Stationary

NIFE ALKALINE

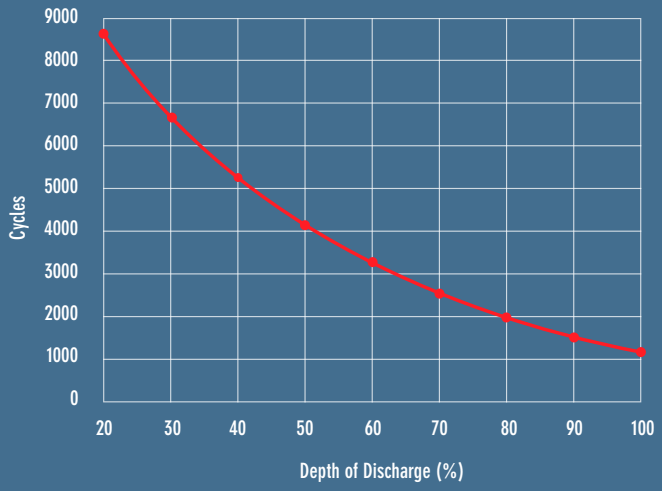
These NiFe batteries are standby batteries especially designed for photovoltaic systems. It is made of Nickel hydroxide and iron oxide plates.

The wide operating temperature range from -20 °C to 60 °C, mechanical and electrical abuse and deep discharges are no problem. There is no acid so the battery will not corrode and it will still work after being discharged for longer time.

BENEFITS

- Long cycle life
- Low operation cost
- Environmentally friendly (no lead, cadmium or acid) & recyclable
- High/low temperature possible (Almost no possibility of burning or thermal runway)
- High safety, high reliability, low maintenance
- Higher charge ratio and utilization ratio
- Easy to transport & install in remote and harsh areas
- No corrosion, no risk of "sudden death"
- Abnormal operation acceptable
- True 20+ years design life

SERVICE LIFE: 2000 CYCLES DOD 80%



Cycle life in relation to Depth of discharge

APPLICATIONS

Railway Telecom Solar UPS

TECHNICAL INFORMATION

For more details about layouts & terminals, flip to page 63 for more information.

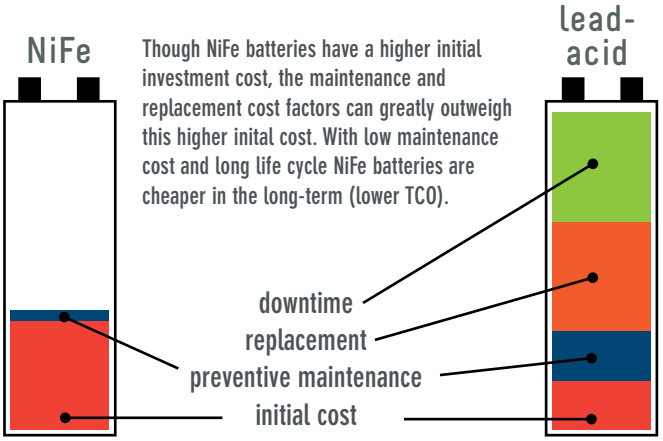
Ref.	Voltage (V)	Capacity (Ah/C5)	Dimensions (mm)			Weight (kg)	Terminals
			X	Y	H		
NiFe10-S	1,2	10	40	85	150	0,80	M8
NiFe20-S	1,2	20	55	134	270	1,65	M8
NiFe30-S	1,2	30	55	134	270	1,75	M10
NiFe40-S	1,2	40	70	140	295	3,30	M10
NiFe50-S	1,2	50	70	140	295	3,60	M10
NiFe60-S	1,2	60	80	140	295	4,13	M10
NiFe70-S	1,2	70	80	140	295	4,45	M10
NiFe80-S	1,2	80	80	140	295	4,51	M10
NiFe100-S	1,2	100	80	140	365	6,00	M10
NiFe120-S	1,2	120	80	140	365	6,20	M10
NiFe150-S	1,2	150	165	167	354	8,50	M20
NiFe200-S	1,2	200	165	167	354	9,50	M20
NiFe250-S	1,2	250	170	285	350	20,40	2 x M20
NiFe300-S	1,2	300	170	285	350	21,00	2 x M20
NiFe350-S	1,2	350	170	285	350	21,50	2 x M20
NiFe400-S	1,2	400	140	280	490	24,60	2 x M20
NiFe500-S	1,2	500	175	285	490	33,40	2 x M20
NiFe600-S	1,2	600	175	285	490	34,70	2 x M20
NiFe700-S	1,2	700	185	395	560	52,60	3 x M20
NiFe800-S	1,2	800	185	395	560	55,00	3 x M20
NiFe900-S	1,2	900	185	395	560	57,00	3 x M20
NiFe1000-S	1,2	1000	185	395	560	59,00	3 x M20

MAIN RANGES OF APPLICATION

Thanks to the outstanding characteristics, the NiFe batteries have replaced the lead-acid batteries in a wide range of applications, especially for solar PV and renewable energy power systems. Suitable for commercial and residential buildings, railway and light trains (crossing gates, lighting & signage), navigation aids like remote lighthouses, beacons, offshore. Also utilities like electric power supply for remote areas and islands can use these batteries. And so do oil and gas fields (emergency lighting on offshore platforms and cathodic protection for pipelines) and telecommunication systems (base stations, radio repeaters, emergency telephones, ...)

Speaking of a wide range of applications!

COST EFFECTIVENESS



COMPARISATION VRLA ⟷ NiFe

Characteristics	Lead acid battery	NiFe batterie
Nominal voltage	2V	1.2V
Floating charge volt.	2.23V~2.3V/cell	1.45V~1.5V/cell
Temperature factor during floating charge	-3mV/°C per cell	-3mV/°C per cell
Operating voltage	Average	Good
Standard charge and discharge current	0.1A (C10)	0.25A (C5)
High rate discharge performance	Poor	Good
Overcharge performance	Poor	Good
Over discharge performance	Extremely poor	Good
Effect from floating charge voltage	When charge voltage > 2.35V/cell then service life reduced by 1/2 for every 0.1V/cell increase	Not affected
Operation life	3 years	20 years
Storage life	2 years	4 years
High temperature performance	temp > 50°C = capacity decrease which affect the service life	Not affected
Low temperature performance	will affect the service life	Little effect on the service life
Thermal danger if shorted	Yes	No
Premature capacity loss	Yes	No
Environmentally friendly	No	Yes