Golden Extreme

Battery Brochure

LITHIUM | GEL | UPS

Expanding into Renewable Energy – Powering the Future

At Golden Extreme, we are proud to carry forward our legacy of excellence by expanding into the renewable energy sector. In a world increasingly driven by sustainability, we are committed to delivering innovative and dependable solar energy solutions that empower communities and businesses alike.
Through our trusted brand Falcon, we provide a comprehensive range of high-quality solar products, including:

- Lithium Batteries
- Solar Inverters
- Tubular Batteries
- Gel Batteries

Our products are designed to combine efficiency, reliability, and affordability, making clean energy accessible to emerging and underserved markets—particularly across Africa and the Middle East.
Whether for residential, commercial, or industrial applications, Falcon solar systems are engineered for durability, high performance, and energy independence.
With this expansion, Golden Extreme continues to build on its reputation for innovation and integrity—powering a cleaner, brighter future for generations to come.

150,000+
Sq Ft Warehouse

120+
Sales Points

1974
Established

Our Global Presence

FALCON LITHIUM BATTERIES

FBLI SERIES

48V - 100/200/300AH

- Indoor/outdoor telecom base stations UPS
- Household energy storage system
- Smart Transportation backup power supply
- Parallel connection up to 15 Units

Battery Specifications

Model	FBLI-48100 (100Ah)	FBLI-48200 (200Ah)	FBLI-48300 (300Ah)
Rated Voltage	51.2 V	51.2 V	51.2 V
Rated Capacity	100 Ah	200 Ah	300 Ah
Rated Energy	5120 Wh	10240 Wh	15360 Wh
Combination Method	16 S 1 P	16 S 1 P	16 S 1 P
Cycle Life (@80% DOD)	≥ 6000 cycles	≥ 6000 cycles	≥ 6000 cycles
Self-Discharge	1 % / month	1 % / month	1 % / month
Charge Efficiency	≥ 97 %	≥ 97 %	≥ 97 %
Discharge Efficiency	≥ 98 %	≥ 98 %	≥ 98 %
Charge Voltage	57.6 V	57.6 V	57.6 V
Recommended Charge Current	20 A	40 A	40 A
Max Charge Current	100 A	100 A	100 A
Discharge Cut-off Voltage	43.2 V	43.2 V	43.2 V
Recommended Discharge Current	100 A	100 A	100 A
Max / Pulse Current	100 A	220 A (pulse)	220 A (pulse)
Charge Temperature	0 °C ~ 60 °C	0 °C ~ 60 °C	0 °C ~ 60 °C
Discharge Temperature	−20 °C ~ 60 °C	−20 °C ~ 60 °C	−20 °C ~ 60 °C
Humidity	5 % ~ 95 %	5 % ~ 95 %	5 % ~ 95 %
IP Class	IP30	IP30	IP32
Case Material	Metal	Metal	Metal
Dimensions (mm)	600 × 442 × 170 mm	740 × 450 × 260 mm	880 × 448 × 260 mm
Weight (kg)	50 kg	90 kg	118 kg
Communication / Display	Wi-Fi, Bluetooth	CAN, RS-485, LCD Display	Wi-Fi, Bluetooth
Battery Cell Type	EVE	EVE	EVE
Parallel Connection	Up to 15 units	Up to 15 units	Up to 15 units
Features	Multi-protocol support (RS-485, CAN, RS-232)	Multi-protocol support (RS-485, CAN, RS-232)	Multi-protocol support (RS-485, CAN, RS-232)

Smart BMS

Fast Charging

Compatible with many Inverters

Longer Life

FALCON UPS BATTERIES

FB SERIES

4V: 4AH

Applications

UPS • IT equipment • Security systems • Medical devices • General purpose stand-by use

