PROJECTA

INTELLI-GRID 12V 2000/3000W

HIGH POWERED MANAGEMENT WITH BLUETOOTH MONITOR

P/No IG2-BT7, IG3-BT7

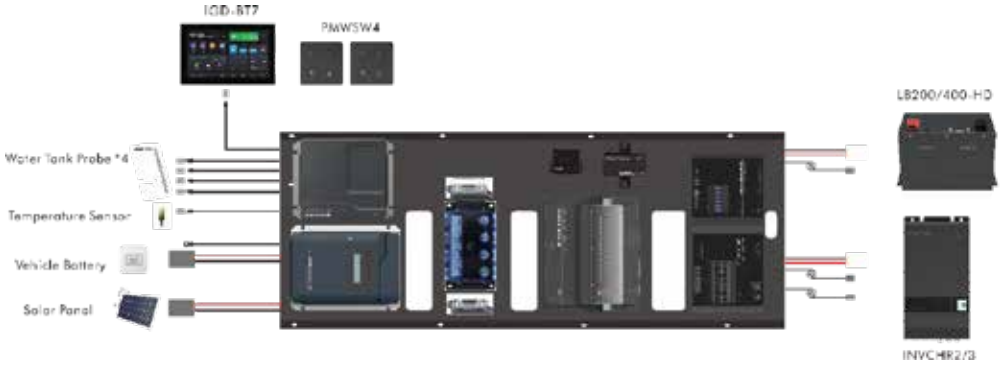
SYSTEM INTRODUCTION

The IG2/3-BT7 is a 2000W/3000W power solution for all your power, lighting and water requirements. This system monitors the status of the tyres and the level of the RV while also tracking the gas cylinders. It is connected to a colour display with Bluetooth, so you can check and control the system from your phone.

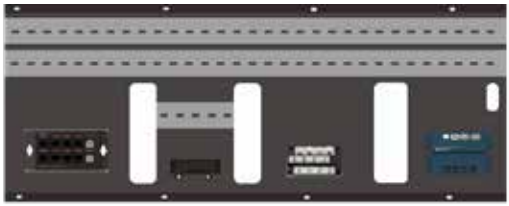
SYSTEM COMPONENTS

- 7" Monitor with App Connectivity
- 2KW/3KW Inverter/Charger with AC change over switch
- MPPT Solar controller
- DC-DC Charger
- Controller Box
- Constant Output Module with 12 outputs
- Auxiliaries Controller with 9 outputs & Water Tank Measurement
- Lights Module with 6 outputs
- 200Ah/400Ah Lithium Battery
- Wireless switch (Not supplied)
- 4 water tank sensors (Not supplied)

PAB – FRONT: 950 x 370 x 160mm



PAB – BACK



KEY FEATURES

INVERTER & GRID POWER

2000/3000W Inverter with 120/180Amp charging, grid power booster and AC transfer switch.
AS/NZS 3001 ready.

LITHIUM BATTERY

An advanced and powerful 200/400Ah lithium battery perfectly matched to the Intelli-Grid system provides the ultimate power for off gird requirements.

BLUETOOTH MONITOR

Bluetooth 7" colour monitor showing SOC, full control of the RV, its water, lighting and hardware.

MULTIPLE CHARGING OPTIONS

30/60A DC-DC charging and 40A MPPT solar charging for charging from vehicle or when sun is shining.

SOLAR CHARGING WAKING UP

When this feature is set to enable, the system can wake up and be solar charged automatically as long as the sun is shining even when the system is OFF.

LOW VOLTAGE PROTECTION

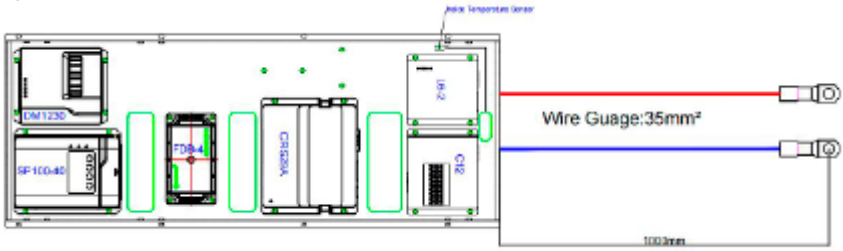
Multiple strategies for low voltage protection of service batteries to avoid failure of lithium batteries by over-discharge.

IG3/IG2-BT7

1. The INTELLI-Grid is system is ordered in the following parts

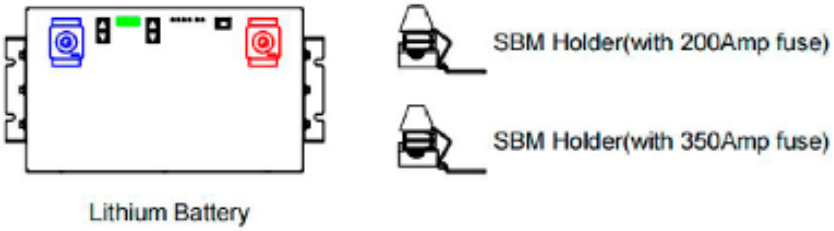
P/n: IGBRD

a.



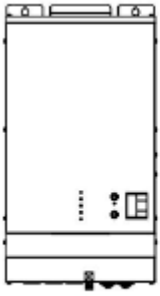
Battery and Fusing

b.

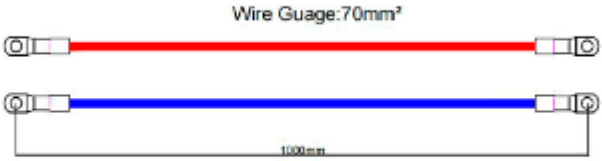


Inverter Charger

c.



Inverter/Charger



d. 7" Colour display with 10m lead.

e. Remote Battery Switch (P/n: LBSW-10).

2. Mount the Battery, Inverter/ Charger, the INTELLI-Grid board into place, 7" Display and the remote battery switch.

a. Ensure the battery is not further than 1 meter from the

i. Inverter / Charger

ii. INTELLI-Grid board

3. Wire up the Inverter;

a. Bolt the Red 70mm^2 cable to the inverter post inside the cover labelled BAT+.

b. Bolt the Black 70mm^2 cable to the inverter post inside the cover labelled BAT-.

c. Connect the RJ45 Cable from the INTELLI-Grid board to the inverter port labelled ComMON.

d. Connect the Data cables (green connectors, 2Pos & 3Pos) to the inverter ports Remote & Relay1.

e. Wire 240VAC mains power input and output from the Inverter/Charger to the installation (Caravan, Shack, Motorhome etc.). Please consult an electrician for 240V AC wiring.

4. Wire up the battery

a. Red battery cable from the power Inverter/Charger connect to the 350Amp Bolt down fuse and place on the Positive (+) terminal of the battery.

b. Red battery cable from the INTELLI-Grid board, bolt and tighten to the 200Amp Bolt down fuse and place on the Positive (+) terminal of the battery.

c. Place the Black battery from the Inverter/Charger cable bolt down to the Negative (-) terminal on the battery.

d. Connect the battery switch (Green 5 Pos switch) into the battery.

i. Connect the Black lead from the battery switch to the Negative battery post and tighten the bolt.
Note: There should be the Inverter/Charger, INTELLI-Grid board and the battery switch lugs on the stud.

ii. Connect the Red lead from the battery switch to the Positive battery post and tighten the bolt.
Note: There should be the Inverter/Charger, INTELLI-Grid board and the battery switch lugs on the stud.

iii. Once nuts are tightened on the battery studs place the black and red terminal posts on top and tighten the plastic nuts.

e. Connect the RJ45 cable from the INTELLI-Grid board to the battery cables port labelled CAN/RS485.

a. Connect the Display cable to the 7" display and connect to the INTELLI-Grid cable labelled A7 monitor.

