Box with Cover 12



63A



40A



63A

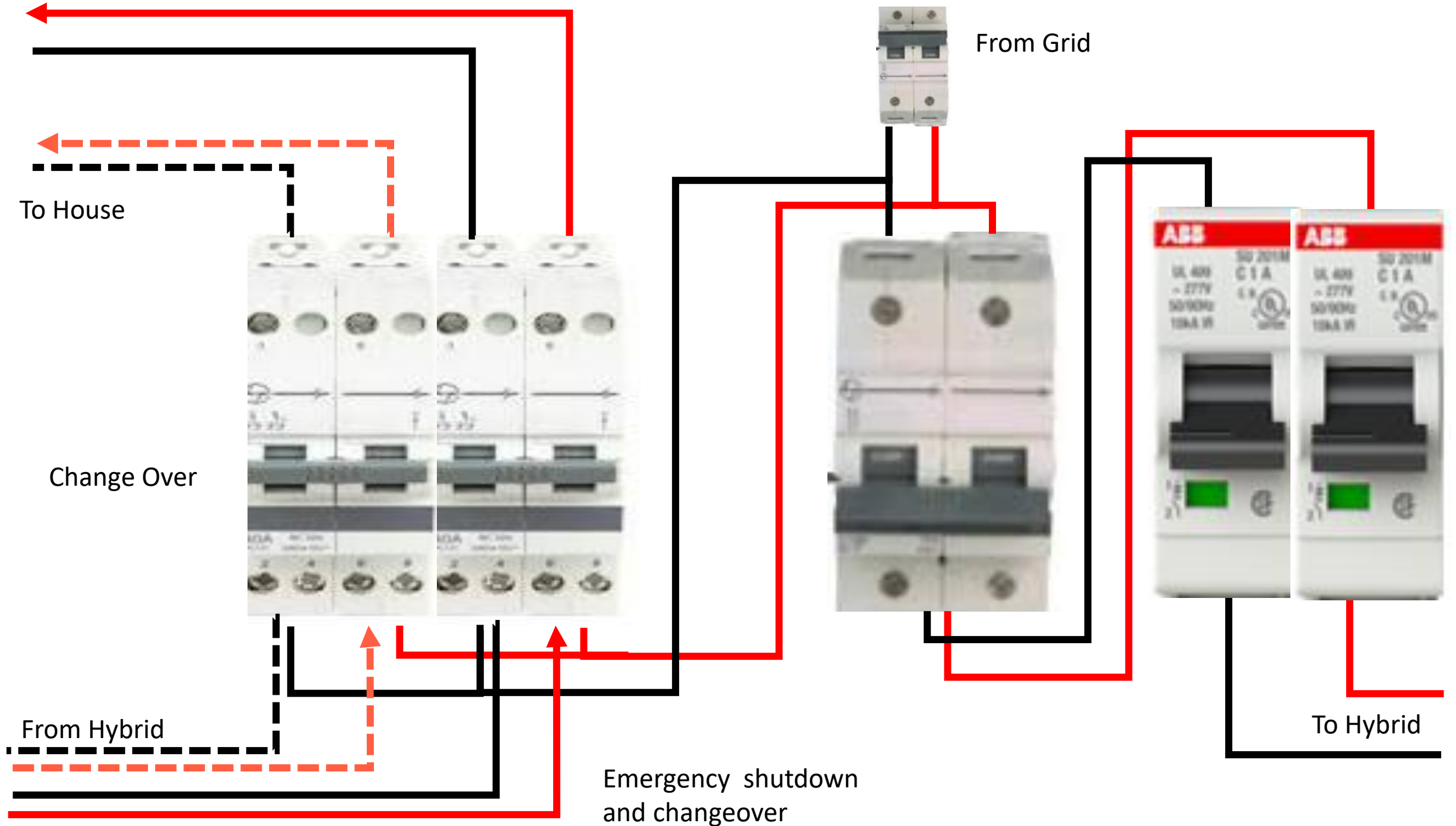


63A

40A



MCB Box with Cover 12
Emergency shutdown
and changeover





L Clamp Only here
Rest all are boxes

