

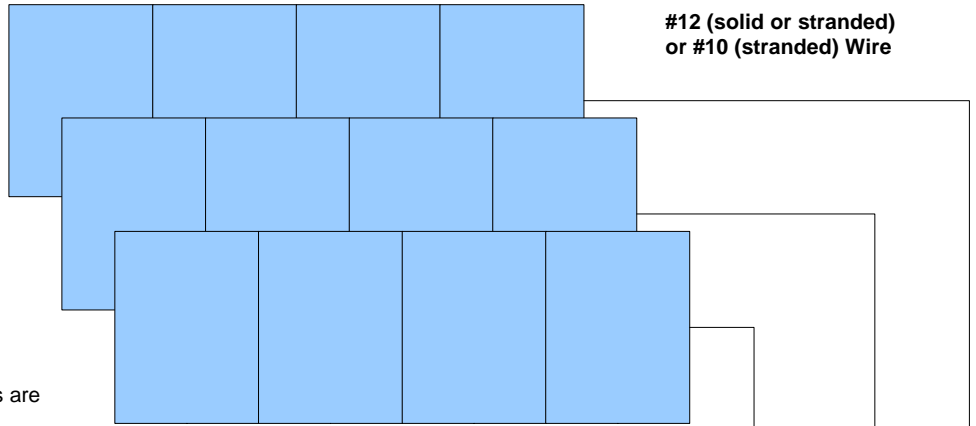
Solar Electric System for Healing Art Missions Clinic Centre de Santé Communautaire de Dumay

**12 Kyocera KC130TMPV Modules in three strings
Each String**

- Volts 48 nominal
- Amps 7.39
- Watts 520 maximum
- Short circuit 8.02 Amps
- Open Circuit Voltage 87.6
- If possible, mount at an 18 degree angle facing south
- Need a frame ground on each panel
- 1/2" PVC Flex between panels and from panels to Array Combiner

Notes:

- For simplicity, negative and ground wires are not shown.
- Install surge arrestor on AC side of E-panel
- May need a 120/240 transformer to run a pump.
- The inverter will accept input from a generator
- Will support three additional PV strings
- Will support three additional battery strings.



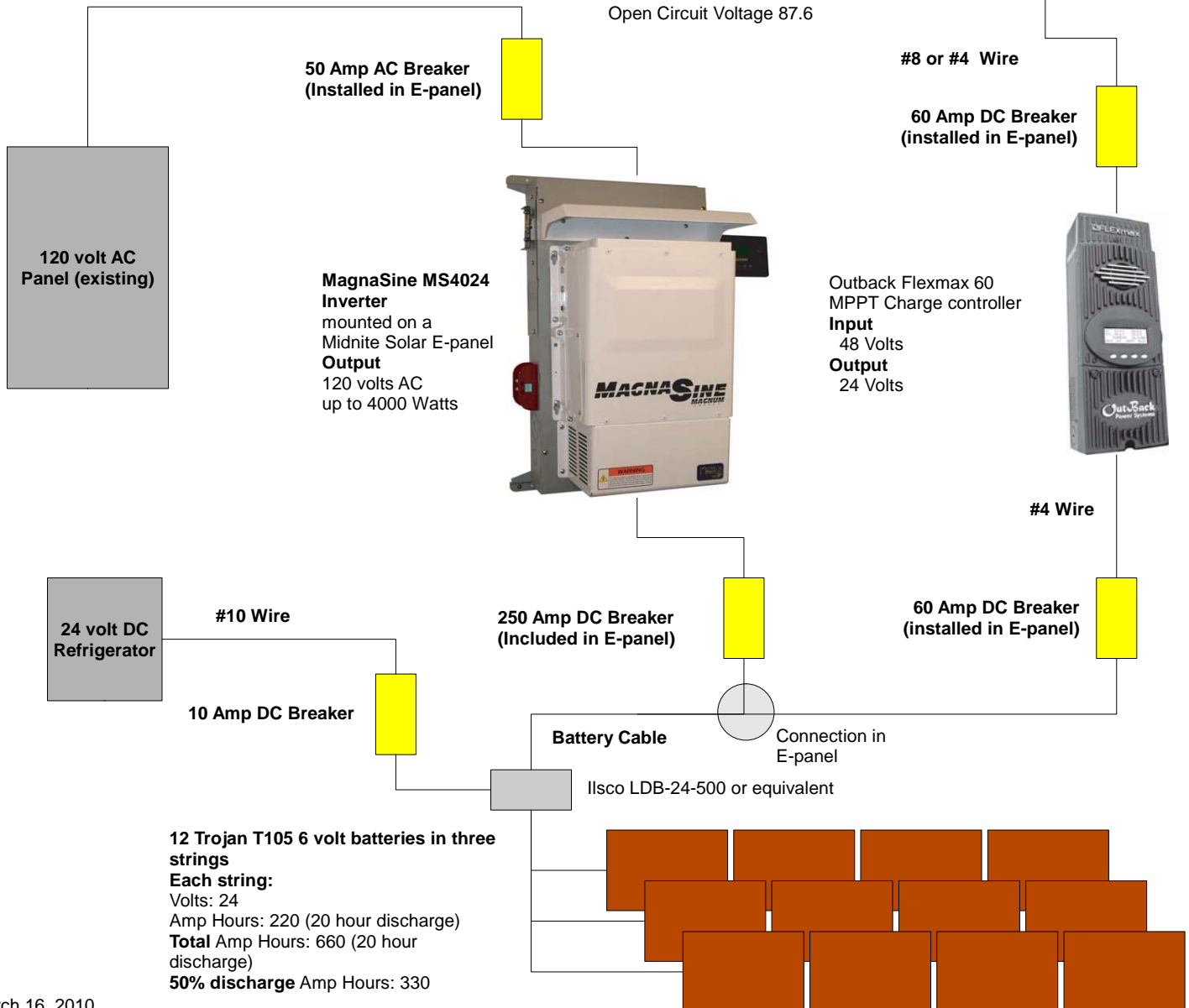
#12 (solid or stranded)
or #10 (stranded) Wire

Midnite Solar MNPV6 Array Combiner
Up to 6 lines in, 10 Amp DC breaker/line
Delta LA-302DC DC Lightning Arrestor
Power Out
Volts 48 nominal
Amps 22.17
Watts 1560
Short circuit 24.06
Open Circuit Voltage 87.6

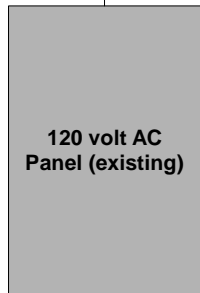


#8 or #4 Wire

60 Amp DC Breaker
(installed in E-panel)



50 Amp AC Breaker
(Installed in E-panel)



MagnaSine MS4024 Inverter
mounted on a Midnite Solar E-panel
Output
120 volts AC
up to 4000 Watts



Outback Flexmax 60 MPPT Charge controller
Input
48 Volts
Output
24 Volts



#4 Wire



#10 Wire

10 Amp DC Breaker

250 Amp DC Breaker
(Included in E-panel)

60 Amp DC Breaker
(installed in E-panel)

Battery Cable

Connection in E-panel

IlSCO LDB-24-500 or equivalent

12 Trojan T105 6 volt batteries in three strings
Each string:
Volts: 24
Amp Hours: 220 (20 hour discharge)
Total Amp Hours: 660 (20 hour discharge)
50% discharge Amp Hours: 330

