

Element3

BATTERY TECHNOLOGY



LITHIUM BATTERY PRODUCT MANUAL

ELEMENT3 LITHIUM BATTERY RANGE

This product manual applies to the following Element3 Battery Technology
lithium battery models:

PRO SERIES

E3 12.8V 100Ah Pro Lithium Battery

E3 12.8V 105Ah Slimline Pro Lithium Battery

E3 12.8V 206Ah Slimline Pro Lithium Battery

E3 12.8V 210Ah Pro Lithium Battery

E3 12.8V 300Ah Pro Lithium Battery

E3 12.8V 410Ah Pro Lithium Battery

E3 12.8V 345Ah Troop-Carrier Rear Seat Pro Lithium Battery

E3 12.8V 200Ah Seat Base Pro Lithium Battery

CORE SERIES

E3 12.8V 100Ah Core Lithium Battery

E3 12.8V 200Ah Core Lithium Battery

E3 12.8V 300Ah Core Lithium Battery

E3 12.8V 350Ah Core Lithium Battery

SPECIFICATIONS

PRO SERIES

Capacity	100Ah	105Ah	206Ah	210Ah
Voltage	12.8V			
Rated Energy	1280Wh	1344Wh	2636.8Wh	2688Wh
Max Continuous Discharge Current	150A	150A	250A	200A
Discharge Current Peak (10 sec)	300A	300A	500A	400A
Short Circuit Protection	1200A			
Recommended Charge Current	20A	20A	40A	40A
Max Charge Current	100A	105A	200A	210A
Max Inverter Size	1800W	1800W	3000W	2400W
Max Number of Parallel Batteries	4 of the same model			
Max Number of Series Batteries	4 of the same model			
Low Voltage Trip	10.0V			
High Voltage Trip	14.6V			
Balance Current	2A			

SPECIFICATIONS

PRO SERIES CONT.

Capacity	100Ah	105Ah	206Ah	210Ah
Length (mm)	260	320	461	350
Width (mm)	170	115	115	190
Height (mm)	220	303	321.2	250
Weight (Kg)	12.5	13	22	23
Mounting Orientation	Upright or side			
Charging Voltage	14.2V - 14.6V			
Float Voltage	13.5V - 13.6V			
Cycle Life	4000 cycles at 80% depth of discharge (DOD) at 25°C			
Case Material	Metal with powder coating inside and out			
IP Rating	IP54 (due to vent)			
Terminal	M8			
Terminal Torque	14Nm Max (12Nm Recommended)			
Charging Temp	0°C ~ 60°C			
Discharging Temp	-20°C ~ 65°C			
Storage Temp	10°C ~ 45°C			
Storage Conditions	Ideally 25°C @ 40%-50% State-of-Charge (approximately 13.0V)			
Battery Ventilation Required	Yes - To outside the habitable space as per AS/NZS 3001.2:2022			
Bluetooth	Yes - IOS & Android			

SPECIFICATIONS

PRO SERIES CONT.

Capacity	300Ah	410Ah	345Ah	200Ah
Voltage	12.8V			
Rated Energy	3840Ah	5248Ah	4416Wh	2560Wh
Max Continuous Discharge Current	300A	300A	300A	200A
Discharge Current Peak (10 sec)	450A	600A	450A	400A
Short Circuit Protection	1200A			
Recommended Charge Current	30A	80A	68A	40A
Max Charge Current	300A	400A	300A	200A
Max Inverter Size	3600W	3600W	3600W	2400W
Max Number of Parallel Batteries	4 of the same model			
Max Number of Series Batteries	4 of the same model			
Low Voltage Trip	10.0V			
High Voltage Trip	14.6V			
Balance Current	2A			

SPECIFICATIONS

PRO SERIES CONT.