Battery Specifications

Category	Specification
Nominal Voltage	4 V (2 cells per unit)
Nominal Capacity (20 h rate / 3.5 V, 25 °C)	4 Ah
Capacity at 10 h rate (3.5 V)	3.7 Ah
Capacity at 1 h rate (3.2 V)	2.4 Ah
Design Life (Stand-by)	3–5 years (EUROBAT @ 20 °C)
Weight	0.46 kg ± 5 % (1.01 lb)
Approx. Internal Resistance (25 °C)	15 mΩ
Terminal Type	T1
Maximum Torque	N/A
Max Charging Current	1.2 A
Max Discharge Current (5 s)	60 A
Self-Discharge Rate (25 °C)	≤ 3 % / month
Float Charging Voltage (25 °C)	4.50 – 4.60 V
Cyclic Charging Voltage (25 °C)	4.80 – 5.00 V
Temperature Compensation	−6 mV / °C / block (float) • −10 mV / °C / block (cycle)
Operating Temperature Range	Discharge: −15 °C to 50 °C • Charge: −10 °C to 50 °C • Storage: −20 °C to 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (UL94-HB / V-0 optional)
Dimensions (mm)	L 47 ± 1 × W 47 ± 1 × H 101 ± 1 (Total Height 107 ± 1)
Construction Materials	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container

FALCON UPS BATTERIES

FB SERIES

6V: 4.5AH - 7AH -12AH

Applications

UPS • IT equipment • Security systems • Medical devices • General purpose stand-by use

Battery Specifications

Model	FB6-4.5Ah	FB6-7Ah	FB6-12Ah
Nominal Voltage	6 V (3 cells)	6 V (3 cells)	6 V (3 cells)
Nominal Capacity (20 h rate @ 25 °C)	4.5 Ah @ 5.25 V	7 Ah @ 5.25 V	12 Ah @ 5.25 V
Capacity (10 h rate)	4.3 Ah	6.5 Ah	11 Ah
Capacity (1 h rate)	2.7 Ah @ 4.8 V	4.2 Ah @ 4.8 V	7.2 Ah @ 4.8 V
Design Life (stand-by)	5 yrs / 3–5 yrs	5 yrs / 3–5 yrs	5 yrs / 3–5 yrs
Weight	0.76 kg ± 5 % (1.68 lb)	1.1kg ± 4 %(2.42 lbs)	1.70 kg ± 4 % (3.75 lb)
Internal Resistance (25 °C)	18 mΩ	16mΩ	10 mΩ
Terminal Type	T1	T1 / T2	T1 / T2
Max Charging Current	1.35 A	2.1 A	3.6 A
Max Discharge Current (5 s)	68 A	105 A	180 A
Self-Discharge Rate (25 °C)	≤ 3 % / month	≤ 3 % / month	≤ 3 % / month
Float Charging Voltage (25 °C)	6.80 – 6.90 V	6.80 – 6.90 V	6.80 – 6.90 V
Cyclic Charging Voltage (25 °C)	7.25 – 7.50 V	7.25 – 7.50 V	7.25 – 7.50 V
Temperature Compensation	−9 mV / −15 mV per °C per block	−9 mV / −15 mV per °C per block	−9 mV / −15 mV per °C per block
Operating Temperature Range	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (UL94-HB / V-0 opt.)	ABS (UL94-HB / V-0 opt.)	ABS (UL94-HB / V-0 opt.)
Dimensions (mm)	70 × 48 × 101 (Total H 107)	151 x 34 x 94(Total H 100)	151 × 50 × 94 (Total H 100)
Construction Materials	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container

FALCON UPS BATTERIES

FB SERIES

12V: 5AH - 7AH - 9AH

Applications

UPS • IT equipment • Security systems • Medical devices • General purpose stand-by use