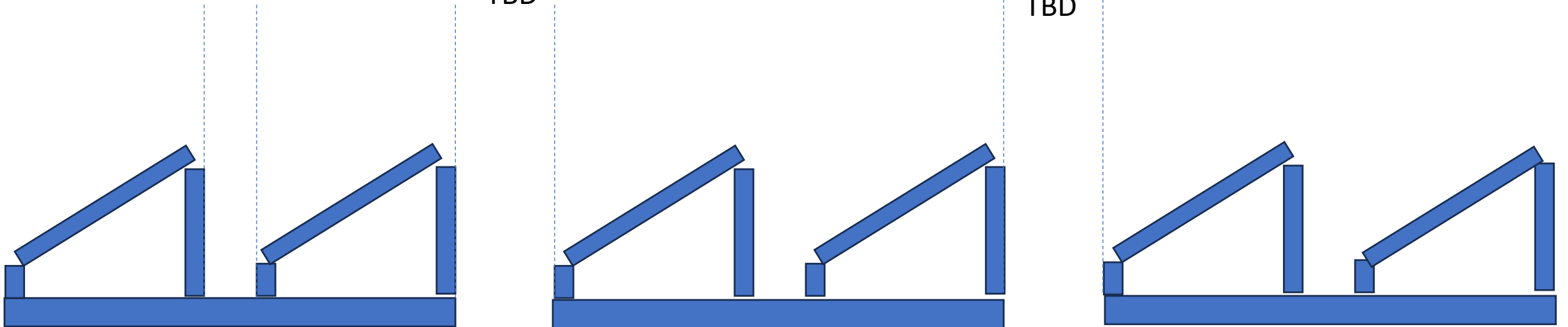
15cm

$$35\text{cm} = \sin(10^\circ) \times 1.134 + 0.15$$

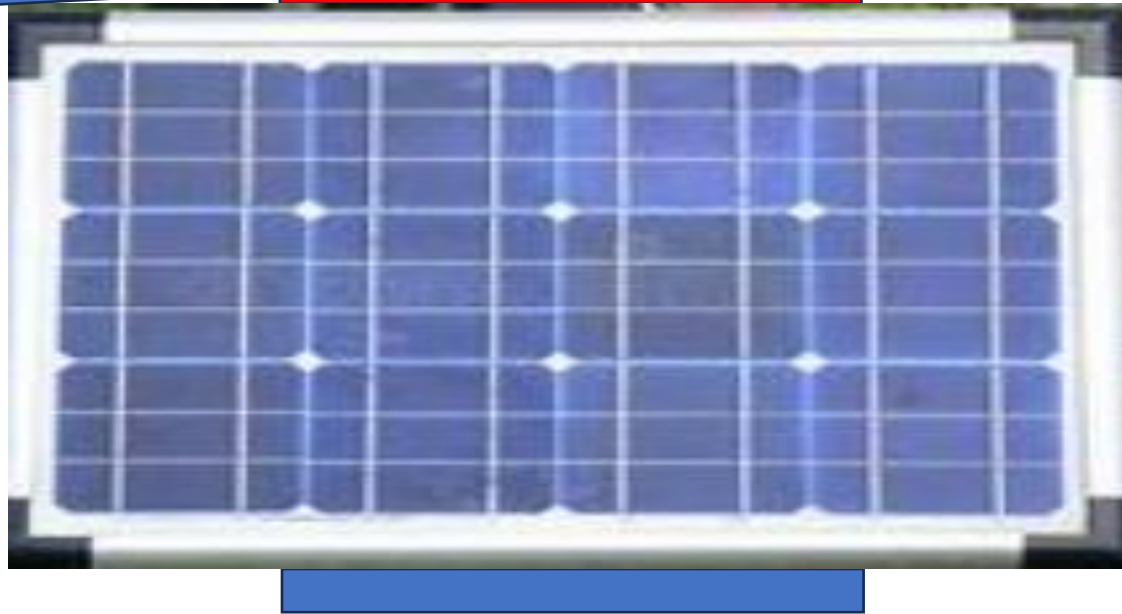
0.5 feet's

TBD

TBD

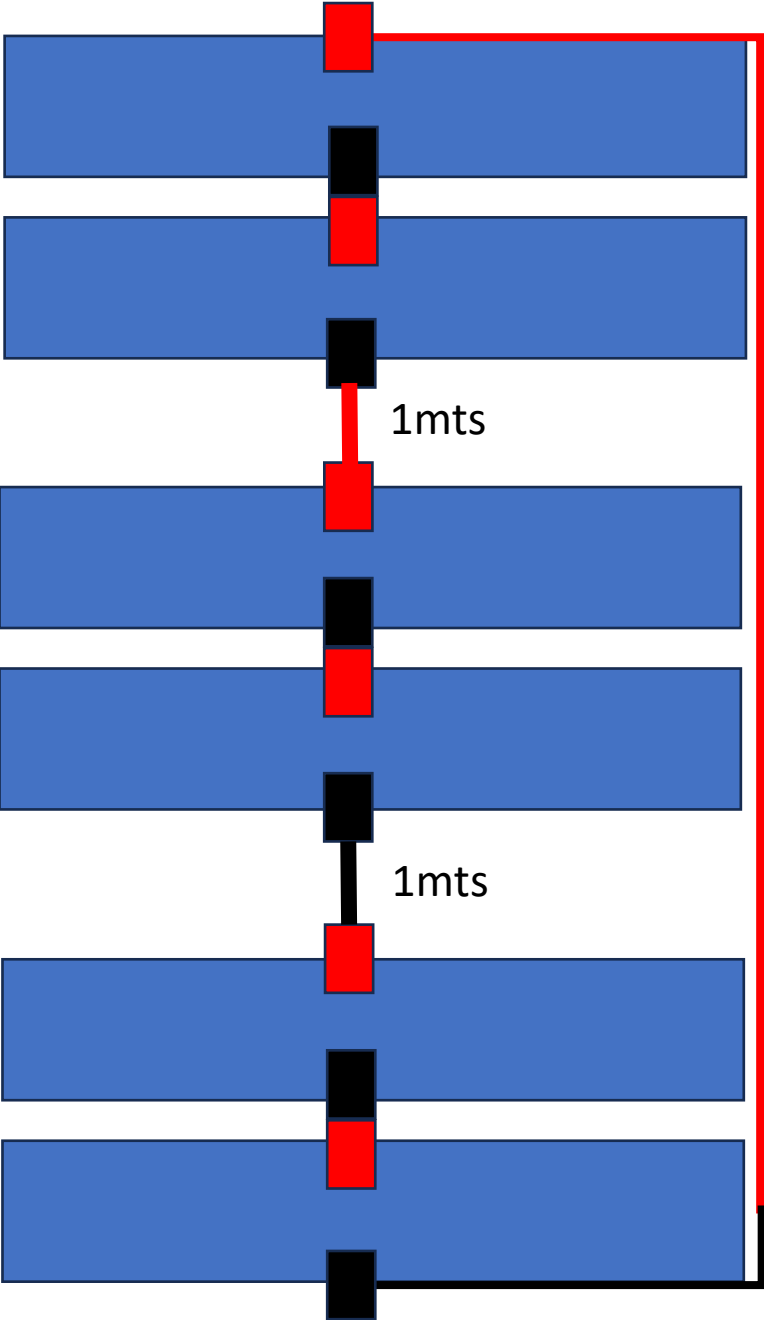