Capacity	300Ah	410Ah	345Ah	200Ah
Length (mm)	380	371	655	328
Width (mm)	190	333	283	280
Height (mm)	265	300	143	170
Weight (Kg)	29.1	40.2	36.7	22.7
Mounting Orientation	Upright or side			
Charging Voltage	14.2V - 14.6V			
Float Voltage	13.5V - 13.6V			
Cycle Life	4000 cycles at 80% depth of discharge (DOD) at 25°C			
Case Material	Metal with powder coating inside and out			
IP Rating	IP54 (due to vent)			
Terminal	M8			
Terminal Torque	14Nm Max (12Nm Recommended)			
Charging Temp	0°C ~ 60°C			
Discharging Temp	-20°C ~ 65°C			
Storage Temp	10°C ~ 45°C			
Storage Conditions	Ideally 25°C @ 40%-50% State-of-Charge (approximately 13.0V)			
Battery Ventilation Required	Yes - To outside the habitable space as per AS/NZS 3001.2:2022			
Bluetooth	Yes - IOS & Android			

SPECIFICATIONS

CORE SERIES

Capacity	100Ah	200Ah	300Ah	350Ah
Voltage	12.8V			
Rated Energy	1280Wh	2560Wh	3840Wh	4480Wh
Max Continuous Discharge Current	150A	250A	300A	300A
Discharge Current Peak (10 sec)	300A	500A	450A	450A
Short Circuit Protection	1200A			
Recommended Charge Current	20A	40A	60A	70A
Max Charge Current	100A	200A	300A	350A
Max Inverter Size	1800W	3000W	3600W	3600W
Max Number of Parallel Batteries	4 of the same model			
Max Number of Series Batteries	4 of the same model			
Low Voltage Trip	10.0V			
High Voltage Trip	14.6V			
Balance Current	2A			
Length (mm)	260	345	345	384
Width (mm)	168	190	190	194
Height (mm)	209	245	245	255
Weight (Kg)	10.8	18.7	25.1	28.3

SPECIFICATIONS

CORE SERIES CONT.

Capacity	100Ah	200Ah	300Ah	350Ah
Mounting Orientation	Upright or side			
Charging Voltage	14.2V - 14.6V			
Float Voltage	13.5V - 13.6V			
Cycle Life	4000 cycles at 80% depth of discharge (DOD) at 25°C			
Case Material	ABS			
IP Rating	IP67			
Terminal	M8			
Terminal Torque	14Nm Max (12Nm Recommended)			
Charging Temp	0°C ~ 60°C			
Discharging Temp	-20°C ~ 65°C			
Storage Temp	10°C ~ 45°C			
Storage Conditions	Ideally 25°C @ 40%-50% State-of-Charge (approximately 13.0V)			
Bluetooth	Yes - IOS & Android			

GENERAL INSTRUCTIONS

Ensure to read the following instructions prior to use:

- Confirm the DC input voltage is DC12V and that the rated power of the load does not exceed maximum discharge load specific for the unit.
- Ensure to check the insulation, relevant connectors and physical condition of the battery.
- The positive and negative terminal of the battery are copper terminals - M8 internal thread with M8*12 outer hexagon screws.
 - **Red** terminal is the **positive** terminal
 - **Black** terminal is the **negative** terminal
- After the battery is completely discharged ensure to charge the battery within 12 hours.
- **Do not operate if battery voltage falls below 10V.** Cease use immediately and contact us for assistance.
- If the battery is used in series or parallel, it must be ensured that the battery pack has the **same state of charge** and the **same AH rating (must be the same brand)**.
Batteries must be balanced before connecting.

CHARGING INSTRUCTIONS

- 1.Ensure your charger is **lithium iron phosphate (LiFePO4) battery compatible** and the charge current does not exceed the amperage as per the charging specifications on your battery.
- 2.When connecting the charger, ensure to **confirm the positive and negative terminal** of the charger output.
- 3.After charging, ensure to disconnect the charger.

Note: After extended storage, clean the battery electrodes with a clean, dry cloth before charging to prevent poor contact that could cause operational failure.

STORAGE & TRANSPORTATION

To ensure the protection and longevity of your battery it must be stored and transported correctly:

- A **30%-50% state-of-charge (SOC)** must be kept.
- Always check and investigate short circuits.
- Ensure the battery is **kept away from liquids** (e.g., water, oil).
- The battery should be kept at a temperature within 10°C to 45°C in an area where it's dry, clean and well-ventilated when unused.
- The battery is required to be **recharged every 3-6 months when stored for long periods**. The battery must be fully charged then fully discharged every 6 to 12 months.

