

# Hand-portable **Automotive Power**

JUMP STARTERS **ACCESSORIES** 























# Leaders in portable automotive jump starters



Twenty-five years ago, starting vehicles with flat batteries required a set of jump leads from car to car or a pair of old truck batteries in a supermarket trolley – how things have changed. Back then, aviation battery technology using ultra-thin pure lead plates in sealed cells was delivering extraordinary instant power for turbine starting using batteries small enough to be easily portable. The technology was perfect for portable battery packs for vehicle starting.

It was 25 years ago that Powervamp's founder saw the potential to use this compact aviation power source in the transport industry, and so in January 1994 Powervamp (the name derived from power = volts x

amps) was formed to design, build and sell a range of portable battery packs for the starting of every type of engine.

Compared with jump leads or homemade battery carts, when first developed the new portable packs were considered expensive. However, one word summed up the key benefit of this advanced battery technology and the money it saved throughout the motor and transport industry: 'time'.

The time it took to move two vehicles close enough to use jump leads or to drag a crude trolley with batteries between closely parked trucks was history! Engines were now started in seconds. New and used car sales, construction machinery, diesel trains, bus and truck fleets, helicopters and aircraft, all required the Powervamp product, and the benefits the product brought in productivity and safety were instantly recognised.

During the thousands of demonstrations and product training sessions across every sector of the transport industry, vast experience was gained that was fed to Powervamp's designers. From case design to output cable lengths, from crocodile clip design to battery pack capacity, only Powervamp recognised exactly what was required, leading the way and guickly becoming the first choice of the professional user.

The company's successful product designs were developed for aviation use and a range of aircraft turbine starting packs – both hand-portable and trolley-mounted – were developed. So successful were these that civil and military users now rely on them in more than 60 countries, with regional airlines using Powervamp's latest 28 volt DC Coolspool battery carts daily, on scheduled passenger services in countries around the world.

Powervamp leads the way in quality and performance. Competitors have tried to match our products but none has the experience that years of selling direct to the end user has given Powervamp. That's why our crocodile clips are the best in the industry and our batteries by EnerSys have no equal. We have always designed for performance and durability. If an engine is capable of starting, then a Powervamp pack can be relied on to deliver the sustained power to do the job, time after time.



#### **Richard Roller**

Chairman and company founder

#### NOTES:

\* Peak amps: Throughout the catalogue, the specifications include reference to peak amps. Please note this is a theoretical calculation of the instantaneous current from a momentary dead short across the battery terminals. It is not representative of the power delivered at the croc clips which is significantly less, due to cable losses and other factors, and is shown only for comparative purposes.

#### DISCLAIMER

The information and data within this brochure regarding pack size, performance and engine models is given in good faith as a guide only. The company accepts no responsibility for errors and omissions.

# Products



MR26 12V dedicated voltage	2–3
TB1224HDD 12/24V dual voltage	4-5
Tower Pack 12/24V dedicated or dual voltage	6-7
Nato Range Nato 175 12/24V dual voltage Nato 200 12/24V dual voltage Nato 200 Twin 12/24V dual voltage	8-11
Go-Cart 12V or 24V dedicated voltage	12-13
Accessories and spares	14-15
Why Powervamp?	16

# MR26



## **MR26**

# HIGHLY EFFICIENT, LOW-COST 12V PROFESSIONAL JUMP START PACK

The MR26 is a high-powered professional jump starter designed for the frequent starting of medium to large sized 12V engines. The exceptionally tough polyethylene case is shatterproof, making it ideal for use in the most demanding of commercial environments.

The MR26 shares many of the safety features associated with Powervamp's premium range of jump starters such as reverse polarity audible warning and voltage spike suppression circuitry for ECU protection.

The standard 2m, 25mm² highly flexible output cables allow the operator to safely connect to a flat battery within the engine bay whilst the pack remains on the ground.

The cables are detachable to allow for easy storage or replacement. The cables terminate with 500A braided croc clips, ensuring an equal power delivery with minimal voltage loss.

The ergonomically designed case houses a powerful 26Ah dry cell battery isolated by a robust 500A key switch isolator with dustcover. The pack also has a 4 LED battery status display to allow monitoring of the battery capacity.

The MR26 is supplied with a 2.3A internal charger and detachable 240V AC power cable.

Optional accessories include a 10A fast charger and an on-board charge kit (OBCK) to allow the pack to be charged from a 12V DC vehicle cigarette/auxiliary socket.