6. Connect the solar panels via a fuse to the 50Amp Anderson connector.

7. Connect the Alternator cable via a fuse and suitable Cable to the 50Amp Anderson connector for the PMDCS30.

a. Recommended fuse 80Amp (Close to the starter battery) and 8 B&S (8mm^2) up to 9m in length.

8. Connect water tank sensors.

9. Mount Outside temperature sensor cable up to 3meters long.

10. Turn on the system by:-

a. Turn on the battery switch on top of the battery to ON.
b. Turn on the remote battery switch.

The IG2/IG3-BT7 should be on at this stage.

MONITORING THE 7" COLOUR DISPLAY INTRODUCTION

Home Page

The above is the home page, the details are as follows:

1) Region 1: Area for time and date display.
2) Region 2: Indoor and Outdoor temperature display area.
3) Region 3: Area for showing battery information.
   In this area, the user can see the battery power data and status. It contains the following points:
   a) Check the batteries are charging or discharging.
   b) Check the batteries voltage and current.
   c) Check the batteries SOC value.
   d) Check the time to go or time to full of batteries.
4) Region 4: Area of shortcut keys.
   a) PWR: All DC and AC outputs turned on/off with this key. Only the constant live output of IGCMD and the class C3 output of C12 are retained.
   b) Inverter: Inverter charger ON/OFF switch.
   c) HWS: Water heater ON/OFF switch.
   d) Pump: Water pump ON/OFF switch.
5) Region 5: Water tank level display area.
   a) If the fresh water is lower than the warning value, the alarm is triggered.
   b) If the gray or black water is greater than the warning value, the alarm is triggered.

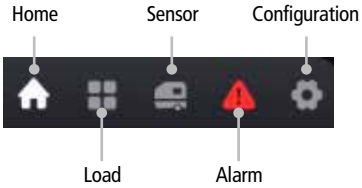
6) Region 6: Scene mode.
   a) ECO mode: System will enter "ECO" Mode automatically after being started. When SOC drops to 15% (it is settable within 15% - 20%), the system shuts down the inverter outputs and the heavy loads, keeping ONLY the essential loads on.
      i. Typically fridge, ceiling light and a spare output is ON. Only the constant live output of IGCMD are ON, such as Fridge and USB.
      ii. Pump, spot FR&BK, bedroom light can be turned ON manually.
      iii. One group of the C12 outputs (marked as C3) is ON.

      When SOC is back to 15% (or other setting value) + 3% or there is AC grid charging, system exits ECO mode automatically. Customer can also exit the mode manually
   b) Night mode: Designed for a silent environment for customers. It can be activated at the front page of 7" screen. When entering the mode,
      i. The system will shut down the lights and the back lights of the screens.
      ii. De-rate the charging current of inverter/charger to reduce the fan noise.
   c) Light off: This mode is designed for turning off the all lights with one key.
7) Region 7: Gas level display area.
8) Region 8: Charging source information display area.
   In this area, the user can check the charging data as follows:
   a) Inverter/Charger:
      i. Display output voltage, power and load rate.
      ii. The user can select the AC input source. "Mains" means the source is grid, "Gen" means it is generator.

   b) Vehicle charger: Checks the output current and power of vehicle charger.

   c) Solar charger: Checks the output current and power of vehicle charger

9) Region 9: Navigation area.



   Note:
   a) The icon will turn white when switched to the corresponding page.
   b) When the alarm icon is red, it means that one or more alarms exist. After the alarm is removed, the icon turns to gray.

Load Control Page

The load control page displays all switchable outputs with their functions named. When the load is turned on, the load icon is white with a green dot in the upper right corner. If the load is turned off, the icon turns gray and the green dot disappears.

Sensor Page

6 .3.1 Leveling

Ensures your RV is level when parked.

6 .3.2 TPMS

Monitors tyre pressure to prevent premature wear with high / low warning setting.

6 .3.3 GAS sensor

Monitors the level of gas available within the gas cylinders.

Setting Page

The setting menu allows the user to make basic changes to the system, including:

1) Screen setting.
   The user can set screen brightness level, time and date, sleep time, buzzer enable, temperature unit and language selection.

2) Rename.
   In this page, the load and water tank can be renamed.

   Further, the icon also can be changed when renaming the load.

3) System.
   The user can engage the 'Solar Automatic Wake Up Function' as well as disengage the 'Ground Relay'.
   WARNING: Ground relay MUST be left on for correct RCD operation.

4) Firmware.
   Displays all software revisions of available components.

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   sleep time, buzzer enable, temperature unit and language selection.

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3) System.
The user can engage the 'Solar Automatic Wake Up '

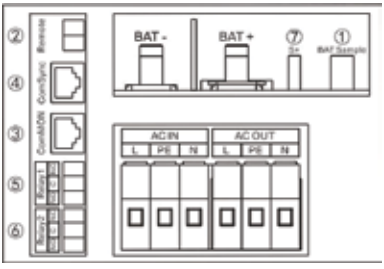
COMPONENT SPECIFICATIONS

INVCHR2 & INVCHR3

2000W/3000W 12V INVERTER/CHARGER

Perfect for powering the most demanding 240V appliances on the go this inverter/charger is ideal for operating on or off the grid. An RCD is included to ensure maximum safety for the unit and operator.
The inverter/charger is fitted with grid power boost which is great if the shore power or generator is weak. Grid power boost will supplement the shore power to ensure all your appliance can run.

SPECIFICATIONS		
PART NO	INVCHR2	INVCHR3
240V CHARGING		
CHARGE TYPE	5 Stage Automatic	
INPUT	240VAC, 50/60Hz, 32A(MAX)	
OUTPUT	12V, 120A	12V, 180A
BATTERIES SUPPORTED	GEL, AGM, WET, Lithium	
TEMPERATURE COMPENSATION	YES	
INVERTER		
INPUT	12V (10.5V~17V)	
OUTPUT	220/230/240 VAC	
FREQUENCY	50/60 Hz	
OUTPUT POWER	2000W (4000W peak)	3000W (6000W peak)
GRID BOOST OUPUT	24Amps, Mains Supply + 8.3Amps Inverter RCBO limited to 16Amps max.	28Amps, Mains Supply + 12.5Amps Inverter RCBO limited to 16Amps max.
AC TRANSFER	<2m Sec	
OPERATING TEMPERATURE	-20°C ~ 65°C	
WEIGHT	17KG	21KG
IP RATING	IP20	



SIGNAL TERMINAL INTRODUCTION

NO.	LABEL	DEFINITION
1	Bat Sample	Battery temperature and voltage sample.
2	Remote	A dry contact input for remote on/off, often IGN was connected.
3	Com MON	RS485 port for external monitor such as INVCHRD-BT.
4	Com Sync	Communication with PROJECTA's LB-HD series lithium battery, which is able to synchronize lithium battery's charging and discharging strategy
5	Relay1 (NO,C,NC)	Dry contact output control 1(NO,C,NC)
6	Relay2 (NO,C,NC)	Dry contact output control 2(NO,C,NC)
7	S+	Slave charger for starter battery

Note: Relay 1 or 2 can be used Generator remote start.

GENERATOR AUTO STOP/START

The INTELLI-Grid system can manage the generator by turning it on or off depending on the state of charge of the battery. Even manual start / stop is possible via the screen.

How to wire?

INTELLI-Grid runs a simple 2 wire dry contact system. When the relay is closed the generator turns on. when the relay turns off the generator will turn off. The generator will need to have a remote 2 wire start.

Steps:-

1. Wire the generator to either relay 1 or relay 2 in the inverter wiring enclosure.
2. Enable the Generator
   a. Via the main home page press the "Gen" button
   b. Press the Setting button "small cog" in the top right hand corner
   c. Select Relay 1 or Relay 2 depending on which relay output on the inverter the remote start has been connected to.