L Clamp Only here
Rest all are boxes



WEST

EAST



1mts

15mts

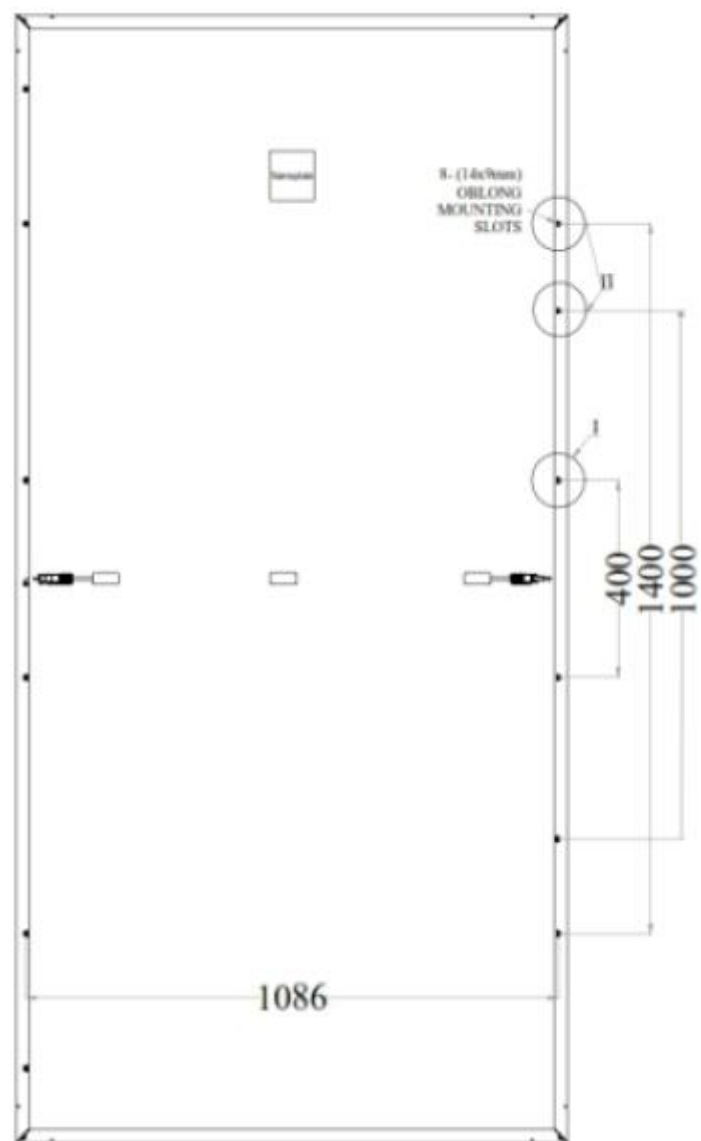
1mts

MPPT1

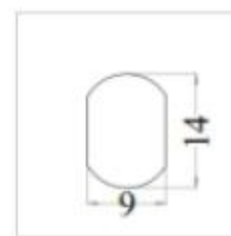
5mts

CIRCUIT
BREAKER
