# MODULAR
## Power System

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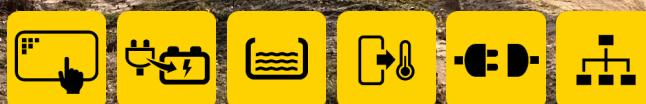
**Compact**
**Flexible**
**Powerful**

Water Sensors

MODULAR
BY DESIGN

*Intuitive touchscreen control with modular plug & play accessories*

# Modular System

*The main building blocks of the power system*

## Touchscreen Displays

### EC940 4" Control Panel

The EC940 control panel provides intuitive touchscreen controls for monitoring and control of lighting, power, water and environment sensors.  It can also control optional accessories such as lithium batteries, solar regulator and ultrasonic water sensors.
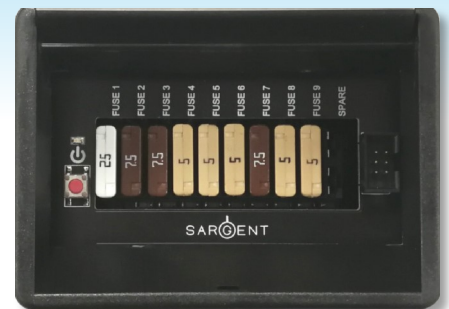
**4 Inch Touchscreen**

**Integrated Clock**

**Built-In Help**

## Control Unit

**12V**

### MC100 Modular Control Unit

The MC100 is the hub of the system, providing power, switching and monitoring for 12 volt equipment such as heating, lighting and water systems.  It also provides protective fusing for all 12 volt circuits, including blown fuse indicators.

**Intelligent Control**

**12V Protection**

**Plug & Play**

**Fuse Blown Indicators**

*For further information and ordering, scan the QR code*

**4" System**

**7" System**

PLUG & PLAY CHARGER
COLOUR TOUCHSCREEN
Solar
LCD
CANBUS COMMUNICATION
Humidity
Water Level
Temperature Sensor
LITHIUM BATTERY

## EC970 7" Control Panel

The EC970 has all features of the EC940 but in a larger format screen for displaying more information. It is also compatible with additional accessories such as AC-DC & DC-DC chargers and Webasto heating systems.
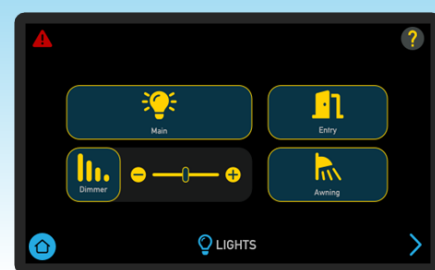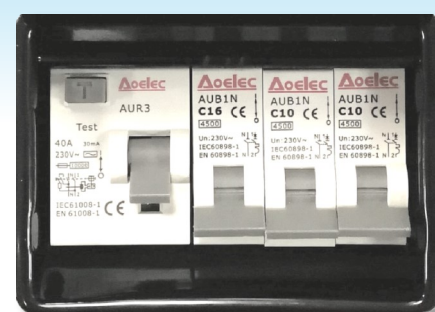
**7 Inch Touchscreen**

**Integrated Clock**

**Built-In Help**

# Mains Protection

## MC200 Modular Consumer Unit

The MC200 provides an RCD for earth leakage protection and MCBs for overcurrent protection of the mains supply. The unit also provides switching for the water heater and battery charger along with a reverse polarity indicator.
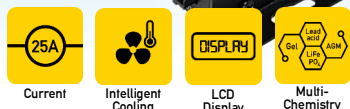
**230V Protection**

**Plug & Play**

# Accessories

*Additional parts for upgrading the system*

## Mains Charger

**CHARGE+**

**PX310-KIT** 20A 3-Stage Charger
* **PXC360-KIT** 25A 3-Stage Charger c/w CANBus

Provides multi-stage charging for most battery types including lithium. The integrated LCD display shows battery charging status. The PSU mode allows the charger to be used without a battery fitted. A silent mode allows the cooling fan to be disabled during night charging. The PXC360 model also allows display of data on the EC970 screen.
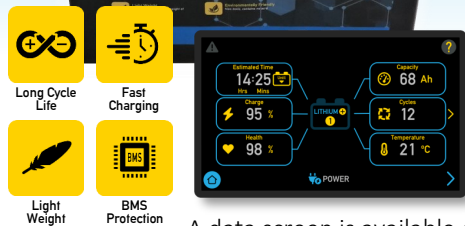
* - Available Q4/25