SAFETY WARNINGS

WARNING - A CONNECTABLE ELECTRICAL INSTALLATION BATTERY SHALL ONLY BE REPLACED BY ONE OF THE SAME TYPE AND SPECIFICATION AS THAT ORIGINALLY FITTED. UPGRADES TO THE BATTERY OR SYSTEM SHALL ONLY BE PERFORMED BY A COMPETENT PERSON.

AS3001.2:2022 Clause 5.4.8

To prevent battery leakage, overheating, fire, explosion, personal injury, and warranty void, strictly follow all safety guidelines below:

- Never immerse the battery in water or expose it to moisture.
- Store in a dry, shaded, cool environment when not in use.
- Always follow manufacturer specifications for operating temperatures (refer above).
- **Never reverse the positive and negative terminals.**
- **Never connect positive and negative terminals with metal objects.**
- Never ship or store batteries with loose metal objects.
- Ensure proper insulation of terminals.

SAFETY WARNINGS **CONT.**

- Never knock, throw or trample the battery.
- Do not pierce, cut or puncture the battery.
- Keep away from fires or heating devices.
- Keep away from strong static or magnetic fields that could damage protective circuits.
- If the battery electrolyte comes into contact with eyes, do not rub them—immediately flush with clean water and seek medical attention to prevent eye injury.
- **Stop using the battery immediately if you notice:**
 - Unusual odours or chemical smells
 - Physical deformation, swelling or cracking
 - Excessive heat during use, storage or charging

QUICK START GUIDE

Turning the Battery ON:

1. Press the switch button and release.
2. The LED light will illuminate and you will hear two beeps.
3. Your battery is now ON.

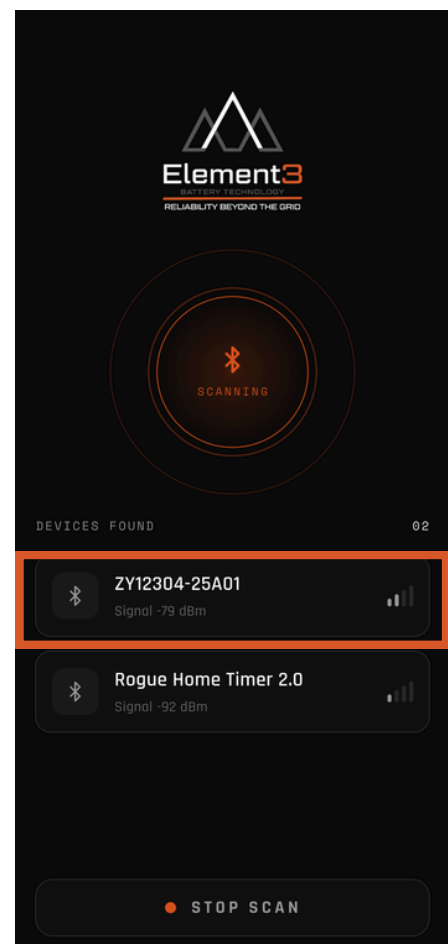
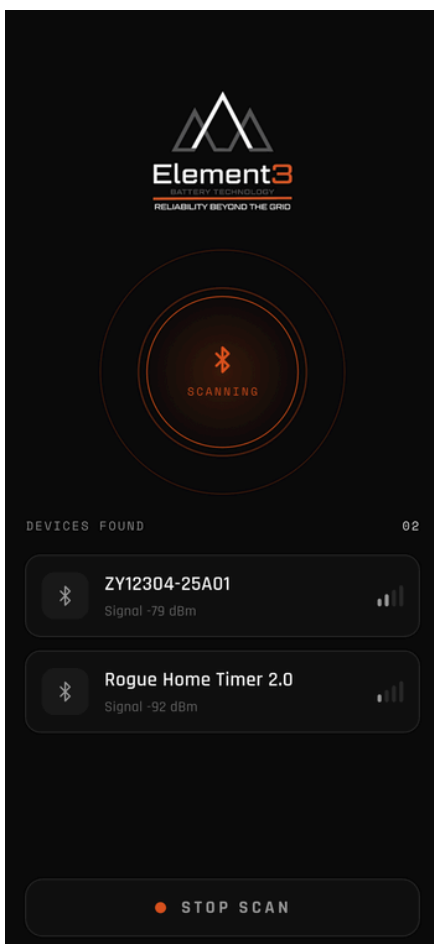
Turning the Battery OFF:

1. Press and hold the switch button for 5 seconds, then release.
2. The red LED ring around the button will turn off and you will hear one beep.
3. Your battery is now OFF.

