



UPS

Telecom

EV

Renewable
Storage



VISION GROUP

Vision Group is one of the largest manufacturers of batteries in the world. Our products are classified into different categories: Valve-Regulated Lead Acid Battery, Lithium-ion Battery, Hybrid Battery and so on. The VRLA battery includes AGM series, Deep Cycle series, Pure Lead series and Gel series, The Lithium-ion Battery covers Lithium cobalt oxide series, Lithium manganese oxide series and Lithium iron phosphate series.

Vision Group was founded in 1994 and the headquarter is in Shenzhen. We are one of the largest and the first one to develop and commercialize the VRLA Battery with brand name VISION around the world. With 20 years of development, Vision has three industrial location in Shenzhen, Hubei Province and Vietnam, which cover the area of 260,000m². Today, we have more than 3,500 employees; the total production capacity is more than 3,000,000 KVAH per year.

Vision Group is committed to keep the high quality of products and provide perfect service, to be always able to meet the

customer's needs. Vision Group has a powerful global sales network. Currently, its sales and service engineers are active in more than 100 countries.

We always stick to the principle of "technology and value-added service are the crucial core of VISION", and continually develop to become world-class enterprise.

As one of the leading industrial battery manufacturers, we are keeping quality and environment protection first and foremost in our minds. With a proven track record of this dedication, to protect both the earth and our employees for years, has propelled us to be the industry leader in environmental protection while still maintaining the highest quality products on the market. With the recertification of Chinese Environment Ministry to Chinese battery industry in 2011, Vision Group has become the best company on the environmental protection in South of China.

VISION BATTERY



V-LFP48-80S

(LiFePO4)

Vision Technology provides safe lithium iron phosphate battery solutions for EV application. The V-LFP48-80S lithium iron phosphate battery has the advantages of excellent performance, safety and long cycle life.

Features

- Built-in automatic protection for over-charge, over-discharge and over-temperature conditions, over-current, short circuit
- State of charge and state of health indication
- Built-in battery control for efficient operation
Internal cell balancing
- RS485 communication output for monitoring
- Maintenance free



Battery specification

Nominal Characteristics

Nominal Voltage:	48V
Max Output Power:	5000W

Mechanical characteristics

Weight (approximate):	47±5%
Dimension L*W*H /mm :	462x432x242±5%

Electrical characteristics

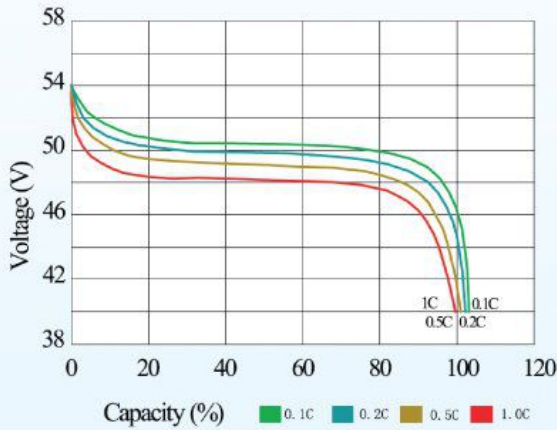
Working voltage range:	40 to 60V
Recommended charging voltage:	56.5 to 57.6V
Discharging Cut-off voltage:	44±1V

Operating conditions

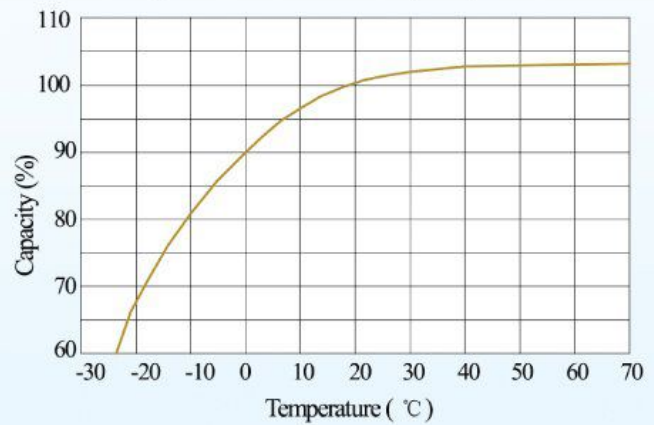
Cycle life (+20° 0.2C 80%DOD):	≥4000
Operating temperature:	Discharge -20° to 60° Charge -20° to 60°
Storage temperature:	-20° to 55°
Safety standard:	UL1642 for cell

Performance curve

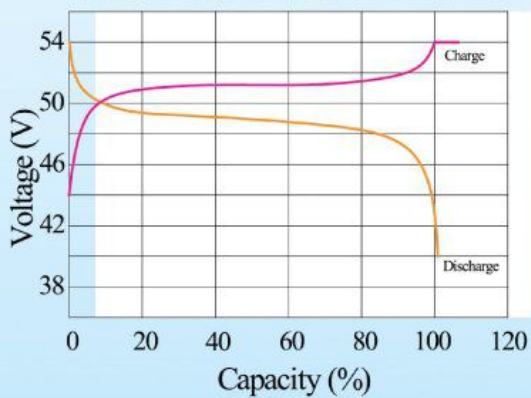
Discharge Performance at 25 °C



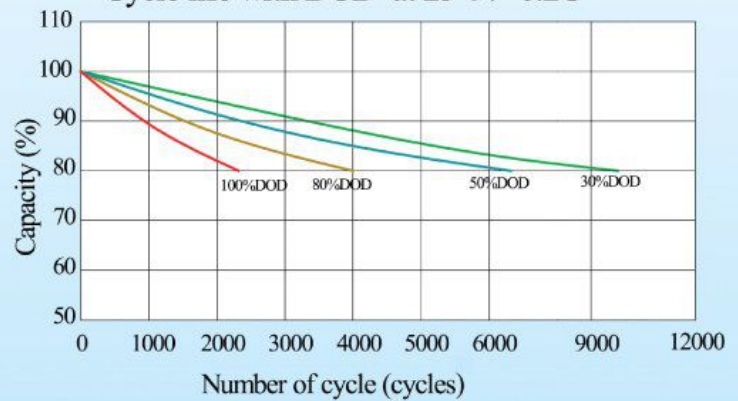
Temperature effects on capacity at 0.2C



Charge and Discharge at 25 °C, 0.2C



Cycle life with DOD at 25 °C, 0.2C



- Performance curve may vary depending on, but not limited to cell usage and application. If cell is used outside specifications, performance will diminish. All specifications are subject to change without notice. All information provided herein is believed, but not guaranteed, to be current and accurate.

Design renderings:



Compare LFP battery with Lead-acid battery

Item	LFP	Lead-acid
Cycle life	excellent ★★★★★	not good ★☆☆☆☆
High energy density	well ★★★★☆	★☆☆☆☆
Application range	excellent ★★★★★	limited ★☆☆☆☆
Charge and discharge quickly	excellent ★★★★★	non-conformance ☆☆☆☆☆
Small footprint	excellent ★★★★★	★☆☆☆☆
Intelligent	excellent ★★★★★	not good ★☆☆☆☆
High power	★★★★★	★★★★☆☆