

**MARSHALL**



2024

# DATA SHEET

MARSHALL BLACKBOX ULTRA

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# Marshall BlackBox Ultra (BBU-25-1)

Information about Marshall BlackBox



## Product Overview

Chip	Broadcom BCM2711
Core architecture	64-bit ARM architecture
CPU	Quad core 64-bit ARM-Cortex A72 running at 1.5GHz
GPU	VideoCore VI 3D GPU
Memory	LPDDR4-3200 SDRAM (2GB or 4GB)
Operating System	Boots from Micro SD Card
	Linux operating system

## Specification

### Communication Interfaces

LAN 1x Gigabit Ethernet port

USB 2x USB2 Ports  
2x USB3 Ports

Connectivity Ethernet/Wifi  
Optional RS485

Communications Protocols MODBUS

### Data Login Specifications

Data Polling Rate Dynamic

### External Power Supply (Included)

Input Voltage 230 VAC

Input Frequency 50 Hz

Output Voltage 5 VDC

Output Current 3A

### Mechanical Parameters

Dimensions 370 × 200 × 100 mm

Mounting System DIN Rail

IP IP68

### Environment Parameters

Operating Temperature 0C to 40C

Meter (GRID)	EM530
Model	ZECO
Phase	1,2,3
Connection	RS 485
CT	CT Ratio (2000 Max) Rated Current: 5A

Marshall Blackbox Ultra supports dynamic export control and are compatible with the following inverter brands :-

- **South Australia** -
  - SAPN
- **Queensland** -
  - EnergyQ
- **Victoria** -
  - United Energy
  - Powercor
  - Citipower
  - AusNet
  - Jemena

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
Delta Electronics INC	HXE	H10E (AS4777-2 2020)
		H8E (AS4777-2 2020)
		H9E (AS4777-2 2020)
Fronius Australia Pty Ltd	Tauro	Tauro 50-3-D (AS4777-2 2020)
		Tauro 50-3-P (AS4777-2 2020)
		Tauro Eco 50-3-D (AS4777-2 2020)
		Tauro Eco 50-3-P (AS4777-2 2020)
Primo GEN24	Primo GEN24	Primo GEN24 3.0 (AS4777-2 2020)
		Primo GEN24 4.0 (AS4777-2 2020)
		Primo GEN24 5.0 (AS4777-2 2020)
		Primo GEN24 6.0 (AS4777-2 2020)
		Primo GEN24 10.0 (AS4777-2 2020)
		Primo GEN24 8.0 (AS4777-2 2020)
		Primo GEN24 4.6 (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
Fronius Australia Pty Ltd	Primo GEN24 Plus	Primo GEN24 3.0 Plus (AS4777-2 2020)
		Primo GEN24 4.0 Plus (AS4777-2 2020)
		Primo GEN24 5.0 Plus (AS4777-2 2020)
		Primo GEN24 6.0 Plus (AS4777-2 2020)
		Primo GEN24 10.0 Plus (AS4777-2 2020)
		Primo GEN24 8.0 Plus (AS4777-2 2020)
		Primo GEN24 4.6 Plus (AS4777-2 2020)
	Primo	Primo 3.0-1 (AS4777-2 2020)
		Primo 3.5-1 (AS4777-2 2020)
		Primo 3.6-1 (AS4777-2 2020)
		Primo 4.0-1 (AS4777-2 2020)
		Primo 4.6-1 (AS4777-2 2020)
		Primo 5.0-1 (AS4777-2 2020)
		Primo 5.0-1 AUS (AS4777-2 2020)
		Primo 5.0-1 SC (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
Fronius Australia Pty Ltd	Primo	Primo 8.2-1 (AS4777-2 2020)
		Primo 6.0-1 (AS4777-2 2020)
	ECO	Eco 25.0-3-S (AS4777-2 2020)
		Eco 27.0-3-S (AS4777-2 2020)
	Symo	Symo 3.0-3-M (AS4777-2 2020)
		Symo 3.7-3-M (AS4777-2 2020)
		Symo 4.5-3-M (AS4777-2 2020)
		Symo 5.0-3-M (AS4777-2 2020)
		Symo 6.0-3-M (AS4777-2 2020)
		Symo 7.0-3-M (AS4777-2 2020)
		Symo 8.2-3-M (AS4777-2 2020)
		Symo 10.0-3-M (AS4777-2 2020)
		Symo 12.5-3-M (AS4777-2 2020)
		Symo 15.0-3-M (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
Fronius Australia Pty Ltd	Symo	Symo 17.5-3-M (AS4777-2 2020)
		Symo 20.0-3-M (AS4777-2 2020)
	Symo Gen 24	Symo GEN24 3.0 (AS4777-2 2020)
		Symo GEN24 4.0 (AS4777-2 2020)
		Symo GEN24 5.0 (AS4777-2 2020)
		Symo GEN24 10.0 (AS4777-2 2020)
		Symo GEN24 6.0 (AS4777-2 2020)
		Symo GEN24 8.0 (AS4777-2 2020)
	Symo Gen 24 Plus	Symo GEN24 3.0 Plus (AS4777-2 2020)
		Symo GEN24 4.0 Plus (AS4777-2 2020)
		Symo GEN24 5.0 Plus (AS4777-2 2020)
		Symo GEN24 10.0 Plus (AS4777-2 2020)
		Symo GEN24 6.0 Plus (AS4777-2 2020)
		Symo GEN24 8.0 Plus (AS4777-2 2020)



## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
Fronius Australia Pty Ltd	Fronius Symo Advanced	Symo Advanced 10.0-3-M (AS4777-2 2020)
		Symo Advanced 12.5-3-M (AS4777-2 2020)
		Symo Advanced 15.0-3-M (AS4777-2 2020)
		Symo Advanced 17.5-3-M (AS4777-2 2020)
		Symo Advanced 20.0-3-M (AS4777-2 2020)
Hanwha Solutions Corporation	Q.HOME CORE	Q.VOLT H5S (AS4777-2 2020)
		Q.VOLT A5S (AS4777-2 2020)
SMA Australia Pty Ltd	Sunny Tripower	STP3.0-3AV-40 (AS4777-2 2020)
		STP5.0-3AV-40 (AS4777-2 2020)
		STP6.0-3AV-40 (AS4777-2 2020)
		STP4.0-3AV-40 (AS4777-2 2020)
		STP10.0-3AV-40 (AS4777-2 2020)
		STP8.0-3AV-40 (AS4777-2 2020)
		STP 110-60 (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
SMA Australia Pty Ltd	Sunny Boy	SB3.0-1AV-41 (AS4777-2 2020)
		SB4.0-1AV-41 (AS4777-2 2020)
		SB5.0-1AV-41 (AS4777-2 2020)
		SB6.0-1AV-41 (AS4777-2 2020)
	Sunny Tripower CORE1	STP 50-41 (AS4777-2 2020)
	Sunny Tripower X	STP 12-50 (AS4777-2 2020)
		STP 15-50 (AS4777-2 2020)
		STP 20-50 (AS4777-2 2020)
		STP 25-50 (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
SolarEdge Technologies Ltd	Three Phase Inverter	SE25K (AS4777-2 2020)
		SE30K (AS4777-2 2020)
		SE33.3K (AS4777-2 2020)
		SE100K (AS4777-2 2020)
		SE50K (AS4777-2 2020)
		SE66.6K (AS4777-2 2020)
		SE82.8K (AS4777-2 2020)
		SE10K (AS4777-2 2020)
		SE15K (AS4777-2 2020)
		SE17K (AS4777-2 2020)
		SE5K (AS4777-2 2020)
		SE7K (AS4777-2 2020)
		SE8.25K (AS4777-2 2020)
		SE10K-AUB (AS4777-2 2020)
		SE5K-AUB (AS4777-2 2020)
		SE7K-AUB (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

Inverters	Series	Model number
SolarEdge Technologies Ltd	Three Phase Inverter	SE8.25K-AUB (AS4777-2 2020)
	Single Phase Inverter	SE10000H-MM (AS4777-2 2020)
		SE3000H-MM (AS4777-2 2020)
		SE4000H-MM (AS4777-2 2020)
		SE5000H-MM (AS4777-2 2020)
		SE6000H-MM (AS4777-2 2020)
		SE8250H-MM (AS4777-2 2020)
		SE10000H (AS4777-2 2020)
		SE3000H (AS4777-2 2020)
		SE4000H (AS4777-2 2020)
		SE5000H (AS4777-2 2020)
		SE6000H (AS4777-2 2020)
		SE8250H (AS4777-2 2020)

## Compliant Products

Inverters, Batteries, and EV Chargers

### Batteries

DELTA

BX6.3

### EV Chargers

DELTA

Delta AC Max Smart

Delta AC Max Basic (Only applicable if an inverter is not on the site)

## Dynamic Export Control Approved Networks



SAPN Accredited



ENERGYQ Accredited



United Energy Accredited



Powercor Australia Accredited



CitiPower Accredited

# AusNet

AusNet Accredited



SAPN Accredited

**MARSHALL**

[www.datamarshall.au](http://www.datamarshall.au)

03 4422 4455

[marshall@zeco.au](mailto:marshall@zeco.au)

**ZECO Energy**

6C/148 Chesterville Road,  
Moorabbin  
VIC Australia 3189