GMH

(Nickel Metal Hydride Battery)

GLOBAL BATTERY has pursued high performance environmental technology for over half a century, resulting in GMH.
A sealed & valve regulated GMH with high output, high Capacity, longer life, and most of all, is an environmentally friendly product with no Cadmium or other harmful metals.

- Smaller Dimension (1/10 size compared to other product with same Capacity)
- Innovative weight density with 6 times better than existing flooded type Ni-MH & Ni-Ca batteries
- Installation Free (horizontally & Vertically)
- Convenient to use (Maintenance Free product)

■ GMH Nickel Metal Hydride Battery Characteristics

(1) High Performance
- Energy & output density per given size are excellent
- Can withstand a high temperature range (-40℃ ~ 55℃)
- Excellent charging recovery and constant nominal capacity until end of life
- Efficient in high current charge and discharge

(2) Installation Free
- The perfectly sealed & valve regulated battery enables installation either vertically or horizontally
- Efficient weight and dimensions compared to other batteries
- Installation & maintenance costs reduced due to minimized installation space

(3) Maintenance Free
- No need to refill during service life

(4) Environmentally-friendly
- Contains no harmful metals. Replaces the environmentally-harmful nickel-cadmium battery
- Recyclable after use

(5) Safety
- Battery safety vent prevents explosions due to over-charging, which is a concern with lithium ion batteries.

■ Applications

UPS	Solar Energy-Storage Systems	Telecommunication Systems
Emergency power	Wind power Plants	Factory Automation Systems
Computers	Power Plants	Electrical Vehicles
Switch Boards	Substations	AGV
Chargers/Rectifiers	Fuel Cell Systems	Unmanned Stations
CVCF back up power	Emergency Power for Automatic doors	Shipbuilding/Ports
Fork lifts /Golf Carts/Wheel Chairs	Power and control of Robotics	Military/Security Devices

※ Battery features

Classification		Material	Characteristics
Positive Plate	Collector	Formed Ni	1. Excellent Corrosion Resistance & Collector Strength 2. Minimization of eliminated the active material 3. Excellent electrical conduction (excellent for Deep Discharge)
	Paste	Ni-Oxide	
	Additive	Bonding agent, Conductor	
Negative Plate	Collector	Punching Metal	
	Paste	Hydrogen-absorbent Alloy	
	Additive	Bonding agent, Conductor	
Container, Cover		Engineering Plastics	1. Excellent strength and resistance to internal impacts 2. Non-flammable, chemically resistant case
Pole Strap		Ni-Coated Steel	1. Option : Inserted Screw/Nut 2. Excellent large current charge/discharge performance 3. Anti-seismic Design 4. No corrosion or growth 5. Designed to prevent leakage
Safety Vent		Rubber Mixture	1. Structure: Rubber + Vent (Metal) + Spring 2. Full operation until end of battery life
Separator		Polyolefin	1. Excellent Micro-porosity 2. Excellent Ion-Transmission due to low Electric resistance
Electrolyte		KOH + Special Additive	1. Excellent electrical conductivity

Certificate

MH15934 • ISO 9001 • ISO 14001

GMH Specification (25±2℃)

1. High rate use

Model (1.2V)	Capacity(AH)		Dimension±2(mm)				Weight (Kg)
	5hour rate	1hour rate	L	W	H	TH	
GMH 10	10	9	41	98	131	146	0.3
GMH 20	20	19	41	98	131	146	0.5
GMH 30	30	28	41	98	131	146	0.7
GMH 40	40	37	41	98	131	146	0.9
GMH 50	50	47	41	98	131	146	1.0
GMH 60	60	56	41	98	131	146	1.1
GMH 70	70	65	40	116	163	178	1.3
GMH 80	80	74	40	116	163	178	1.5
GMH 100	100	93	40	116	163	178	1.7
GMH 120	120	112	49	134	175	190	2.1
GMH 130	130	121	49	134	175	190	2.2
GMH 150	150	140	49	134	175	190	2.5
GMH 180	180	167	55	182	205	224	3.8
GMH 200	200	186	55	182	205	224	4.2
GMH 230	230	214	55	182	205	224	4.6
GMH 250	250	233	55	182	205	224	4.9
GMH 350	350	319	133	193	205	224	9.1
GMH 400	400	364	133	193	205	224	9.9
GMH 450	450	410	133	193	205	224	10.7
GMH 500	500	455	133	193	205	224	11.3
GMH 550	550	501	185	193	205	224	13.0
GMH 600	600	546	185	193	205	224	14.2
GMH 700	700	637	185	193	205	224	15.4
GMH 750	750	683	185	193	205	224	16.3
GMH 800	800	728	237	193	205	224	18.5
GMH 900	900	819	237	193	205	224	20.1
GMH 1000	1000	910	237	193	205	224	21.3

※Above specifications subject to change without prior notice

2. Meddle rate use

Model (1.2V)	Capacity (AH)		Dimension±2(mm)				Weight (Kg)
	5hour rate	1hour rate	L	W	H	TH	
GMH 180M	180	167	55	182	205	224	4.0
GMH 200M	200	186	55	182	205	224	4.2
GMH 230M	230	214	55	182	205	224	4.5
GMH 250M	250	233	55	182	205	224	4.7
GMH 300M	250	233	55	182	205	224	5.1
GMH 350M	350	319	133	193	205	224	9.5
GMH 400M	400	364	133	193	205	224	9.9
GMH 450M	450	410	133	193	205	224	10.5
GMH 500M	500	455	133	193	205	224	10.9
GMH 550M	550	501	185	193	205	224	13.6
GMH 600M	600	546	133	193	205	224	11.7
GMH 700M	700	637	185	193	205	224	15.1
GMH 750M	750	683	185	193	205	224	15.7
GMH 800M	800	728	237	193	205	224	18.5
GMH 900M	900	819	185	193	205	224	16.9
GMH 1000M	1000	910	237	193	205	224	20.5
GMH 1200M	1200	1092	237	193	205	224	22.1
GMH 1500M	1500	1365	289	193	205	224	27.3
GMH 1800M	1800	1638	390	193	205	224	33.8
GMH 2000M	2000	1820	442	193	205	224	39.0
GMH 2400M	2300	2093	494	193	205	224	44.2
GMH 2700M	2500	2275	546	193	205	224	49.4
GMH 3000M	2500	2275	598	193	205	224	54.7

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