**Current** | **Intelligent Cooling** | **LCD Display** | **Multi-Chemistry**
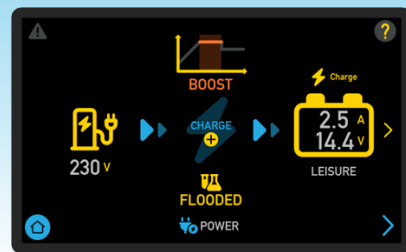
A data screen is available on EC970 displays only

## Lithium Deep Cycle Battery

**LITHIUM+**

**LB70C** 70Ah Battery
**LB100C** 100Ah Battery

Our lithium batteries provide significant advantages over lead acid including reduced weight, longer life, a more useable capacity and faster charging. All data can be displayed on the control panel, allowing efficient power management.
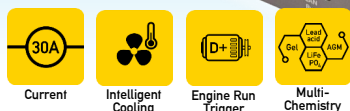
**Long Cycle Life** | **Fast Charging**
**Light Weight** | **BMS Protection**

A data screen is available on EC940 & EC970 displays

## Solar Charger

**300W** **Power** | **MPPT Charging**
**Multi-Chemistry** | **Intelligent Cooling**
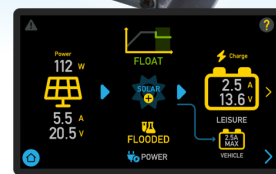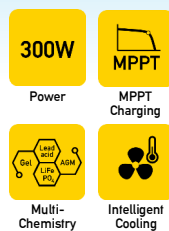
A data screen is available on EC940 & EC970 displays

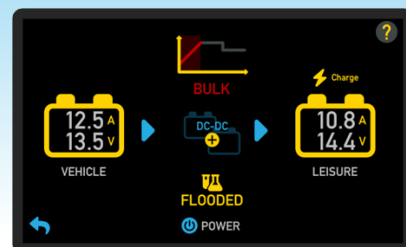*All accessory information can be displayed on the control panel screen*

# DC-DC Charger

### DXC30-KIT 30A 3-Stage DC-DC Charger

Provides up to 30amp multi-stage charging to the leisure battery during driving, ensuring the battery is more fully charged than using a traditional relay system. Compatible with smart alternators and most battery types including lithium.

**Current** — 30A
**Intelligent Cooling**
**Engine Run Trigger**
**Multi-Chemistry**

A data screen is available on EC970 displays <u>only</u>

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## Ultrasonic Water Sensor

### SXC300-KIT2 300W 3-Stage Solar Charger

This solar charger uses MPPT technology to extract up to 30% more energy from a solar panel than standard regulators. A second channel is able to trickle charge the vehicle battery to avoid starting problems.

### WLSUF Fresh Sensor
### WLSUW Waste Sensor

These sensors allow monitoring of fluid levels in fresh or waste water tanks. Contactless measurement improves accuracy and reduces the need for sensor cleaning. The units can easily be calibrated to suit different depths of tank.

**Ultrasonic Sensing**
**IPX7 Fully Sealed**
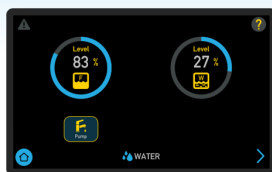
A data screen is available on EC940 & EC970 displays

# Cables & Connectors

*All parts required to get connected*

## CAN Bus Cables

Various cables are available for connecting the CAN Bus communication from each accessory back to the Modular Control Unit.  Select the required type and length from the following table.