IMAGE A

IMAGE B

IMAGE C

SC540

5 STAGE MPPT SOLAR CHARGER CONTROLLER WITH 100V INPUT

Get the most out of your solar array using these Maximum Power Point Tracking (MPPT) solar controllers increasing the charging output by up to 30% (compared to PWM Solar controllers).

SPECIFICATIONS	
PART NO	SC540
BATTERY VOLTAGE	12/24/48V
MAXIMUM SOLAR VOLTAGE	100V
STANDBY CURRENT	1mA 12V
CHARGER TYPE	5 Stage
INPUT	100V
CONTROL TYPE	MPPT
BATTERIES SUPPORTED	GEL, AGM, WET, Lithium
TEMPERATURE COMPENSATION	Yes
COMMUNICATION	RS485
STORAGE TEMPERATURE	-40°C ~ 70°C
HUMIDITY	5 – 95%
IP RATING	IP31
WEIGHT	1.4KG
COOLING	Convection

LABEL		DEFINITION
PV	+	Connection terminal for PV array Positive
	-	Connection terminal for PV array Negative
BAT	+	Connection terminal for Battery Positive
	-	Connection terminal for Battery Negative
EPO		EPO contacts, defined for remote on/off.
NC		Output dry contacts.
C		
NO		
RS485		Connection terminal for RS485 communication.
Temp. Sensor		Connection terminal for battery temperature sensor.

PIN DEFINITION OF TEMP SENSOR

PIN	DEFINITION
Pin 1	Battery Positive
Pin 2	Battery Negative
Pin 3	Temperature Sensor
Pin 4	Battery Negative

PIN DEFINITION OF RS485 COMMUNICATION PORT

PIN	DEFINITION
Pin 1	
Pin 2	
Pin 3	RS485_A
Pin 4	
Pin 5	
Pin 6	RS485_B
Pin 7	
Pin 8	

PMDCS30

DC-DC 12V CHARGER

Smart DC to DC chargers specifically designed for Intelli-RV and Intelli-Grid.

SPECIFICATIONS	
PART NO	PMDCS30
CHARGER TYPE	5 Stage
ALTERNATOR INPUT VOLTAGE	12–16V
OUTPUT	12V, <30A
BATTERIES SUPPORTED	GEL, AGM, WET, Lithium
STORAGE TEMPERATURE	-40°C ~ 70°C
OPERATING TEMPERATURE	-40°C ~ 70°C
IP RATING	IP20
WEIGHT	1.0KG
COOLING	Convection
SMART ALTERNATOR	Turn on: 12.2V Turn off: 11.9V
CONVENTIONAL	Turn on: 13.2V Turn off: 12.8V

CONNECTORS AND TERMINALS

Connectors and terminals guide

No.	Print	PMDCS30	Remarks	Circuit colours and labelling
1	Alternator	Connects to Positive of Alternator	Connects to Positive battery post	Red + Label "Aux+"
	BAT-	Connects to negative of Alternator	Connects to negative battery post	Black – Label "Aux-"
2	AUX BAT	Connects to Positive of auxiliary battery		Red + Label "Vehicle Batt+"
	BAT-	Connects to negative and negative of auxiliary battery		Black – Label "Vehicle Batt-"
3	COM	For communication of RS485	Not Connected	
4	1	Not used	Details of setting can be found as Chapter 4.6	
	2	Set on for 30Amp, off for 15Amps		
	3	Used to set battery chemistry		
	4			
5	BAT-	Connects to BTS' black cable	For battery temperature sensing	RED Ring Terminal connect to Battery +ve
	Temp	Connects to BTS' white cable		
	V-Sen	Connects to BTS' red cable	For voltage sensing	

Fuse specification

No.	Print	Specification	Colour	Quantity	Protection for
6	Alternator	30A/32VDC for PMDCS30	Amber	2	Input from alternator
7	AUX BAT	20A/32VDC	Yellow	2	Output to charge auxiliary battery

IGCMD

INTELLI-GRID AUXILIARIES CONTROLLER

This is the input and output controller, with water sensors and switchable devices being connected with built in fused outputs.

No	Manufacturer	Part Number	Technical Features
①	Yueqing Longsun Electric Co.,Ltd	50033-18Y	Material:PBT + GF15 Product number: B05191F01GY6
②	Yueqing Longsun Electric Co.,Ltd	50033-18	Material:PBT + GF30 Product number: B05183M020Y6
③	Yueqing Longsun Electric Co.,Ltd	50011-YT	Material:3US 304 +phosphor copper

SPECIFICATIONS	
PART NO	IGCMD
INPUT VOLTAGE	9~32V
INPUT CURRENT	<60A
OUTPUTS	2 x 15A Relay with Bypass, 7 x 15A Relay, 4 x Dry contact
INPUTS	4 x Dry contact, 4 x conductive water measurement
COMMUNICATION	CAN bus, RS485, RF

OUTPUT					
A5-1	A5-2	A5-3	A5-4	A5-5	A1-1
A1-2	GND	GND	GND	GND	A5-6
GND	GND	GND	GND	GND	A5-7

OUTPUTS	FUSE	OUTPUT LABEL	DEVICES
A5-6 (15A)	A5-6 (15A)	Spare 1	
A5-7 (15A)	A5-7 (15A)	Spare 2	
A5-1 (15A)	A5-1 (15A)	Spare 3	
A5-2 (15A)	A5-2 (15A)	Media	TV & Stereo &
A5-3 (15A)	A5-3 (15A)	Fans & 12V	Fan & USB, 12 Sockets
A5-4 (15A)	A5-4 (15A)	HWS	Hot water service
A5-5 (15A)	A5-5 (15A)	Heater	Diesel heater if fitted
A1-1 (15A) With optional Bypass fuse	A1-1 (15A)	PUMP 1	Pump 1
A1-2 (15A) With optional Bypass fuse	A1-2 (15A)	PUMP 2	Pump 2
Water Sensor 1		Tap 1	Tank 1
Water Sensor 2		Tap 2	Tank 2
Water Sensor 3			
Water Sensor 4		Waste	Tank 3

PMWLM6

6 CHANNEL OUTPUT MODULE

This 6 channel output module works with wireless switches and can also be controlled via the 4", 7" screen or phone app.

SPECIFICATIONS	
PART NO	PMWLM6
INPUT VOLTAGE	9~16V
MAXIMUM INPUT CURRENT	<60A
STANDBY CURRENT DRAW	3mA
OUTPUTS	6 x 15A Relay
WORKING TEMPERATURE	-40°C ~ 80°C
IP RATING	IP20

No	Manufacturer	Part Number	Technical Features
①	Yueqing Longsun Electric Co.,Ltd	50033-15Y	Material:PBT Color: purple
②	Yueqing Longsun Electric Co.,Ltd	50033-18Y-6	Material:PBT + GF30 Product number: 805183M02GY6
③	Yueqing Longsun Electric Co.,Ltd	50011-YT	Material:GLIS 304 +phosphor copper

CONNECTORS AND TERMINALS

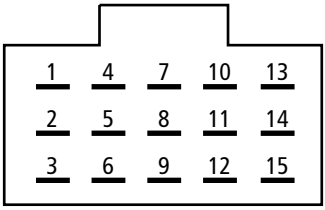
POWER INPUT TERMINAL DEFINITION

PIN NO	PIN DEFINITION	POLARITY	VOLTAGE RANGE	RATED CURRENT
1	BAT+	BAT+	9–16V	30A
2	BAT+	BAT+	9–16V	30A
3	BAT-	BAT-		
4	BAT-	BAT-		

OUTPUT TERMINAL DEFINITION

OUTPUT				
L1	L2	L3	L4	L5
GND	GND	GND	GND	L6
GND	GND	GND	GND	GND

PIN DIAGRAM



PIN NO	PIN DEFINITION	FUSE	CURRENT RANGE	VOLTAGE RANGE
1	L1	L1 15A	0–10A	0-16V
2	GND		0–15A	0-16V
3	GND		0–15A	0-16V
4	L2	L2 15A	0–15A	0-16V
5	GND		0–15A	0-16V
6	GND		0–15A	0-16V
7	L3	L3 15A	0–15A	0-16V
8	GND		0–15A	0-16V
9	GND		0–15A	0-16V
10	L4	L4 15A	0–15A	0-16V
11	GND		0–15A	0-16V
12	GND		0–15A	0-16V
13	L5	L5 15A	0–15A	0-16V
14	L6	L6 15A	0–15A	0-16V
15	GND		0–15A	0-16V

IGCOM12

12 WAY FUSED OUTPUT MODULE

Provides a constant 12V power to power loads like range hoods, fridges, memory retentive circuits and other lighting. IGCOM12 has built in low voltage disconnect and inhibit functions on selected outputs.