Battery Specifications

Model	FB12-5Ah	FB12-7Ah	FB12-9Ah
Nominal Voltage	12 V (6 cells per unit)	12 V (6 cells per unit)	12 V (6 cells per unit)
Nominal Capacity (20 h rate @ 25 °C)	5 Ah @ 10.5 V	7 Ah @ 10.5 V	9 Ah @ 10.5 V
Capacity (10 h rate @ 25 °C)	4.7 Ah	6.5 Ah	8.4 Ah
Capacity (1 h rate @ 25 °C)	3.0 Ah @ 9.6 V	4.2 Ah @ 9.6 V	5.4 Ah @ 9.6 V
Design Life (Stand-by)	5 years / 3 – 5 years	5 years / 3 – 5 years	5 years / 3 – 5 years
Weight	1.65 kg ± 4 % (3.64 lb)	2.10 kg ± 4 % (4.63 lb)	2.60 kg ± 4 % (5.73 lb)
Approx. Internal Resistance (25 °C)	27 mΩ	25 mΩ	19 mΩ
Terminal Type	T1 / T2	T1 / T2	T1 / T2
Max Charging Current	1.5 A	2.1 A	2.7 A
Max Discharge Current (5 s)	75 A	105 A	135 A
Self-Discharge Rate (25 °C)	≤ 3 % / month	≤ 3 % / month	≤ 3 % / month
Float Charging Voltage (25 °C)	13.6 – 13.8 V	13.6 – 13.8 V	13.6 – 13.8 V
Cyclic Charging Voltage (25 °C)	14.5 – 15.0 V	14.5 – 15.0 V	14.5 – 15.0 V
Temperature Compensation	−18 mV (float) / −30 mV (cycle) per °C per block	−18 mV (float) / −30 mV (cycle) per °C per block	−18 mV (float) / −30 mV (cycle) per °C per block
Operating Temperature Range	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)
Dimensions (mm)	L 90 × W 70 × H 101 (Total 107)	L 151 × W 65 × H 94 (Total 100)	L 151 × W 65 × H 94 (Total 100)
Construction Materials	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container

FALCON UPS BATTERIES

FB SERIES

12V: 18AH - 28AH - 45AH

Applications

UPS • IT equipment • Security systems • Medical devices • General purpose stand-by use

Battery Specifications

Model	FB12-18Ah	FB12-28Ah	FB12-45Ah
Nominal Voltage	12 V (6 cells/unit)	12 V (6 cells/unit)	12 V (6 cells/unit)
Nominal Capacity (20 h rate @ 25 °C)	18 Ah @ 10.5 V	28 Ah @ 10.5 V	45 Ah @ 10.8 V
Capacity (10 h rate @ 25 °C)	16.8 Ah	26 Ah	33 Ah (3 h rate)
Capacity (1 h rate @ 25 °C)	11 Ah @ 9.6 V	17 Ah @ 9.6 V	25 Ah @ 10.5 V
Design Life (Stand-by)	3–5 years (EUROBAT @ 20 °C)	3–5 years (EUROBAT @ 20 °C)	10–12 years (EUROBAT @ 20 °C)
Weight	5.30 kg ± 4 % (11.68 lb)	8.80 kg ± 4 % (19.40 lb)	13.80 kg ± 3 % (30.40 lb)
Approx. Internal Resistance (25 °C)	15 mΩ	10 mΩ	7.5 mΩ
Terminal Type	T3 / T12	T12 / T4	T14
Torque	3.0 ± 0.6 N·m	3.0 ± 0.6 N·m	5.1 ± 0.6 N·m
Max Charging Current	5.4 A	8.4 A	13.5 A
Max Discharge Current (5 s)	270 A	360 A	400 A
Self-Discharge Rate (25 °C)	≤ 3 % / month	≤ 3 % / month	≤ 3 % / month
Float Charging Voltage (25 °C)	13.6 – 13.8 V	13.6 – 13.8 V	13.5 – 13.8 V
Cyclic Charging Voltage (25 °C)	14.5 – 15.0 V	14.5 – 15.0 V	14.5 – 15.0 V
Temperature Compensation	–18 mV (float) / –30 mV (cycle) per °C per block	–18 mV (float) / –30 mV (cycle) per °C per block	–18 mV (float) / –30 mV (cycle) per °C per block
Operating Temperature Range	• Discharge –15 ~ 50 °C • Charge –10 ~ 50 °C • Storage –20 ~ 50 °C	• Discharge –15 ~ 50 °C • Charge –10 ~ 50 °C • Storage –20 ~ 50 °C	• Discharge –15 ~ 50 °C • Charge –10 ~ 50 °C • Storage –20 ~ 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)
Dimensions (mm)	L 181 × W 77 × H 167 (Total 167)	L 166 × W 175 × H 125 (Total 125)	L 197 × W 165 × H 170 (Total 170)
Construction Materials	Lead dioxide (+), Lead (–), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (–), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (–), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container