ELEMENT3 APPLICATION & CONNECTING TO BLUETOOTH



1. Download the 'Element3 Battery Technology' application from the Apple App Store or Google Play Store onto your device.
2. Ensure Bluetooth is enabled for your device and for the 'Element3 Battery Technology' application in your device settings.
3. Turn the battery ON. Press and release the switch button. The LED light will illuminate and you will hear two beeps.

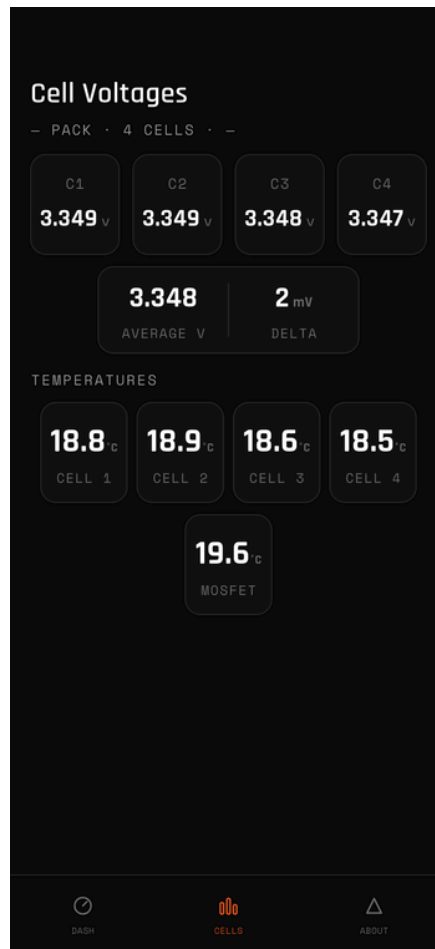


4. Open the 'Element3 Battery Technology' application. The application will automatically scan via bluetooth for your battery.
5. Select your battery from the list of available devices. To locate your device name, refer to the silver label located near the rear of your battery.

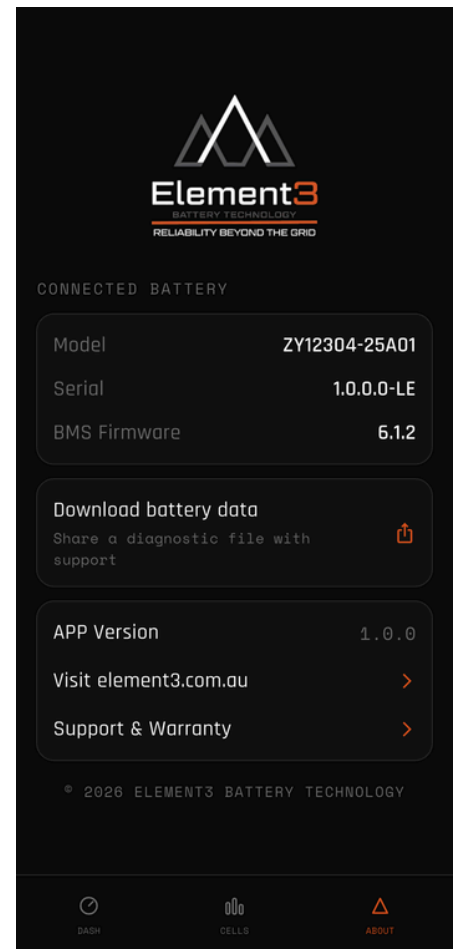
ELEMENT3 APPLICATION & CONNECTING TO BLUETOOTH **CONT.**



‘DASH’



‘CELLS’



‘ABOUT’

6. Your battery information will now be displayed in the application.

Note: If your battery does not appear in the application, ensure it is turned on and that you are within Bluetooth range (approximately 5 metres).

WARRANTY

Element3 lithium batteries are covered by a 7-year warranty. Please scan the QR code to access our full warranty policy.



Warranty Policy

CONTACT US

If you have any questions please contact us via our email or website below:

sales@element3batterytechnology.com.au

element3batterytechnology.com.au

Reliability **beyond** the grid.

ELEMENT3 BATTERY TECHNOLOGY
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