DC-PV

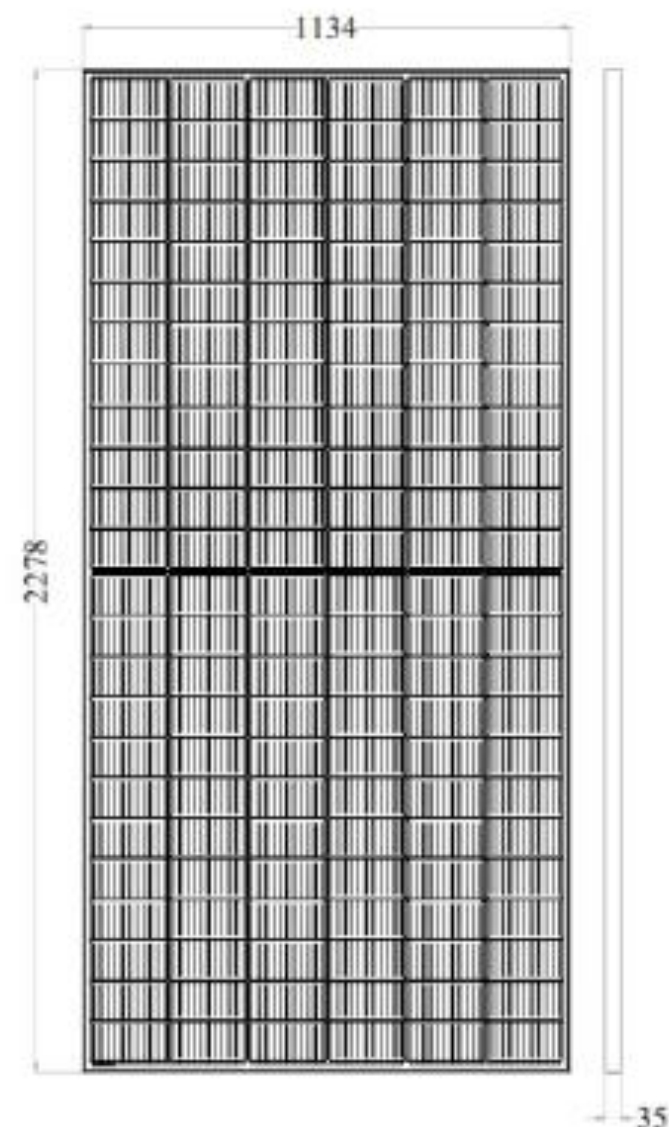
Power Room



I



II



System Configuration

60% - SMART LOAD is ON and will resume if battery discharged to below 40%

50% - Daily usage cycle.