FALCON UPS BATTERIES

FB SERIES

12V: 65AH - 100AH

Applications

• Solar & Wind Systems • Telecom • UPS • Cyclic Use • Renewable Energy Backup

Battery Specifications

Model	FB12-65Ah	FB12-100Ah
Nominal Voltage	12 V (6 cells per unit)	12 V (6 cells per unit)
Nominal Capacity (10 h rate @ 25 °C)	65 Ah @ 10.8 V	100 Ah @ 10.8 V
Capacity (3 h rate @ 25 °C)	48 Ah @ 10.8 V	75 Ah @ 10.8 V
Capacity (1 h rate @ 25 °C)	36 Ah @ 10.5 V	55 Ah @ 10.5 V
Design Life (Stand-by)	10 years (JIS @ 25 °C) / 10–12 years (EUROBAT @ 20 °C)	10 years (JIS @ 25 °C) / 10–12 years (EUROBAT @ 20 °C)
Weight	20.40 kg ± 3 % (45.0 lb)	29.50 kg ± 3 % (65.0 lb)
Approx. Internal Resistance (25 °C)	6.5 mΩ	4.5 mΩ
Terminal Type	T14 (M6 × 16 mm)	T16 (M8 × 20 mm)
Torque	5.1 ± 0.6 N·m	12.3 ± 2.5 N·m
Max Charging Current	19.5 A	30 A
Max Discharge Current (5 s)	650 A	800 A
Self-Discharge Rate (25 °C)	≤ 3 % / month	≤ 3 % / month
Float Charging Voltage (25 °C)	13.5 – 13.8 V	13.5 – 13.8 V
Cyclic Charging Voltage (25 °C)	14.5 – 15.0 V	14.5 – 15.0 V
Temperature Compensation	−18 mV (float) / −30 mV (cycle) per °C per block	−18 mV (float) / −30 mV (cycle) per °C per block
Operating Temperature Range	Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)
Dimensions (mm)	L 350 × W 166 × H 179 (Total 179)	L 330 × W 171 × H 214 (Total 220)
Design Type	Valve-regulated lead-acid (AGM technology) • Maintenance-free • Sealed construction	Valve-regulated lead-acid (AGM technology) • Maintenance-free • Sealed construction
Construction Materials	Positive Plate: Lead Dioxide , Negative Plate: Lead , Separator: AGM , Electrolyte: Sulfuric Acid , Safety Valve: Rubber , Terminal: Copper Case: ABS	Positive Plate: Lead Dioxide , Negative Plate: Lead , Separator: AGM , Electrolyte: Sulfuric Acid , Safety Valve: Rubber , Terminal: Copper Case: ABS

FALCON UPS BATTERIES

FBG SERIES

12V: 100AH - 150AH - 200AH

Applications

• Solar & Wind Systems • Telecom • UPS • Cyclic Use • Renewable Energy Backup

Battery Specifications

Model	FBG12-100Ah	FBG12-150Ah	FBG12-200Ah
Nominal Voltage	12 V (6 cells/unit)	12 V (6 cells/unit)	12 V (6 cells/unit)
Nominal Capacity (10 h rate @ 25 °C)	100 Ah @ 10.8 V	150 Ah @ 10.8 V	200 Ah @ 10.8 V
Capacity (3 h rate @ 25 °C)	75 Ah	112.5 Ah	150 Ah
Capacity (1 h rate @ 25 °C)	55 Ah @ 10.5 V	83 Ah @ 10.5 V	110 Ah @ 10.5 V
Design Life (Stand-by)	10-12 years (EUROBAT @ 20 °C)	10-12 years (EUROBAT @ 20 °C)	10-12 years (EUROBAT @ 20 °C)
Weight	30.5 kg ± 3 % (67.2 lb)	44.5 kg ± 3 % (98.1 lb)	62.5 kg ± 3 % (137.8 lb)
Approx. Internal Resistance (25 °C)	5 mΩ	3.8 mΩ	3.3 mΩ
Terminal Type	T16	T16	T18
Torque	12.3 ± 2.5 N·m	12.3 ± 2.5 N·m	12.3 ± 2.5 N·m
Max Charging Current	20 A	30 A	40 A
Max Discharge Current (5 s)	800 A	1200 A	1400 A
Self-Discharge Rate (25 °C)	≤ 3 % / month	≤ 3 % / month	≤ 3 % / month
Float Charging Voltage (25 °C)	13.5 – 13.8 V	13.5 – 13.8 V	13.5 – 13.8 V
Cyclic Charging Voltage (25 °C)	14.5 – 14.7 V	14.5 – 14.7 V	14.5 – 14.7 V
Temperature Compensation	−18 mV (float) / −30 mV (cycle) per °C per block	−18 mV (float) / −30 mV (cycle) per °C per block	−18 mV (float) / −30 mV (cycle) per °C per block
Operating Temperature Range	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)	ABS (UL94-HB / V-0 optional)
Dimensions (mm)	L 330 × W 171 × H 214 (Total 220)	L 485 × W 172 × H 240 (Total 240)	L 522 × W 238 × H 218 (Total 222)
Construction Materials	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container	Lead dioxide (+), Lead (−), AGM separator, Sulfuric acid electrolyte, Rubber valve, Copper terminal, ABS container

