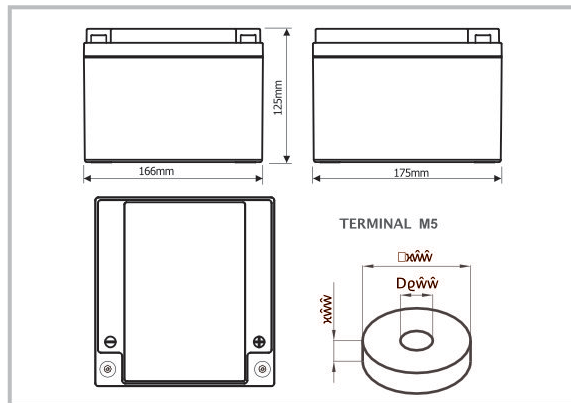


HX GENERAL SERIES VRLA BATTERY

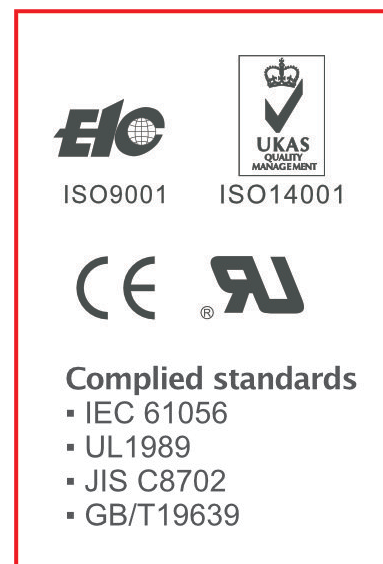
HX series offers 5 years full maintenance free design life. With optimum design and good reliability, this series is highly suited for security and alarm systems, UPS systems, emergency light systems and other small backup applications.

BATTERY DIMENSIONS



TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	5 Years
Nominal Capacity (25°C)	28 Ah @ 20HR-rate (to 1.75Vpc)
Dimension (mm)	L166mm x W175mm x H125mm
Approx. Weight	8.2 kg (18.1 lbs)
Terminal Type	Terminal M5
Internal Resistance	Approx. 0.01 Ohm (fully charged @ 25°C)
Max. Charge Current	8.4 A
Max. Discharge Current (5S)	330 A
Short Circuit Current	1200 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -15~50°C Charge: -15~40°C Storage: -15~40°C
Float Charge Voltage (20~25°C)	13.6-13.8V (-3mV/ cell/ °C)
Equalize and cycle Use Charge Voltage (20~25°C)	14.4-14.8V (-5mV/ cell / °C)
Container Material	ABS (UL94-V0 optional)