| Cable Type | | Length (metres) | Part No |
|---|---|---|---|
| Lumberg > Lumberg | TYPE 1 | 2 | 50100-24B |
| | | 4 | 50100-24D |
| | | 6 | 50100-24F |
| Lumberg > Mini-fit | TYPE 2 | 2 | 50101-24B |
| | | 4 | 50101-24D |
| | | 6 | 50101-24F |
| Mini-fit > Mini-fit | TYPE 3 | 2 | 50102-24B |
| | | 4 | 50102-24D |
| | | 6 | 50102-24F |
| Mini-fit > JST | TYPE 4 | 2 | 50103-24B |
| | | 4 | 50103-24D |
| | | 6 | 50103-24F |

*CAN Bus communication allows the system to be easily expanded*

# CAN Bus Expanders

To provide more CAN Bus connection points, expander PCB's are available
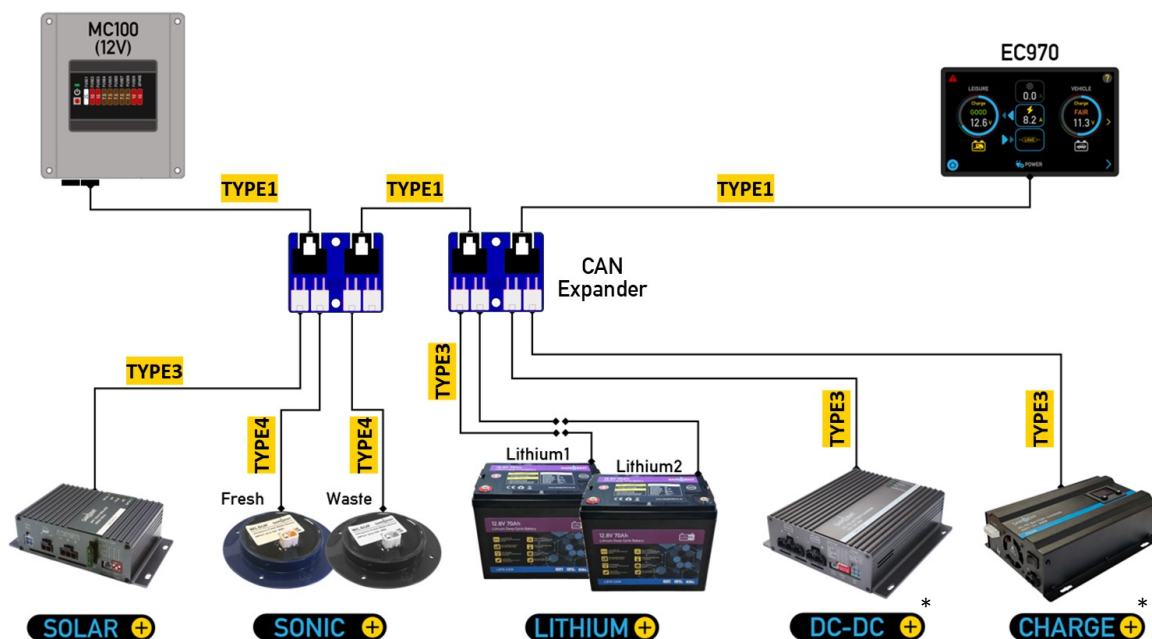
**17461** 2-Way CAN Expander
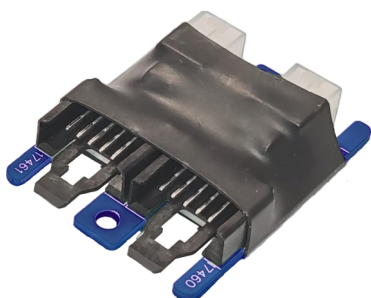


**17830** 4-Way CAN Expander



# Example Installation

Example modular system showing how accessories can be connected using CAN expander and cables



MC100 (12V)

EC970

TYPE1  TYPE1  TYPE1

CAN Expander

TYPE3  TYPE4  TYPE4  TYPE3  TYPE3  TYPE3

SOLAR ⊕  SONIC ⊕  Fresh  Waste  Lithium1  Lithium2  LITHIUM ⊕  DC-DC ⊕ *  CHARGE ⊕ *

*Data screens for DC-DC+ and CHARGE+ are only available on the EC970 displays

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