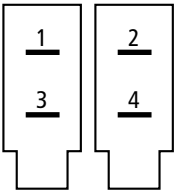
SPECIFICATIONS	
PART NO	IGCOM12
NOMINAL VOLTAGE	12V
MAX INPUT CURRENT	80A
OUTPUTS	6 x 30A 6 x 15A
WEIGHT	780g
WORKING TEMPERATURE	-40°C ~ 65°C
IP RATING	IP20

No	Manufacturer	Part Number	Technical Features
①	Yueqing Longsun Electric Co.,Ltd	50033-18V	Material:PBT + GF15 Product number: B05191F01GY6
②	Yueqing Longsun Electric Co.,Ltd	50033-18	Material:PBT + GF30 Product number: B05183M02GY6
③	Yueqing Longsun Electric Co.,Ltd	50011-YT	Material:SUS 304 +phosphor copper

POWER INPUT TERMINAL DEFINITION

PIN NO	PIN DEFINITION	POLARITY	VOLTAGE RANGE	RATED CURRENT
1	BAT+	BAT+	9–16V	40A
2	BAT+	BAT+	9–16V	40A
3	BAT-	BAT-		
4	BAT-	BAT-		

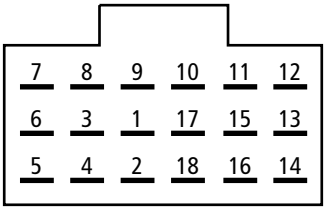
PIN DIAGRAM



OUTPUT TERMINAL DEFINITION

OUTPUT					
C3-1	C3-2A	C3-2B	C3-3A	C3-3B	C3-4
C2-4	C2-2A	C2-1A	OUT4A	OUT3A	OUT1
C2-3	C2-2B	C2-1B	OUT4B	OUT3B	OUT2

PIN DIAGRAM



PIN NO	PIN DEFINITION	FUSE	CURRENT RANGE	VOLTAGE RANGE	FUNCTION	EXAMPLE DEVICE
1	C2-1A	F1 30A	0–15A	9–16V	Inhibit and LVD	Slide out
2	C2-1B	F1 30A	0–15A	9–16V	Inhibit and LVD	Awning
3	C2-2A	F2 30A	0–15A	9–16V	Inhibit and LVD	Steps
4	C2-2B	F2 30A	0–15A	9–16V	Inhibit and LVD	
5	C2-3	F3 15A	0–15A	9–16V	Inhibit and LVD	
6	C2-4	F4 15A	0–15A	9–16V	Inhibit and LVD	
7	C3-1	F5 15A	0–15A	9–16V	Always On	Outside compressor fridge
8	C3-2A	F6 30A	0–15A	9–16V	Always On	Inside compressor fridge
9	C3-2B	F6 30A	0–15A	9–16V	Always On	
10	C3-3A	F7 30A	0–15A	9–16V	Always On	Range hood
11	C3-3B	F7 30A	0–15A	9–16V	Always On	
12	C3-4	F8 15A	0–15A	9–16V	Always On	
13	OUT1	F9 15A	0–15A	9–16V	Inhibit and LVD	See Note 1 below
14	OUT2	F10 15A	0–15A	9–16V	Inhibit and LVD	
15	OUT3A	F11 30A	0–15A	9–16V	Inhibit and LVD	
16	OUT3B	F11 30A	0–15A	9–16V	Inhibit and LVD	
17	OUT4A	F12 30A	0–15A	9–16V	Inhibit and LVD	
18	OUT4B	F12 30A	0–15A	9–16V	Inhibit and LVD	

Note 1: This group can be configured by Dipswitch.
Dip 1 ON: Run Inhibit function & LVD
Dip 2 ON: Always on
Dip 1&2 OFF: Outputs off

The Dipswitch comes default as per the above table and shown right.

IGCOM

INTELLI-GRID CONTROLLER

This is the brains of the INTELLI-Grid system. Controlling communications to external sensors and devices and shutting down power on non essential loads when the battery power gets low.

SPECIFICATIONS	
PART NO	IGCOM
INPUT	12V
WORING CURRENT	80mA
STANDBY CURRENT	5mA
COMMUNICATION	CAN bus, RS485 Bluetooth
WORKING TEMPERATURE	-25°C ~ 60°C
STORAGE TEMPERATURE	-30°C ~ 85°C
WEIGHT	200g
IP RATING	IP20

PMTPMS

TYRE PRESSURE MONITORING SYSTEM MODULE

The Tyre Pressure Monitoring System (TPMS) monitors the RVs tyre pressure before and during the journey.

SPECIFICATIONS	
PART NO	PMTPMS x 4 (one for each tyre)
PART NO	Receiver-PMTPMS-R
INPUT	6-24V
WORING CURRENT	30mA
WORKING TEMPERATURE	-40°C ~ 85°C
HUMIDITY	<95%
RECEIVING FREQUENCY	433.910Mhz
WIRED COMMUNICATION	RS485
WEIGHT	150g
PART NO	Sender * 4 -PMTPMS-S
WORING VOLTAGE	2.2 ~ 3.6V
BATTERY TYPE	CR1632
TRANSMITTED CURRENT	<5mA
TRANSMITTED POWER	<5dbm
TRANSMITTED FREQUENCY	433.910Mhz
PRESSURE RANGE	14~ 130PSI
ACCURACY	± 1.45 PSI
WORKING TEMPERATURE	-30°C ~ 70°C
WEIGHT	13.8g

PMLVL

LEVELLING SENSOR

Level the RV with the levelling sensor which can be monitored via the phone app.

Calibration

To calibrate the level sensor, the RV needs to be level in both forward and back and side to side. Once level, go to the Setting Page, select Level Sensor and press Calibrate. This will zero the sensor.

SPECIFICATIONS	
PART NO	PMLVL
WORKING VOLTAGE	9~16V
WORING CURRENT	30mA
WORKING TEMPERATURE	-40°C ~ 85°C
IP RATING	IP20
ACCURACY	±2°

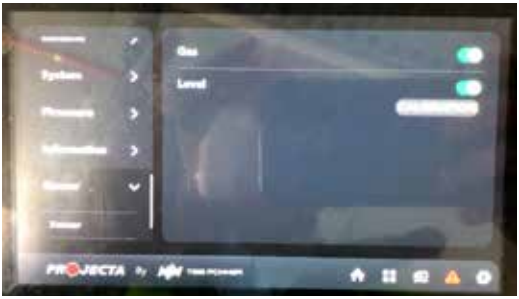
INSTRUCTIONS ON HOW TO PAIR THE GAS SENSORS

Ensure you are using the LCI Lippert Bottle check Bluetooth Gas Gauge.

Enable the GAS Feature.

Go to the Setting Page..

Find the Sensors Page and enable it.



Paring the Sensors.

Long press the "SYNC" button on the gas sensor until a value is displayed on the GAS.

