

**300 W Solar PV Array**  
 (3) of 100 W modules (type 36 cell)  
 3 parallel strings of 1 modules in series  
**EACH MODULE**  
 $V_{mp} = 18V, I_{mp} = 5.5A$   
 $V_{max} = 22V, I_{max} = 5.8A$   
**For the ARRAY to each Charge Controller**  
 $V_{mp} = 18V, I_{mp} = 16.5A$   
 $V_{max} = 22V, I_{max} = 17.4A$

**Off-Grid Inverter**  
 600 W continuous  
 1200 W peak  
 12Vdc, 230Vac, 50Hz

**PWM CC**  
 12V, 20A


**Charge Controller**  
 (+)(-) (-)(+)

**DC Breaker**  
 125A, 30+V

**Inverter**  
 DC (+)(-) (G)  
 Load Outlets

**Battery Bank**  
 12V, 2.4 kWh  
 2 strings of 1 batteries in series  
**EACH BATTERY**  
 12V, 100Ah @20hr

**Note:**  
 One 70mm² wire equals  
 two parallel 35mm² wire

 <b>Rial Baai Project</b>	Off Grid Systems			
	<b>Sheet Title:</b> 600 kW, 12Vdc Output Electrical Drawing			
<b>Project No:</b>	SIZE	FSCM NO	DWG NO	REV
<b>Revisions:</b> CCB 31-Oct-14	SCALE	NTS	SHEET	1 OF 6