#### **Features**

- High powered sealed lead acid dry cell battery
- 2.3A, 3-stage internal charger
- 4 LED status display
- 2m (6ft) output lead with 500A croc clips
- Tough polyethylene case
- Audible reverse polarity warning buzzer
- Voltage spike protection PCB
- 12V DC auxiliary socket for external charging and 12V DC accessories
- 500A output key switch isolator



See the MR26 in action at Manheim Car Auctions on our YouTube channel

#### **Typical engines**

Petrol engines	up to 7 litres
Diesel engines	up to 3.5 litres













#### Supplied as standard with:





#### Optional extras







Peak amps*	2400A
Nominal voltage	12V DC
Standing voltage	12.8V DC
Amp/hour capacity	26Ah @ 10hr rate (20°C)
Operating temp	-40°C to +45°C (-40°F to +114°F)
Case	Moulded impact resistant polyethylene
Automotive cable	2m (6ft) lead set with 500A croc clips
Charger	12V, 2.3A, 3-stage / 100-240V AC / 50-60Hz / internal charger
Dimensions	H 355mm (14in), L 180mm (7in), W 160mm (6in)
Weight	13.8kg (30lb)

# TB1224HDD



## **TB1224HDD**

## ROBUST DUAL VOLTAGE JUMP START PACK - FOR THE HARSHEST OF WORKING ENVIRONMENTS

The TB1224HDD is a robust 12V/24V jump start pack designed for heavy engine starting. The increased battery capacity is ideal for starting bus, truck and plant engines or where maintenance operations such as fuel bleeding, oil pressure build-up and tail-lift cycling are also required.

The tough powder-coated steel case is designed to deal with the harshest working environments and houses  $2 \times 26Ah$  dry-cell batteries isolated by a heavy-duty 1000A key switch isolator.

The pack is fitted with  $2 \times 2.3A$  independent internal chargers to maintain the batteries separately, ensuring maximum longevity is achieved

The TB1224HDD shares many of the safety features associated with Powervamp's premium range of jump starters such as reverse polarity audible warning and voltage spike suppression circuitry for ECU protection.

The standard 2m, 50mm<sup>2</sup> highly flexible output cables allow the operator to safely connect to a flat battery within the engine bay with the pack securely on the ground.

The cables terminate with fully cast 1000A braided croc clips, ensuring an equal power delivery with minimal voltage loss. The cables are detachable to allow for easy storage or replacement.

Optional accessories include bus plug (cowbell) lead sets and an on-board charge kit (OBCK) to allow the pack to be charged from a 12V DC vehicle cigarette/auxiliary socket.

#### **Features**

- High powered sealed lead acid AGM battery
- 2 x 2.3A, 3-stage internal chargers
- LED status display
- 2m (6ft) output lead with 1000A croc clips
- Tough powder-coated steel case
- Audible reverse polarity warning buzzer
- Voltage spike protection PCB
- 12V DC auxiliary socket
- 1000A output key switch isolator

#### Typical engines

Petrol engines	up to 7 litres	
Diesel engines	un to 14 litres	















#### Supplied as standard with:





#### Optional extras













Peak amps*	2400A
Nominal voltage	12V / 24V DC
Standing voltage	12.8V / 25.6V DC
Amp/hour capacity	26/26Ah @ 10hr rate (20°C)
Operating temp	-40°C to +45°C (-40°F to +114°F)
Case	Powder-coated steel
Automotive cable	2m (6ft) lead set with 1000A croc clips
Charger	2 x 12V, 2.3A, 3-stage / 100-260V AC / 50-60Hz / internal chargers
Dimensions	H 290mm (11in), L 380mm (15in), W 138mm (5in)
Weight	27kg (60lb)

# Tower Pack



## Tower Pack

## DEDICATED OR DUAL VOLTAGE JUMP START PACK - IDEAL FOR CRAMPED WORKING ENVIRONMENTS

The Tower Pack is designed primarily for heavy engine starting. The pack is available as a dedicated 12V, 24V, or 12V/24V DC dual voltage version. The increased battery capacity is ideal for using within the bus, truck and plant industries for maintenance operations such as fuel bleeding, oil pressure build-up, tail-lift cycling as well as multi engine starting.

The exceptionally tough polyethylene case is shatterproof and is ideal for use in the most demanding of commercial environments. The high 'waistline' enables the pack to be operated in snow or flooded sites up to 300mm, without the risk of water ingress.

The unique design and small overall footprint makes the pack ideal for service vans where space is limited.

The Tower Pack shares many of the safety features associated with Powervamp's premium range of jump starters such as reverse polarity audible warning and voltage spike suppression circuitry for ECU protection. The pack is also fitted with a 750A fused output to protect the battery from a short circuit or excessive cranking.