○ System will discharge at night load up to 50% , after that Grid power will be used to supplement the load, **if grid fails at 50% then**

- 50%-40% = 10% = 0.5KW(150W/h)is SMART LOAD running time (fridge) ~ 3.3hrs backup
- 50%-20% = 30% = 1.5KW(150W/h)is BACKUP LOAD running time **(fan + lights) as emergency load ~ 10 hrs backup**

40% - SMART LOAD is OFF after battery discharged to 40% , BACKUP is still available up to 20%

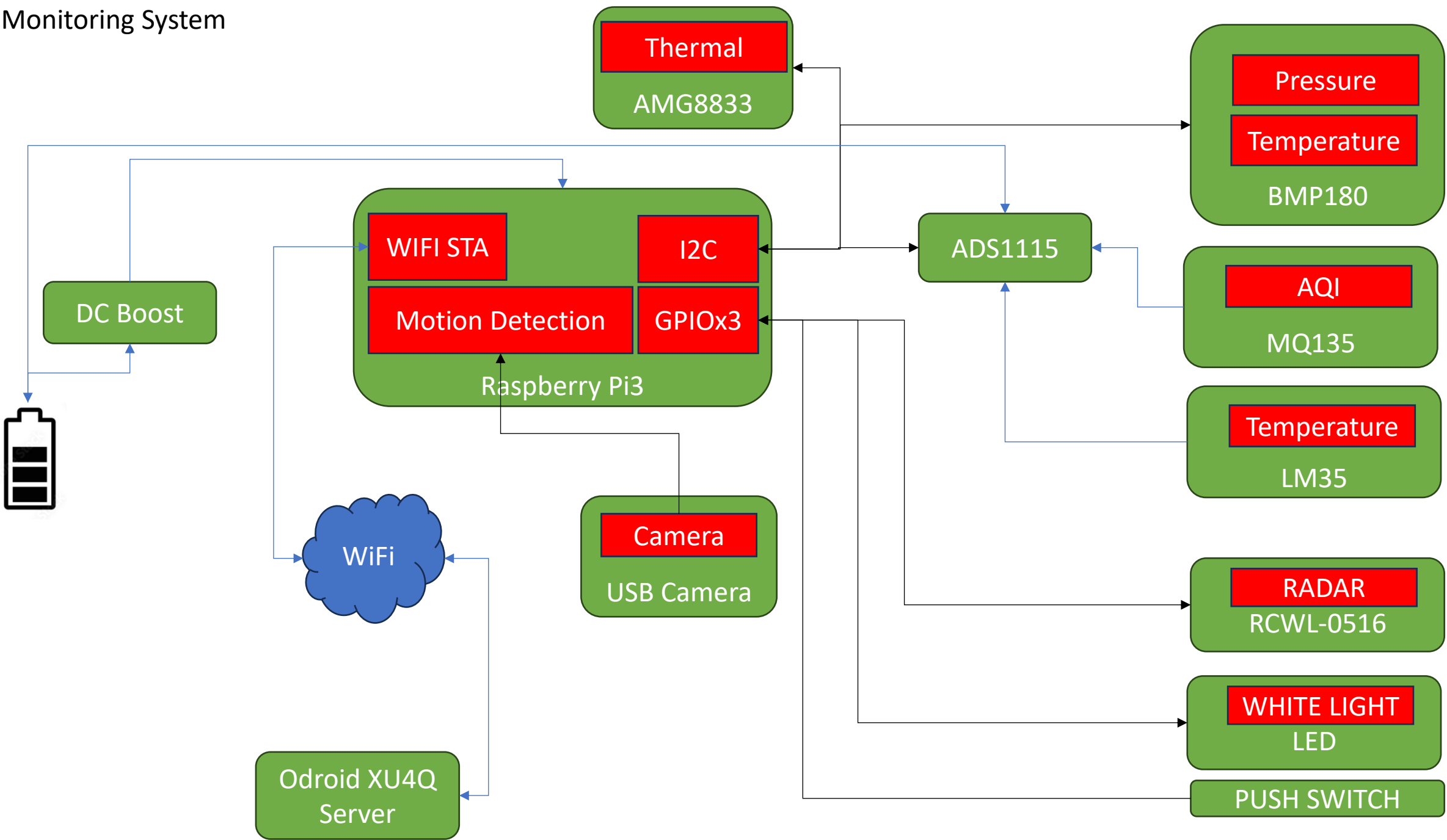
30% - Restart battery capacity required for Battery once it is gone below 20%