Repeat the process to pair second gas sensor.

IGD-BT7

7" COLOUR BLUETOOTH MONITOR

The 7" colour display, enables complete control of the RV or commercial application. Its smart, intuitive design provides all the vital information at the press of a button.

SPECIFICATIONS	
PART NO	IGD-BT7
WORKING VOLTAGE	12V
WORKING CURRENT	350mA Screen ON, 200mA Screen OFF
RESOLUTION	1024 x 600
COMMUNICATION	RS485.CAN.Bluetooth
WORKING TEMPERATURE	-30°C ~ 70°C
STORAGE TEMPERATURE	-30°C ~ 85°C
WEIGHT	200g
IP RATING	IP 20

BATTERIES

LB200-HDJ

12V HIGH DISCHARGE 200AH LITHIUM BATTERY

LB200-HD boast impressive capabilities and are ideal for 4WDs and caravans with high power demands.

SPECIFICATIONS	
PART NO	LB200-HD
NOMINAL VOLTAGE	12.8V
NOMINAL CAPACITY	200Ah
NOMINAL ENERGY	2560Wh
CHARGE VOLTAGE	14.2V
DISCHARGE CUT-OFF VOLTAGE	11.2V
STANDARD CHARGE CURRENT	100 Amps
MAXIMUM CHARGE CURRENT	200 Amps
MAXIMUM DISCHARGE CURRENT	200 Amps
PEAK DISCHARGE CURRENT	300 Amps (10Mins)
OPERATING TEMPERATURE	-20°C ~ 60°C
MAXIMUM NUMBER OF BATTERIES IN PARALLEL	4
NUMBER OF DISCHARGE CYCLES	3000
WEIGHT	22KG
IP RATING	IP20

LB400-HDJ

12V HIGH DISCHARGE 400AH LITHIUM BATTERY

The LB400-HD boasts an astonishing 400Ah capacity and a market leading 300A discharge capability making it ideal to partner with high current drawing appliances such as 3000W inverters.

SPECIFICATIONS	
PART NO	LB400-HD
NOMINAL VOLTAGE	12.8V
NOMINAL CAPACITY	400Ah
NOMINAL ENERGY	5120Wh
CHARGE VOLTAGE	14.2V
DISCHARGE CUT-OFF VOLTAGE	11.2V
STANDARD CHARGE CURRENT	100 Amps
MAXIMUM CHARGE CURRENT	200 Amps
MAXIMUM DISCHARGE CURRENT	200 Amps
PEAK DISCHARGE CURRENT	300 Amps (10Mins)
OPERATING TEMPERATURE	-20°C ~ 60°C
MAXIMUM NUMBER OF BATTERIES IN PARALLEL	4
NUMBER OF DISCHARGE CYCLES	3000
WEIGHT	42.5KG
IP RATING	IP20

Note for the battery to work if not connected to INTELLI-Grid the green connector on top of the battery must be connected with the small bridging wire across pin 1 & 2 (Remote) along with the Power switch turned on.

PMWSW4

Wireless switches make it easy to install additional switches if required. i.e. additional bedroom switch is easy as 2 screws for installation.

SPECIFICATIONS	
PART NO	PMWSW4
RATED VOLTAGE	5V
BATTERY TYPE	2 x CR2032
COMMUNICATION	RF 433Mhz
EFFECTIVE RANGE	Outdoor 30m, Indoor 15m
IP RATING	IP20
WORKING TEMPERATURE	-20°C ~ 60°C
MOUNTING	Surface
WEIGHT	40g

This product contains a coin / button cell battery. If the coin / button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children. Do not ingest battery, Chemical Burn Hazard. If the battery compartment does not close securely, stop using the product and keep it away from children.

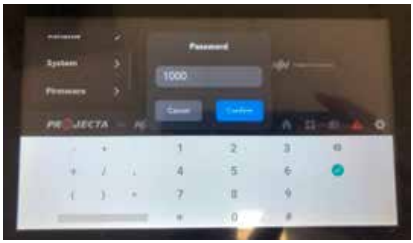
If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

To program the wireless switches (P/n: PMWSW4) follow these steps.

1. Turn on the INTELLI-Grid screen.

2. Go to the home page press the setting button in the bottom right hand corner.

3. Go to the bottom of the menu selection the left and tap the blank space 3 times and enter password 1000.



4. Press "Channel Pairing" on the screen then press the + symbol on the screen.

5. Follow the screen prompts which will mean you will need to press one of the buttons on the 4 position switch.

WATER TANK PROBE

For Intelli-Grid system, a maximum of 4 probes can be monitored.

Note: Always check the probe required for the water tank before pruchase. There are 2 probe styles.

PMWS200

- Side installation
- Suitable for water tank
- Depth >200mm

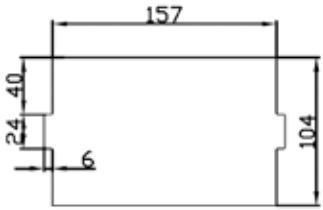
PMWS400

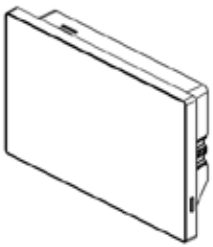
- Side installation
- Suitable for water tank
- Depth <400mm

STRUCTURE AND INSTALLATION

Monitor

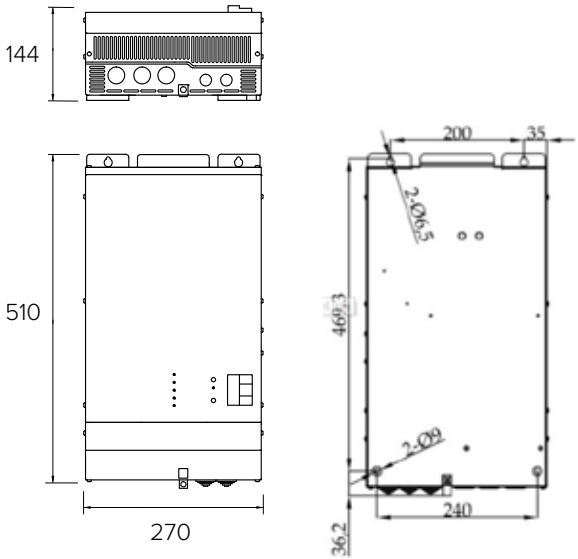
Hole Size





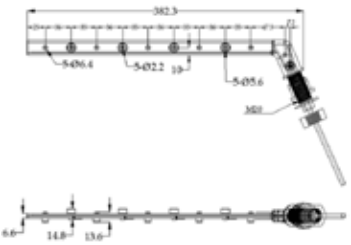
Inverter

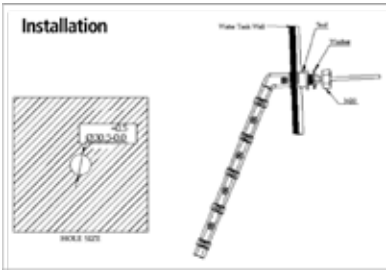
Note: Please install the inverter
in a well ventilated area so that it works
at maximum efficiency.