The standard 2m, 50mm<sup>2</sup> highly flexible output cables allow the operator to safely connect to a flat battery within the engine bay with the pack securely on the ground.

The cables terminate with fully cast 1000A braided croc clips, ensuring an equal power delivery with minimal voltage loss. The cables are detachable to allow for easy storage or replacement.

The Tower Pack is supplied with a 10A external charger and detachable 240V AC power cable.

Optional accessories include bus plug (cowbell) lead sets, a powerful 24V DC inspection lamp, and an on-board charge kit (OBCK) to allow the pack to be charged from a 12V DC vehicle cigarette/auxiliary socket.

#### **Features**

- High powered sealed lead acid AGM battery
- 12V, 10A, 3-stage external charger
- 4 LED status display
- 2m (6ft) output lead with 1000A croc clips
- Tough polyethylene case
- Audible reverse polarity warning buzzer
- Voltage spike protection PCB
- External 750A fuse output protection
- 12V and 24V DC auxiliary socket for external charging and accessories
- 1000A output key switch isolator

#### Typical engines

Petrol engines	up to 7 litres
Diesel engines	up to 14 litres















#### Supplied as standard with:





#### Optional extras













	12V	24V	12/24V		
Peak amps*	4800A	2400A	2400A		
Nominal voltage	12V DC	12V DC			
Standing voltage	12.8V DC 25.6V DC 12.8/25.6V DC				
Amp/hour capacity	26/26Ah@	26/26Ah @ 10 hr rate (20°C)			
Fuse rating	750A				
Operating temp	-40°C to +45°C (-40°F to +114°F)				
Case	Moulded impact resistant polyethylene				
Automotive cable	2m (6ft) lead set with 1000A croc clips				
Charger	12V, 10A, 100-230V AC / 50-60Hz external charger				
Dimensions	H 570mm (22in), L 180mm (7in), W 158mm (6in)				
Weight	21kg (55lb)				

# Nato Range



# Nato 175 / Nato 200 / Nato 200 Twin

# 12/24V HEAVY DUTY JUMP START PACKS FOR LARGE COMMERCIAL ENGINES

The premium Nato range of 12/24V jump start packs have been designed for the multi starting of large commercial engines. The packs are fitted with high capacity AGM batteries capable of delivering massive cranking power, making them ideal for maintenance operations such as fuel bleeding, oil pressure build-up, tail-lift cycling as well as frequent engine starting.







# Nato 175







## Nato 200





#### **NATO 175 AND NATO 200**

The Nato 175 is fitted with 34Ah and 45Ah dry cell batteries and the Nato 200 with 2  $\times$  45Ah batteries, isolated by twin heavy-duty 1000A key switch isolators with dustcovers. All 12V and 24V outputs are protected against short circuit, or excessive engine cranking, by individual 750A fuses.

The packs are fitted with  $2\times 2.3A$  independent internal chargers that charge the batteries separately, ensuring maximum battery longevity is achieved.

The 3-stage chargers also have a 3 coloured LED to display the status of each battery during its charge cycle.

The standard 2m, 50mm<sup>2</sup> highly flexible output cables allow the operator to safely connect to a flat battery within the engine bay with the pack securely on the ground.

The cables terminate with fully cast 1000A braided croc clips, ensuring an equal power delivery with minimal voltage loss. The cables are detachable to allow for easy storage or replacement.

Optional accessories include bus plug (cowbell) lead sets, a powerful 24V DC inspection lamp and an on-board charge kit (OBCK) to allow the pack to be charged from a 12V DC vehicle cigarette/auxiliary socket. Longer lead sets are also available.

#### **NATO 200 TWIN**

The Nato 200 Twin comprises 2 x Nato 200 battery packs, supplied in a heavy-duty trolley, and paralleled with an output yoke to double the power. Each Nato 200 is fitted with 2 x 2.3A independent internal chargers that charge the batteries separately, ensuring maximum battery longevity is achieved.

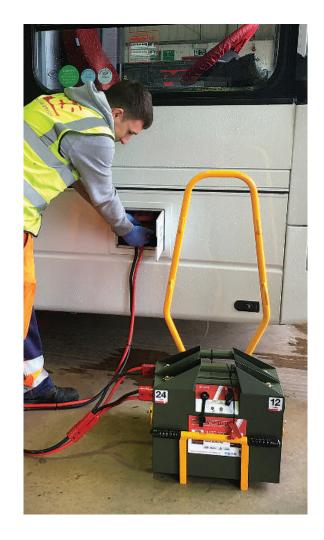
### **Features**

#### Nato 175 and Nato 200:

- High powered sealed lead acid AGM battery
- 2 x 2.3A, 3-stage internal chargers
- External 750A fused protection
- LED charging status display
- 2m (6ft) output lead with 1000A croc clips
- Powder-coated steel case
- Audible reverse polarity warning buzzer
- Voltage spike protection PCB
- 12/24V DC auxiliary socket for external charging and accessories
- 2 x 1000A output key switch isolator

