PS100

APPLICATIONS

- **Peak shaving:**
  - Reduces electricity costs by supplying stored energy during periods of high demand, lowering peak load charges
- **Load shifting:**
  - Stores energy during off-peak hours and discharges during peak hours, optimising energy and costs
- **Ancillary grid services:**
  - Provides frequency support by quickly injecting or absorbing power to help stabilise grid frequency
  - Can participate in voltage regulation and other grid-balancing services
- **Bidirectional operation:**
  - Allows both charging (from grid or renewables) and discharging (to grid or loads), enabling flexible energy management
  - Support CHP engines during load fluctuation
- **Uninterruptible power supply:**
  - Supplies critical loads during outages by switching to island mode
  - Automatically re-synchronises with grid when available

WEIGHT AND DIMENSIONS

Length:	1600mm
Width:	800mm
Height:	500mm
Weight:	320 Kg
Lifting options:	Corner lifting eyes

COMMUNICATION AND CONTROL

Communications: Canbus 2.0B, RS232

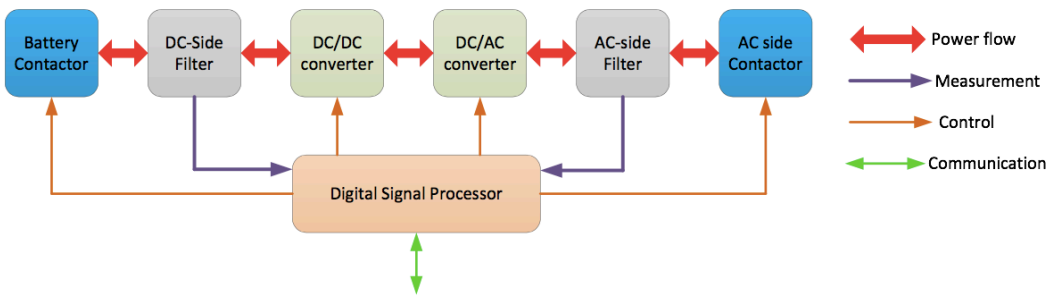
OPERATING MODES

- Stand alone Off-grid operation with black start capability
- Grid connected operation with UPS functionality (uninterruptible power supply)
- Scalable parallel connection

PERFORMANCE

Nominal Power:	100KW
Nominal Frequency:	50 Hz
Minimum battery DC voltage:	400V
Maximum battery DC voltage:	700V
Nominal DC current:	250A
Nominal AC voltage:	440V/400V line to line
Maximum current per phase:	200A

Minimum displacement power factor:	0.8 lead/lag
Maximum voltage THD (off-grid):	<3% at rated power
Response time (0 to full power):	<0.5 second
Operating temperature:	- 15 °C up to + 40 °C
Efficiency:	>96% one way
Cooling:	Forced air-cooled
Grid code:	G99



Modular
- Multiple units in parallel
- 0.7MW in one side of 20 foot container
- 1.4MW in one side of 40 foot container

Robust
- Designed for long life
- Minimal maintenance
- Efficiency > 96%

Smart Controller
- Reactive power control
- Dynamic grid support
- Fast response
- Integrated communication