25% - Low Battery Alarm

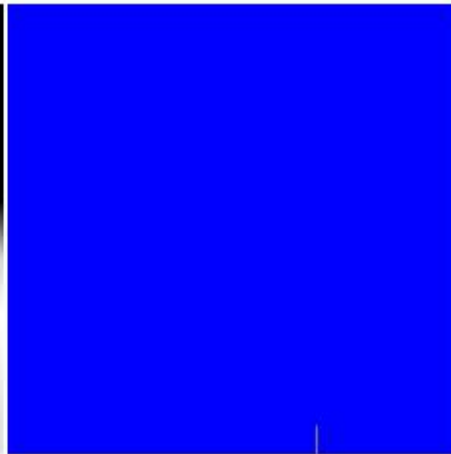
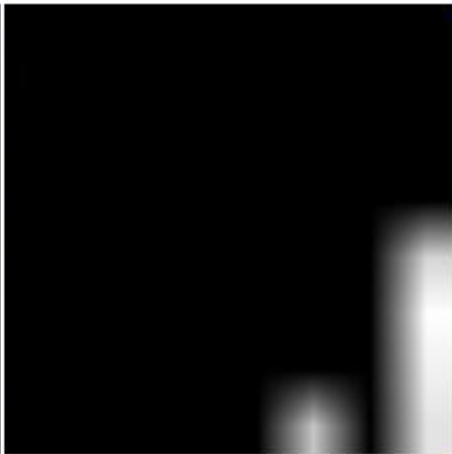
20% - BACKUP and SMART both OFF – total power failure

Grid usage by system is set to 10W + Actual load (~220W =2 Fan+3 Tube lights and reference load = 300W)

Monitoring System



184355@1:5:19



2025-08-18 18:43:55
[1]Days [5]Hours [14]Minutes

[Show Summary](#)

[Show Configuration](#)

Disk Usage



[Back to main page](#)

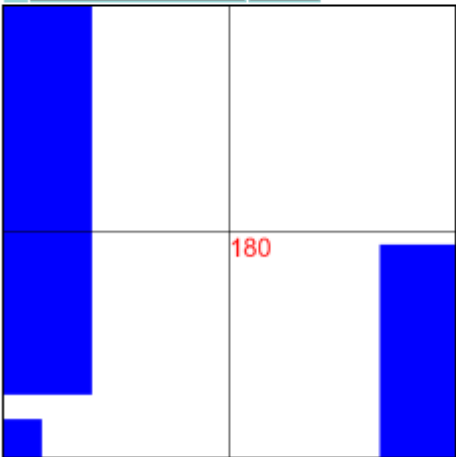
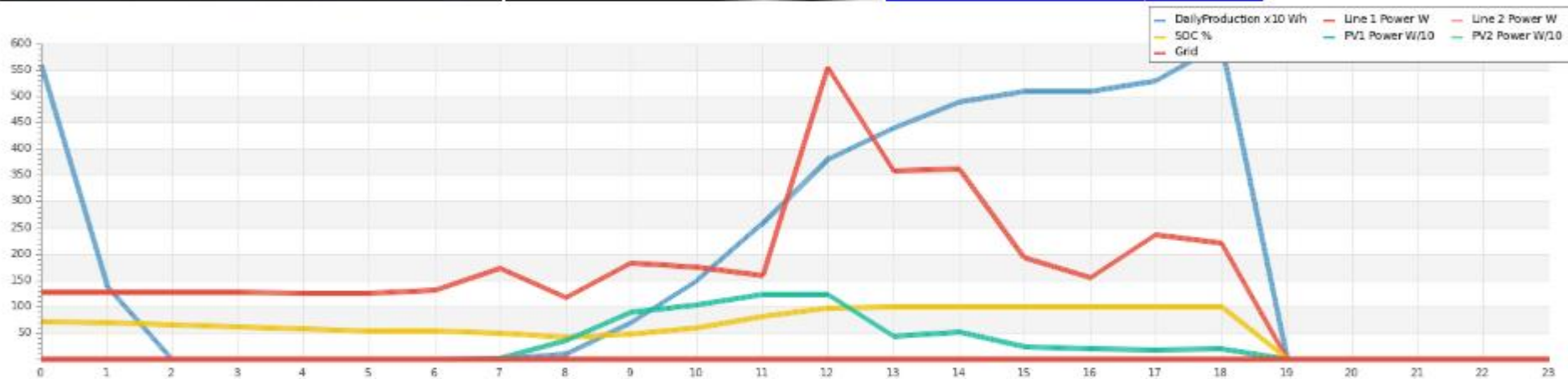
[Configurations](#)