#### Nato 200 Twin only:

- 4 x 2.3A, 3-stage internal chargers
- 4 x 1000A output key switch isolator
- Heavy-duty double trolley



#### Supplied as standard with:

#### ALL MODELS:





#### PLUS, FOR NATO 200 TWIN ONLY:





#### Optional extras

#### ALL MODELS:











#### PLUS, FOR NATO 175 AND NATO 200 ONLY:



	Nato 175	Nato 200	Nato 200 Twin
Peak amps*	2100A	2450A	4900A
Nominal voltage	12V / 24V DC		
Standing voltage	12.8V / 25.6V DC		
Amp/hour capacity	34/45Ah @ 10hr rate (20°C)	45/45 Ah @ 10hr rate (20°C)	45/45/45/45Ah @ 10hr rate (20°C)
Fuse rating	750A		
Operating temp	-40°C to +45°C (-40°F to +114°F)		
Case	Powder-coated mild steel		
Automotive cable	2m (6ft) lead set with 1000A croc clips		plus heavy duty parallel connector
Charger	2 x 12V, 2.3A, 3-stage / 100-240V AC / 50-60Hz / internal chargers	2 x 12V, 2.3A, 3-stage / 100-260V AC / 50-60Hz / internal chargers	4 x 12V, 2.3A, 3-stage / 100-260V AC / 50-60Hz / internal chargers
Dimensions	H 435mm (17in), L 455mm (18in), W 110mm (4in)		H 1120mm (44in), L 555mm (21in), W 465mm (18in)
Weight	30kg (66lb)	33kg (72lb)	85kg (191lb) including trolley

# Go-Cart



## Go-Cart

## SUSTAINED CRANKING OR NUMEROUS MULTI-STARTS - ALL ON ONE CHARGE

The ultra powerful Go-Cart is available as a dedicated 12V or 24V DC start cart. Configured for 24V, the cart is designed for the multi starting, or sustained cranking, of large commercial and plant engines.

However, configured for 12V, the cart will start a huge quantity of 12V engines on a single charge – synonymous with auction houses / car supermarkets.

The Go-Cart is fitted with high capacity, maintenance free, 45Ah dry cell batteries capable of delivering massive cranking power. The cart is ideal for maintenance operations such as fuel bleeding, oil pressure build-up, tail-lift cycling as well as frequent engine starting.

The batteries are isolated with a heavy-duty push/pull isolator switch and the output is protected against short circuit, or excessive engine cranking, by a 750A external fuse.

The standard 2m, 50mm² highly flexible output cables terminate with fully cast 1000A braided croc clips, ensuring an equal power delivery with minimal voltage loss. The cables are detachable to allow for easy storage or replacement and the cart is supplied with a 10A, 3-stage external charger.

Optional accessories include bus plug (cowbell) lead sets, a powerful 24V DC inspection lamp and an on-board charge kit (OBCK) to allow the pack to be charged from a 12V DC vehicle cigarette/auxiliary socket. Longer lead sets are also available.

#### **Features**

- High powered sealed lead acid dry cell battery
- 24V, 10A, 3-stage external charger
- 2m (6ft) output lead with 1000A croc clips
- Tough powder-coated steel case with integral trolley
- Audible reverse polarity warning buzzer
- Voltage spike protection PCB
- 20A fused auxiliary socket
- External 750A fuse output protection
- 12V or 24V DC auxiliary socket for external charging and accessories
- Heavy-duty push/pull isolator switch





#### Supplied as standard with:







#### Optional extras











	12V	24V			
Peak amps*	5200A	2600A			
Nominal voltage	12V DC	24V DC			
Standing voltage	12.8V DC	25.6V DC			
Amp/hour capacity	42/42Ah @ 1	42/42Ah @ 10hr rate (20°C)			
Fuse rating	750A				
Operating temp	-40°C to +45°C (-40°F to +114°F)				
Case/trolley	Powder-coated mild steel with foam filled tyres				
Automotive cable	2m (6ft) lead set with 1000A croc clips				
Charger	10A, 110-220V AC / 50-60Hz external charger /				
Dimensions	H 1070mm (42in), L 560mm (22in) x W 370mm (15in)				
Weight	50kg (110lb)				

