HIGH PERFORMANCE ENERGY SYSTEMS
MODULAR PRODUCT RANGE
Hyperdrive's modular design provides manufacturers with the opportunity to deploy a common architecture across a range of niche electric and hybrid vehicles, portable and stationary energy storage systems.

**HIGH PERFORMANCE AS STANDARD**

Hyperdrive’s modular battery technology provides a complete solution; a high performance lithium-ion NMC battery pack with built in BMS ready for easy deployment in a range of electric vehicles, stationary and portable energy storage systems.

**HIGH PERFORMANCE ENERGY SYSTEMS**

- **High energy density**
  - up to 156 Wh/kg
- **100% depth of discharge available**
- **2,000 cycles**
- **Fast & efficient charging**
  - up to 132 amps
- **Wide operating temperatures**
  - charge and discharge
  - -20 + 45 and -26 + 60 degrees Celsius

**MULTIPLE SECTOR APPLICATIONS**

Hyperdrive's modular design provides manufacturers with the opportunity to deploy a common architecture across a range of niche electric and hybrid vehicles, portable and stationary energy storage systems.

- **Global manufacturers who have a diverse product range**
- **Low to medium volume OEM’s who benefit from economies of scale**
- **Product developers who must react quickly to new market demand**

- Construction Equipment
- Autonomous Vehicles
- Airport Fleets
- Residential Energy Storage
- Portable Energy Storage
- Grid Scale Energy Storage
- Warehouse Robots
- Municipal Vehicles
- Stationary Energy Storage
A standard design, the modular product range is highly configurable for a range of different applications, providing a proven and best value solution that is flexible, powerful and scalable.
PROVEN TRACK RECORD

Providing cleaner options for supplying portable power to construction sites, temporary events and utility response.

**Diesel Hybrid Electric:**
- Battery inverter generator units of 40kVA output used on network faults affecting an estimated 1 to 7 domestic customers on single or three phase networks.
- Pack Arrangement: 12P
- Voltage: 40.6-58.1V
- Capacity: 42kWh

**Ground Power Unit (GPU) for trials at major European airport.**
- Pack Arrangement: 7S7P
- Voltage: 284.2-406.7V
- Capacity: 171kWh

**Battery Energy Storage:**
- Fully electric, zero emissions aircraft ground power equipment.
- Pack Arrangement: 7S7P
- Voltage: 284.2-406.7V
- Capacity: 171kWh

**Providing a high performance technology platform accelerating the electrification of construction machines and delivery vehicles.**

**Electric Hydraulic:**
- Electrification of an excavating machine for a leading OEM.
- Pack Arrangement: 4P
- Voltage: 40.6-58.1V
- Capacity: 14kWh
- Peak Current: 200A
- Peak Power: 9kW Peak

**Powering a new generation of electric municipal vehicles to reduce carbon emissions in major cities across the world.**

**Fully Electric:**
- Street sweeper for municipal and contractor use in towns and shopping centres.
- Pack Arrangement: 10P
- Voltage: 40.6-58.1V
- Capacity: 35kWh

**Pack Option A**
- **Nominal Voltage:** 52.5V
- **Max. Voltage:** 58.1V (4.15 V per cell)
- **Min. Voltage:** 43.4V (3.1 V per cell)
- **Nominal Capacity:** 66.2 Ah
- **Energy:** 3.46 kWh
- **Number of Cells/pack:** 28
- **Cell Configuration:** 145 2P
- **Cell Chemistry:** Manganese Laminated Lithium-ion
- **Power Terminal Type:** AMPHENOL SLPRB50TPS – B [Black] BATTERY V-
- **BMS:** Integrated
- **Fuse Fitted:** 400 A
- **Max. Current (continuous):** 132 A
- **Series Configuration:** Maximum 11 Packs in series (normal applications; variance subject to agreement with Hyperdrive)
- **Parallel Configuration:** Maximum 15 packs (or strings of packs) in parallel
- **Certification:** UN 38.3
- EN61000-6-1 Immunity for residential, commercial and light industrial
- EN61000-6-2 Immunity for industrial environments
- EN61000-6-3 Emissions for residential commercial and light industrial
- EN61000-6-4 Emissions for industrial environments
- EMC EN50522 Class A Certified (Emissions and Immunity)
- RoHS Directive
- WEEE Directive

**Pack Option B**
- **Nominal Voltage:** 44.4V
- **Max. Voltage:** 49.8V (4.15 V per cell)
- **Min. Voltage:** 37.2 V (3.1 V per cell)
- **Nominal Capacity:** 111.4 Ah
- **Energy:** 4.94 kWh
- **Number of Cells/pack:** 24
- **Cell Configuration:** 125 2P
- **Cell Chemistry:** Manganese Laminated Lithium-ion
- **Power Terminal Type:** AMPHENOL SLPRB50TPS – R [Red] BATTERY V+
- **BMS:** Integrated
- **Fuse Fitted:** 400 A
- **Max. Current (continuous):** 132 A
- **Series Configuration:** Maximum 13 Packs in series (normal applications; variance subject to agreement with Hyperdrive)
- **Parallel Configuration:** Maximum 15 packs (or strings of packs) in parallel
- **Certification:** UN 38.3
- EN61000-6-1 Immunity for residential, commercial and light industrial
- EN61000-6-2 Immunity for industrial environments
- EN61000-6-3 Emissions for residential commercial and light industrial
- EN61000-6-4 Emissions for industrial environments
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