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IP Address	<input type="text" value="192.168.1.4"/>
Serial Number	<input type="text" value="3141237744"/>
ACCESS	<input type="text" value="admin"/>
Reboot	<input type="button" value="No"/>
WLED	<input type="button" value="OFF"/>
MASK	<input type="button" value="Add"/>

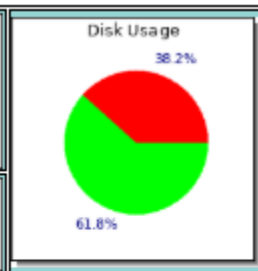
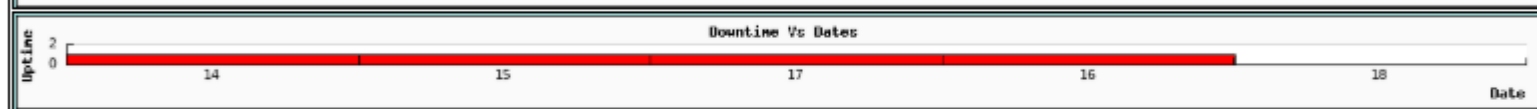
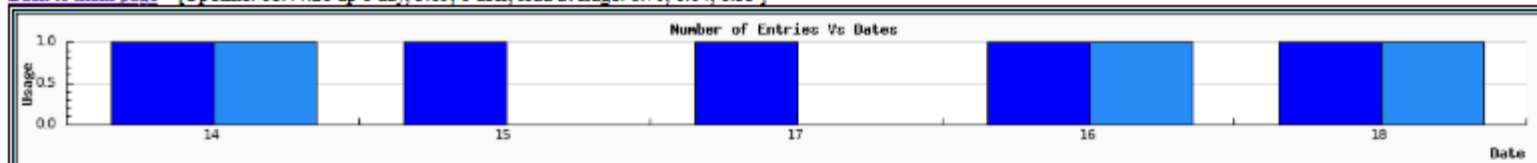
[MASKS](#)

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ID	9	X 300	Y 190	W 60	H 170
ID	10	X 0	Y 0	W 70	H 310