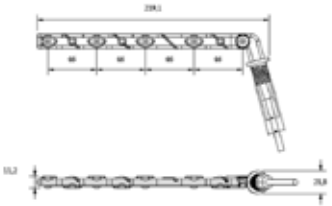
Water Probe

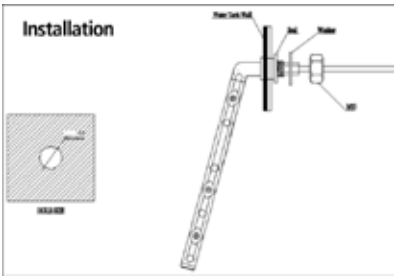
PMWS400 WATER TANK PROBE



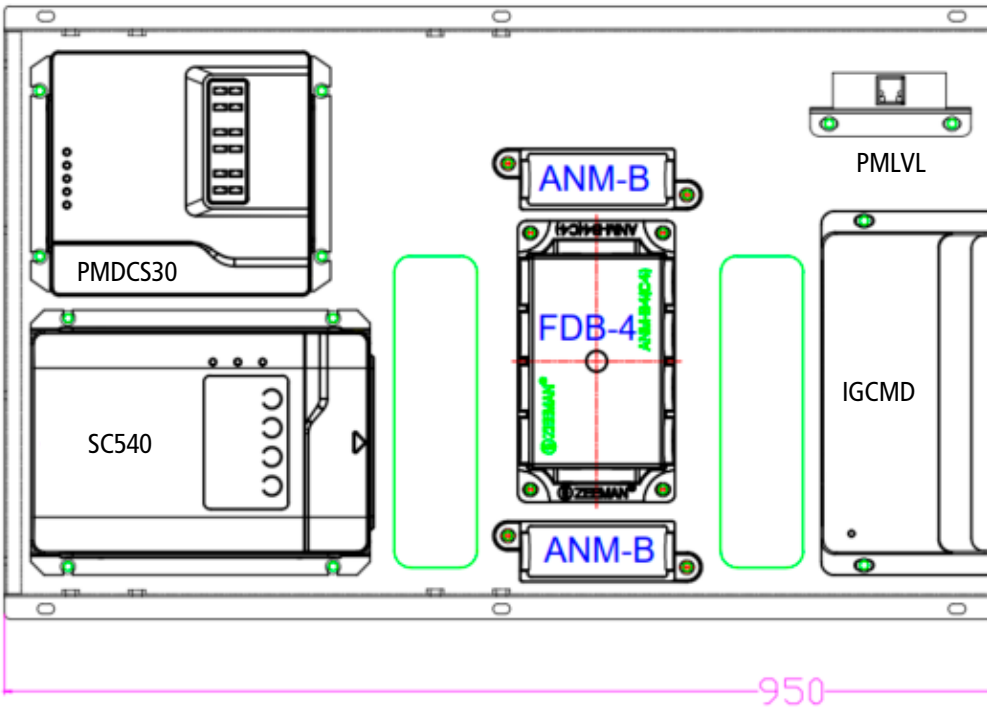


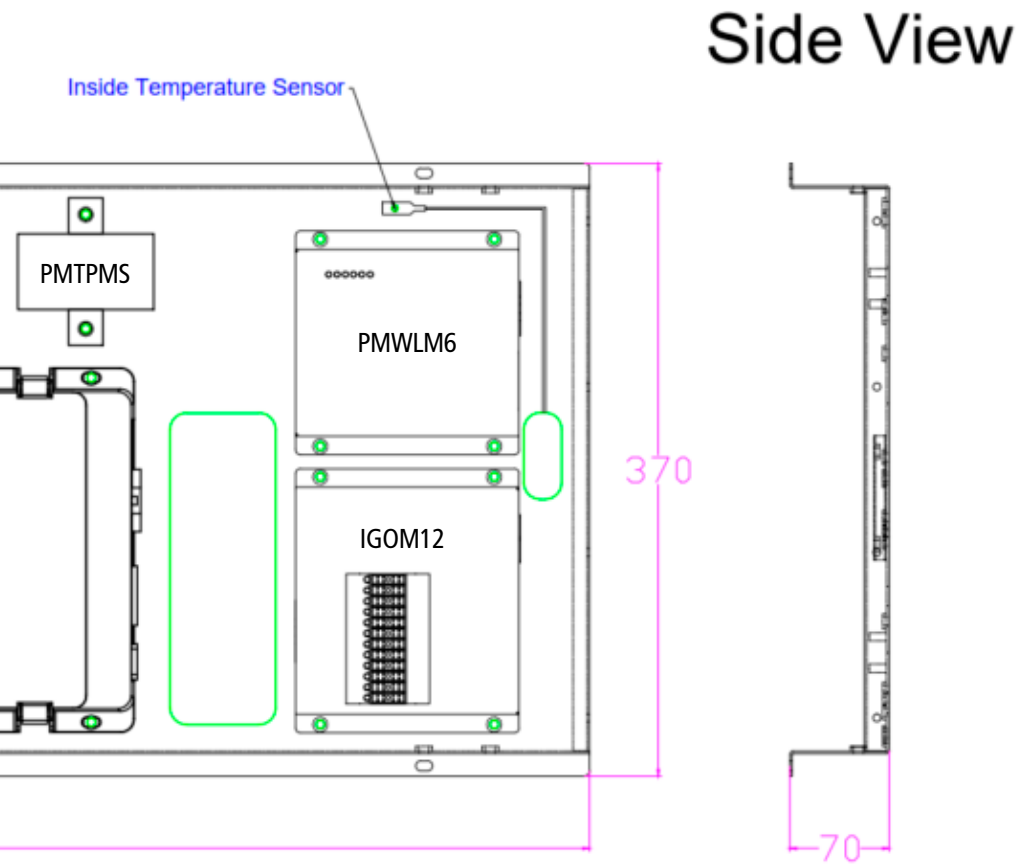
PMWS200 WATER TANK PROBE

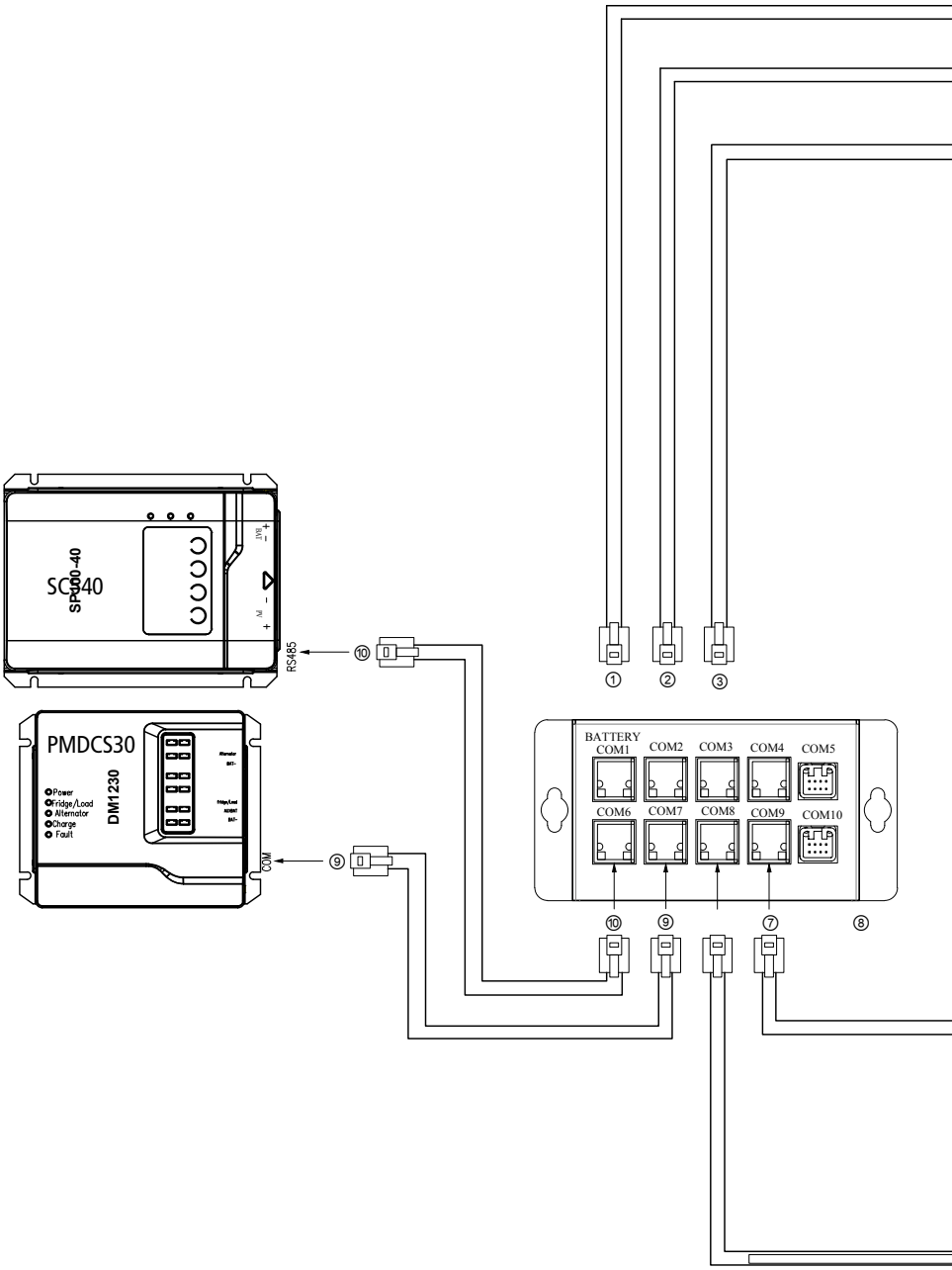




Front View

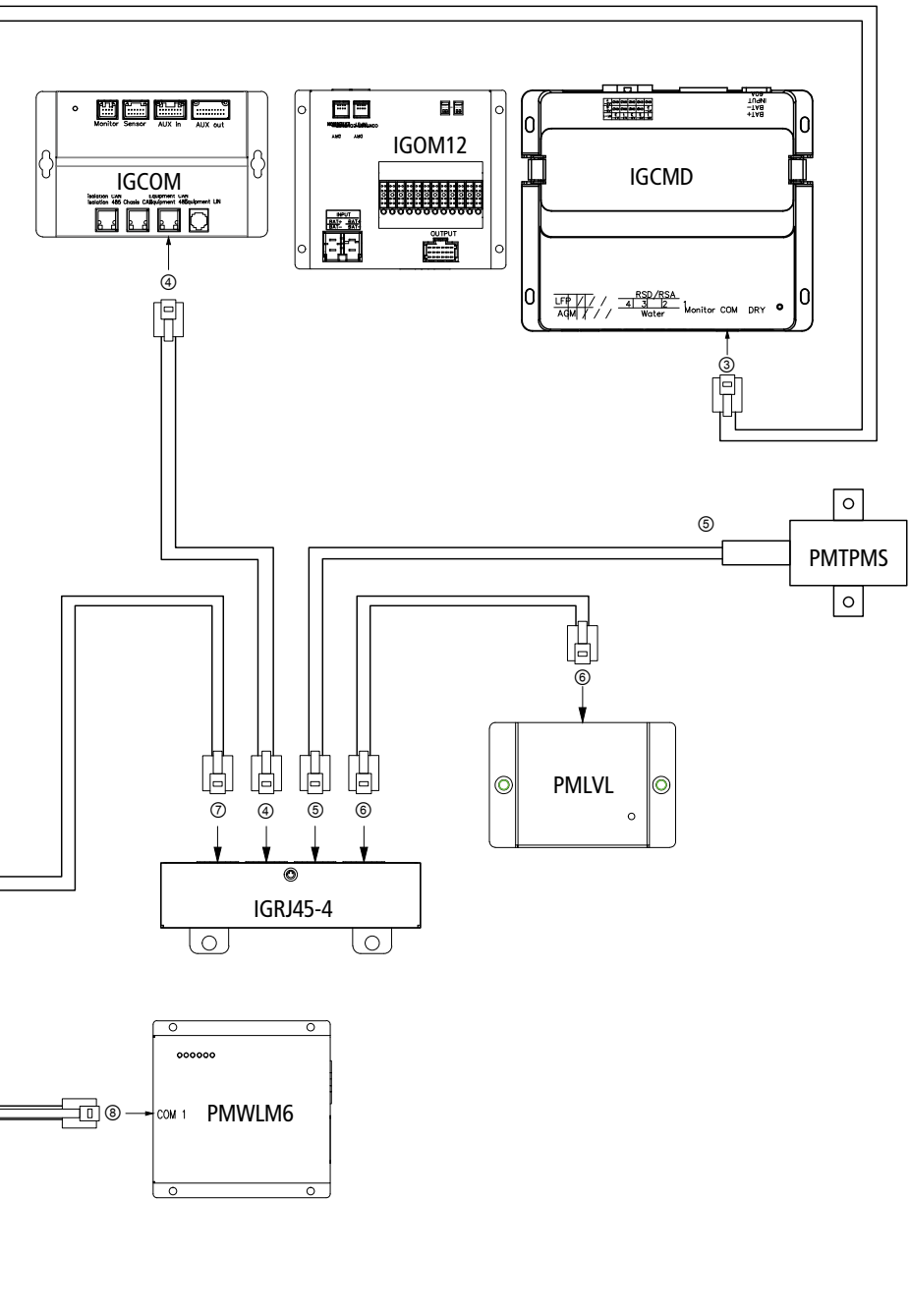


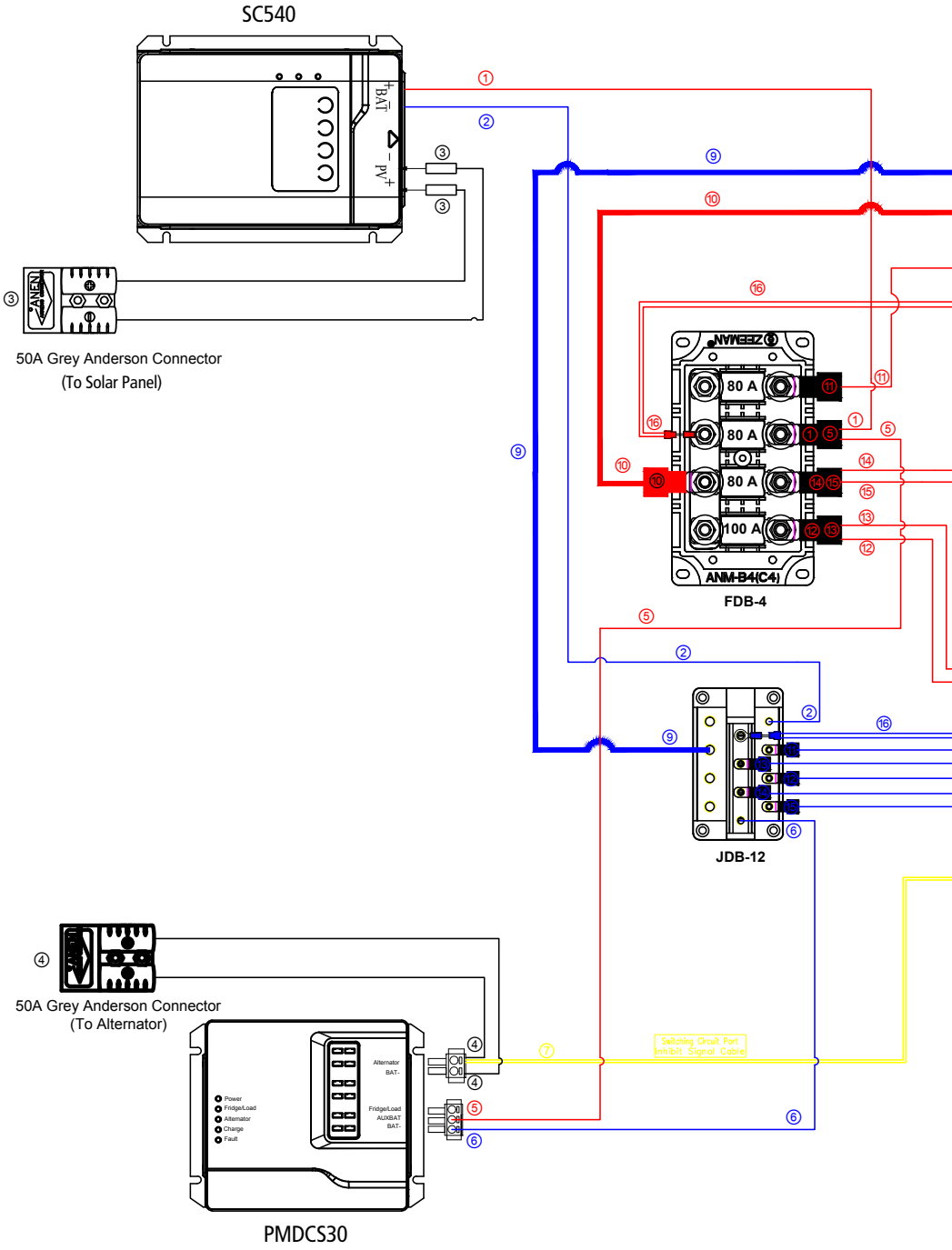

Side View
Inside Temperature Sensor
PMTPMS
PMWLM6
IGOM12
370
70

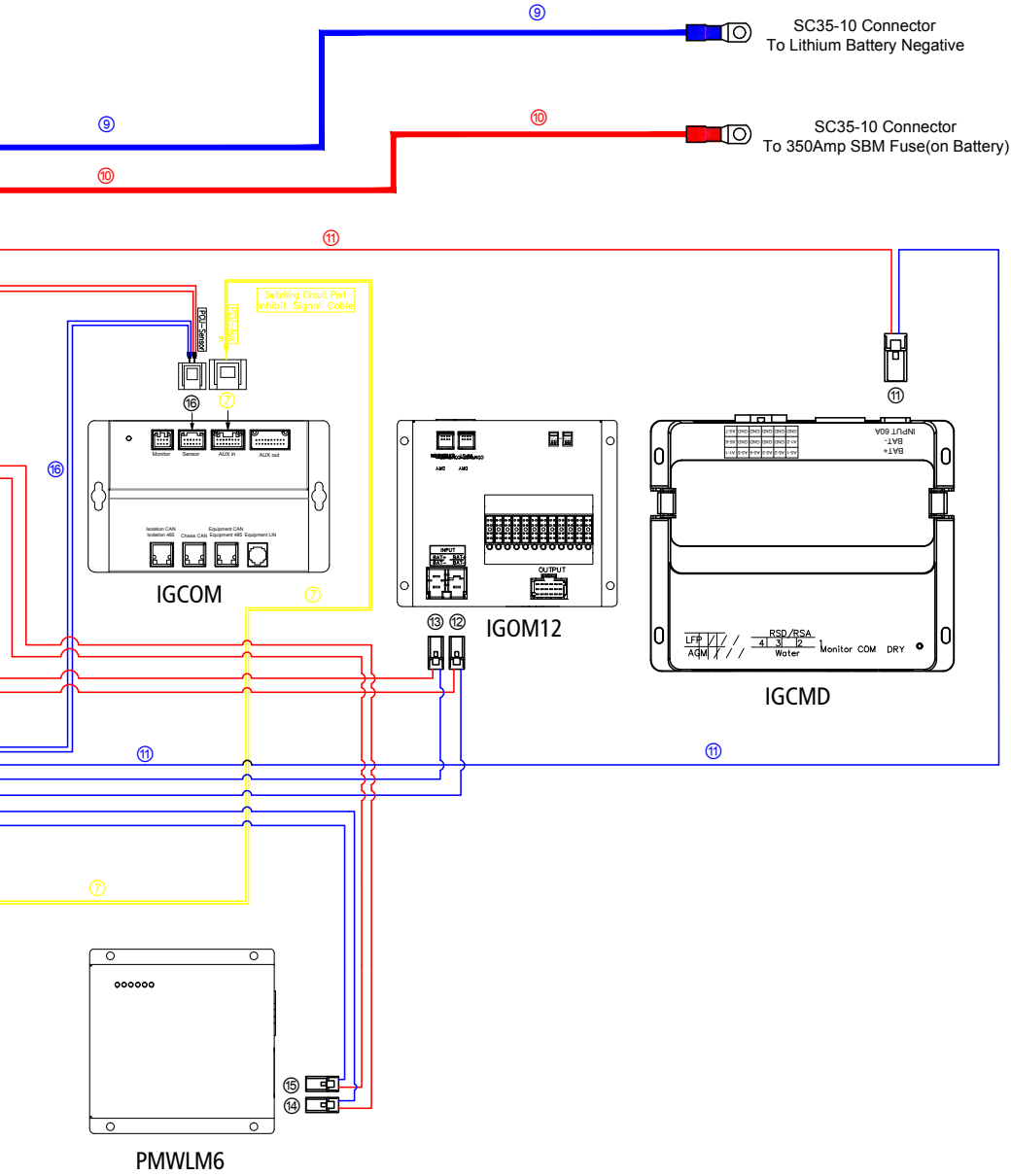

SC1240
SP1000-40
RS485
PMDCS30
DM1230
Power
Fridge/Load
Alternator
Charge
Fault
COM
BATTERY
COM1
COM2
COM3
COM4
COM5
COM6
COM7
COM8
COM9
COM10
①
②
③
⑦
⑧
⑨
⑩

① TO Battery CAN/RS485

② TO Inverter ComMON




SC540
BAT+
PV+
50A Grey Anderson Connector
(To Solar Panel)
80 A
80 A
80 A
100 A
ANM-B4(C4)
FDB-4
JDB-12
50A Grey Anderson Connector
(To Alternator)
Power
Fridge/Load
Alternator
Charge
Fault
Alternator BAT-
Fridge/Load AUXBAT BAT-
Switching Circuit Port Inhibit Signal Cable
PMDCS30


⑨
SC35-10 Connector
To Lithium Battery Negative
⑨
⑩
SC35-10 Connector