# Accessories and spares

Accessories supplied as standard •

Optional accessories o

	MR26	TB1224HDD	Tower Pack	Nato 175	Nato 200	Nato 200 Twin	Go-Cart
UK mains lead	•	•	•	•	•	•	•
2m croc lead with 500A croc clips	•						
2m croc lead with 1000A croc clips		•	•	•	•	•	•
4m croc lead set	0	0	0	О	0	О	0
12V, 4A external charger	О						
12V, 10A external charger	0		•				
24V, 10A external charger							•
Parallel output yoke						•	
On-board charge kit	0	0	0	О	0	О	0
2m cowbell lead		0	О	О	0	О	0
4m cowbell lead		0	0	О	0	О	0
24V inspection lamp			0	О	0	О	0
Tower Pack trolley			О				
Universal trolley		0		О	0		
Double trolley						•	

## Leads



UK mains lead



2m croc lead with 500A or 1000A croc clips



4m croc lead



2m and 4m cowbell lead

### Yokes

## On-board charge kits









Lights

## External chargers



12V, 4A external charger



12V, 10A external charger



24V, 10A external charger



24V inspection lamp



## Also available



Heavy-duty jump lead set



25mm, 35mm, 50mm aviation spec cables

## Spare parts



Charge plugs



Internal charger



Key switch



Fuse



Push/pull switch



Croc clips



Connectors



Dry cell batteries



Cowbell plug



Foam-filled wheel





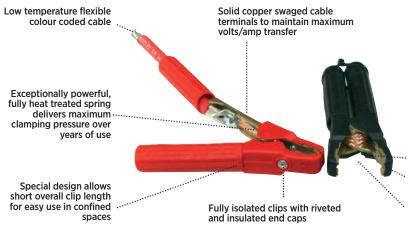




# Why Powervamp?

### Clips

Other makers of jump packs make extravagant claims, but it's Powervamp's attention to detail based on years of operating experience that sets the standard.





Volts x amps = watts, and watts are critical in delivering cranking performance. No other clip can handle the current like a Powervamp clip.

50mm extra-wide jaw opening

Nosed brass ends to maximise terminals grip in any location

Heavy duty copper braid between jaws to deliver maximum current to both clamp faces

### Cables

Powervamp only uses Eland Extraflex cable with its range of jump-starters due to the protection offered against UV light and wet/oily environments from its Nitrile Butadiene PVC outer sheath. The multi strand cable has a Class 6 extra-flexible copper conductor allowing it to be used in the most confined spaces

#### CABLE STANDARDS

BS EN 50525-2-81 (CENELEC) HD22.6 AS3147 BS EN 60228

IFC 245-6 BS EN/IEC 60332-1













Eland Extraflex cable

The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

### **Batteries**

Powervamp fits EnerSys batteries into its entire range of 12V, 24V and 12/24V automotive engine starters. The unique TPPL (thin plate pure lead) technology allows each battery to pack more power into a smaller footprint whilst also offering deep cycling capabilities, fast recharge abilities, no memory effect and a nonspillable design allowing them to be used in any orientation.

EnerSys batteries are made with flat plates constructed from 99.99% pure lead - not lead alloy. Pure lead plates can be made thinner, so more of them can be fitted into the battery. More battery plates mean a larger collective plate surface area which equates to more power - up to twice as much as conventional batteries.

With the ability to deliver massive power instantly, even at low temperatures, the EnerSys battery is ideal for using within the Powervamp automotive jump-starter range.





## Specialists in aviation power

- PORTABLE DC GROUND POWER UNITS
- 400Hz ELECTRICAL GROUND POWER
- TRANSFORMER RECTIFIER UNITS
- AIRSHOW AND RENTAL SERVICES
- AIRPORT CABLE CARRIERS
- MINI-DIESEL GPUs
- POWER SUPPLIES
- DC RAMP CARTS



## Specialists in emergency power

- CENTRAL BATTERY SYSTEMS
- FREQUENCY CONVERTERS
- EMERGENCY LIGHTING
- STATIC INVERTERS



### Specialists in industrial power

- EXPORT MANUFACTURERS
- TEST HOUSES
- AEROSPACE
- MILITARY



## Specialists in automotive power

- BATTERY JUMP-STARTERS
- SPECIALIST AUTOMOTIVE
- DRY-CELL BATTERIES
- POWER SUPPLIES
- DC CHARGERS
- INVERTERS







Powervamp Ltd

22 Bridgwater Court, Oldmixon Crescent, Weston-super-Mare BS24 9AY, England

+44 (0)1934 643000 Fax: +44 (0)1934 642800 Email: info@powervamp.com www.powervamp.com



DISTRIBUTED BY:			