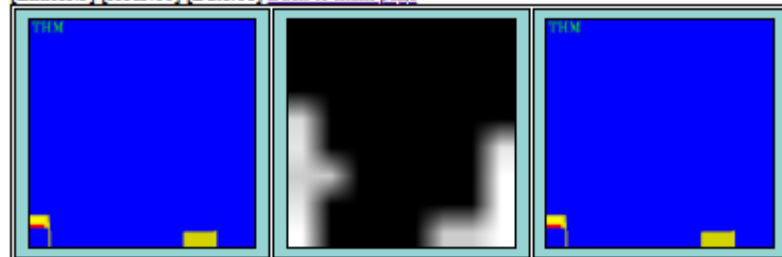
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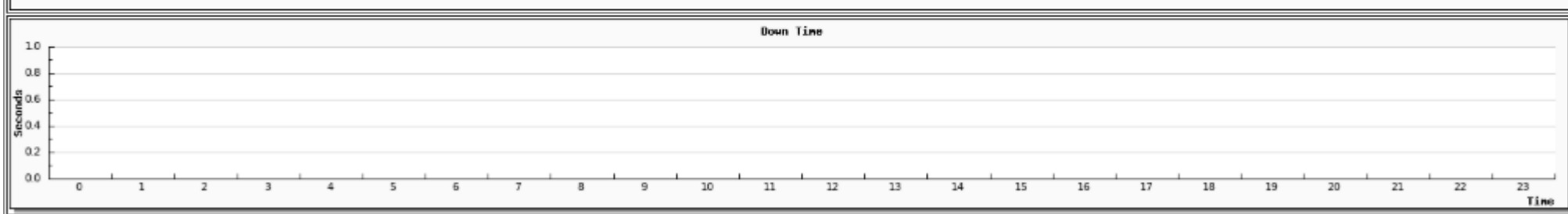
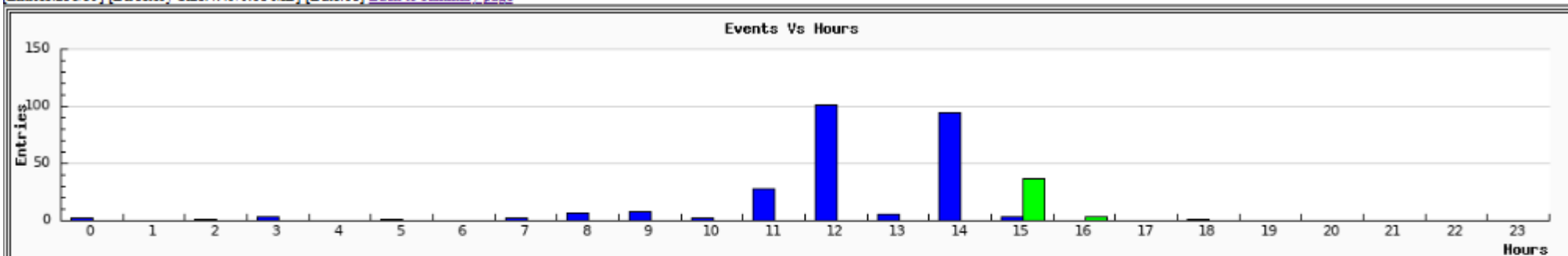
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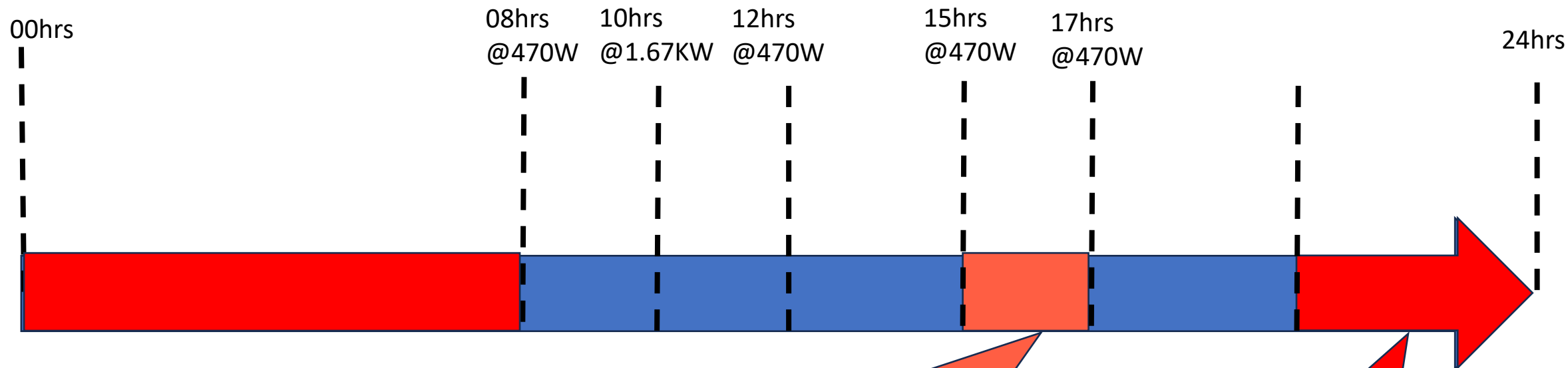
[Entries:3] [Hour:16] [Date:18] [Back to main page](#)



[Entries:258/39] [Directory Size:4.49/0.18 MB] [Date:18] [Back to summary page](#)



Select Hour: 0



Battery Charging Period from Grid.
If Battery is not charged to 95% by this
time and if grid is available battery is
charged to 95% using grid power.

Worst Case scenario
Solar Power < 300W and Grid failed at same time