To 350Amp SBM Fuse(on Battery)
⑩
⑪
Switching Circuit Port
Inhibit Signal Cable
⑯
⑦
IGCOM
⑯
⑦
⑬ ⑫
IGOM12
⑪
⑪
⑪
INPUT 60A
BAT+
BAT-
LFP
AGM
RSD/RSA
Water
Monitor COM DRY
IGCMD
⑦
⑮
⑭
PMWLM6

WARRANTY STATEMENT

Applicable only to product sold in Australia

Brown & Watson International Pty Ltd of 1500 Ferntree Gully Road, Knoxfield, Vic, telephone (03) 9730 6000, fax (03) 9730 6050, warrants that all products described in its current catalogue (save and except for all bulbs and lenses whether made of glass or some other substance) will under normal use and service be free of failures in material and workmanship for a period of five (5) years (unless this period has been extended as indicated elsewhere) from the date of the original purchase by the consumer as marked on the invoice. This warranty does not cover ordinary wear and tear, abuse, alteration of products or damage caused by the consumer. Projecta solar panels are covered by a 1 year warranty for materials and workmanship and a 20 year warranty for at least 80% power output.

To make a warranty claim the consumer must deliver the product at their cost to the original place of purchase or to any other place which may be nominated by either BWI or the retailer from where the product was bought in order that a warranty assessment may be performed. The consumer must also deliver the original invoice evidencing the date and place of purchase together with an explanation in writing as to the nature of the claim.

In the event that the claim is determined to be for a minor failure of the product then BWI reserves the right to repair or replace it at its discretion. In the event that a major failure is determined the consumer will be entitled to a replacement or a refund as well as compensation for any other reasonably foreseeable loss or damage.

This warranty is in addition to any other rights or remedies that the consumer may have under State or Federal legislation.

IMPORTANT NOTE

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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