



Battery is split into banks
2x 10.65kW
2x pairs of cables

2x Strings
18x310watt 120 cell
PV Panels in series
351V DC

1: Fronius genset control off signal via relay volts free N/O contacts.

- NOTES:
- Supply 2x 5kw Victron Multitplus2?
 - 1x 21kw battery banks?
 - CT for for grid power control for Victrons and Fronius
 - Battery switches 2x required
 - AC isolators
 - Put in Fronius on the output of the Victrons to have off grid power, to utilize the PV during the day. AC coupled
 - Add in a transfer switch to isolate the grid when there is a power outage.
 - L2 left floating at house supply point
 - Gen set can be single phase, Kubota GL9000 with remote start.
 - Mains switch required in Garage now.
 - When Genset runs Grid tied PV gets disconnected.
 - 5kw of PV and 21kw of Battery power and 10kW of Inverter power.
 - L2 to be disconnected and not used running on a single phase system only.

COPYRIGHT
RD Electronics & Electrical 2021

RD Electronics & Electrical
Engineering & Projects
11 Selwyn Rd, Rotorua, 3010
New Zealand
Ph 07 346043
MOB 0272898824

PROJECT
5kW GRID TIED SYSTEM
AC COUPLED
CLIENT
PHIL PIGNIERI
5Kw PV System
DRAWING TITLE
WIRING LAYOUT
PV LAYOUT
SINGLE PHASE WITH GENSET

DESIGN:	Rob Duthie		
DRAWN:	RD		
CHECKED:			
APPROVED:			
DRG DATE:	23/10/2020		
DRG No:			
REVISION:	Rev1.0		
PROJECT NUMBER:			
SHT No:	0	SCALE:	NTS
SHEET:	A4	UNITS:	MM

REV	DESCRIPTION	DATE