BERLINO GEL UPS BATTERIES

BA SERIES

12V: 100AH - 200AH

Applications

Solar & Wind Power Systems • Electric Wheelchairs • Golf Carts • Medical Equipment • Fire Alarms • UPS

Battery Specifications

Model	BA12-100G (12 V 100 Ah)	BA12-200G (12 V 200 Ah)
Nominal Voltage	12 V (6 cells/unit)	12 V (6 cells/unit)
Nominal Capacity (10 h rate @ 25 °C)	100 Ah @ 10.8 V	200 Ah @ 10.8 V
Capacity (5 h rate @ 25 °C)	85 Ah @ 10.8 V	170 Ah @ 10.5 V
Capacity (3 h rate @ 25 °C)	75 Ah @ 10.5 V	150 Ah @ 10.2 V
Capacity (1 h rate @ 25 °C)	55 Ah @ 9.6 V	110 Ah @ 9.6 V
Design Life (Stand-by)	Up to 15 years @ 25 °C	12 years @ 25 °C
Weight	29.5 kg ± 3 % (65 lb)	59.6 kg ± 3 % (131 lb)
Approx. Internal Resistance (25 °C)	4.2 mΩ	2.5 mΩ
Max Discharge Current (5 s)	1000 A	2000 A
Self-Discharge Rate (25 °C)	≤ 3 % / month	≤ 3 % / month
Capacity vs Temperature	40 °C → 112 % 25 °C → 100 % 0 °C → 80 % −15 °C → 68 %	40 °C → 112 % 25 °C → 100 % 0 °C → 80 % −15 °C → 68 %
After Storage (25 °C)	3 mo → 91 % 6 mo → 82 % 12 mo → 64 %	3 mo → 91 % 6 mo → 82 % 12 mo → 64 %
Float Charging Voltage (25 °C)	13.5 – 13.8 V	13.5 – 13.8 V
Cycle Use Charging Voltage (25 °C)	14.1 – 14.4 V (initial current < 30 A)	14.1 – 14.4 V (initial current < 73 A)
Operating Temperature Range	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C	• Discharge −15 ~ 50 °C • Charge −10 ~ 50 °C • Storage −20 ~ 50 °C
Nominal Operating Temperature	25 ± 3 °C (77 ± 5 °F)	25 ± 3 °C (77 ± 5 °F)
Container Material	ABS (high strength, flame-retardant optional)	ABS (high strength, flame-retardant optional)
Dimensions (mm)	L 329 × W 172 × H 214 (Total 243)	L 522 × W 240 × H 220 (Total 244)
Key Features	Long cycle life , Deep discharge design , Maintenance-free oxygen recombination , ABS housing , Special paste and separator for durability	Patented GEL electrolyte , Wide operating temperature (−40 ~ +60 °C) , High strength ABS case , Deep cycle optimized plates

Golden Extreme Auto Spare Parts Trading L.L.C

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Golden Extreme - Solar Department

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The technical specifications of this document are subject to change without any notice