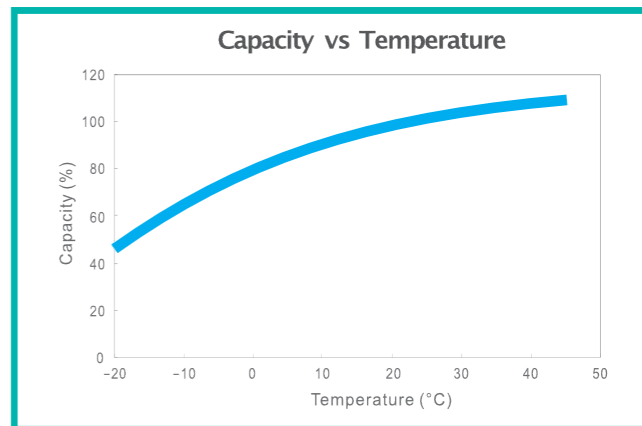
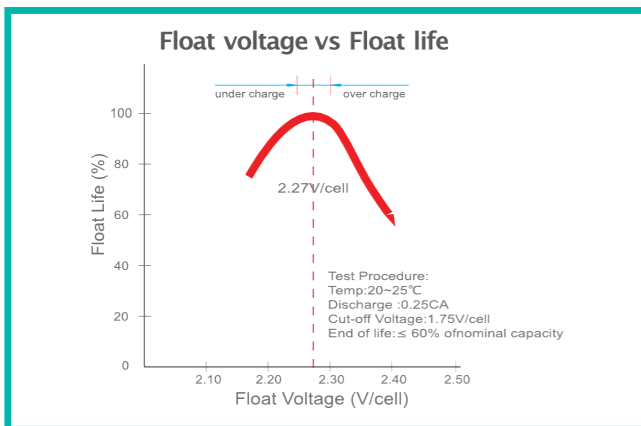
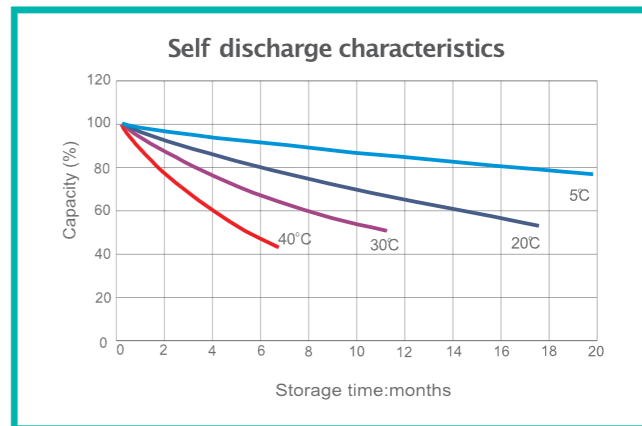
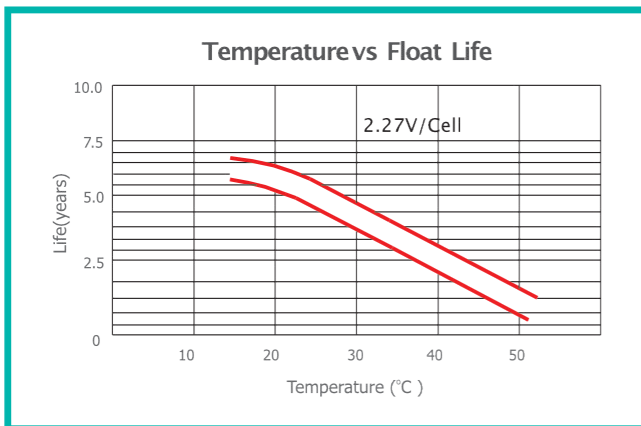
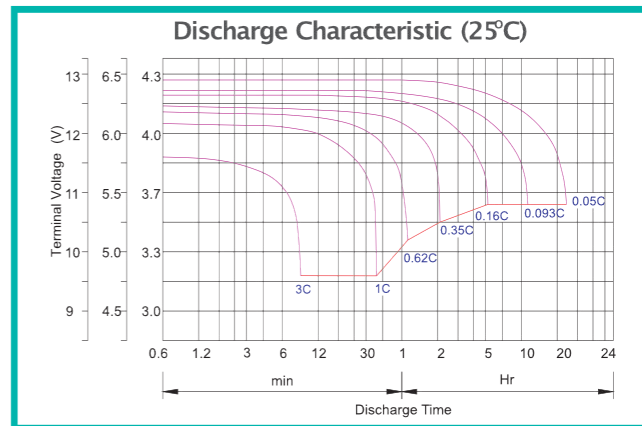
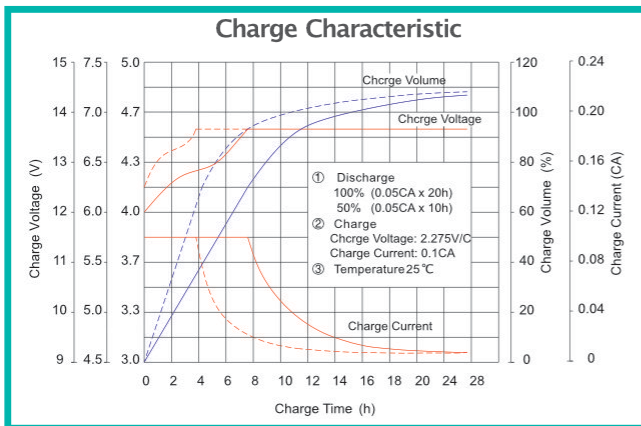


BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	112	69.6	53.1	31.6	18.4	10.9	7.79	6.10	5.03	3.39	2.78	1.48
1.67V	104	67.2	51.3	30.9	18.2	10.8	7.71	6.01	4.98	3.35	2.74	1.46
1.70V	96.7	64.3	50.0	30.3	17.9	10.7	7.65	5.94	4.91	3.31	2.71	1.43
1.75V	88.2	61.5	48.7	29.6	17.6	10.5	7.57	5.88	4.84	3.28	2.68	1.40
1.80V	79.0	58.1	47.6	29.1	17.2	10.4	7.45	5.80	4.79	3.24	2.65	1.37
1.85V	69.9	54.7	46.4	28.5	17.0	10.2	7.36	5.74	4.74	3.20	2.61	1.33

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	198	125	96.9	58.4	34.3	20.5	14.8	11.6	9.58	6.52	5.36	2.88
1.67V	186	122	94.2	57.3	34.1	20.4	14.7	11.5	9.53	6.48	5.32	2.85
1.70V	175	118	92.7	56.8	33.8	20.3	14.6	11.4	9.49	6.46	5.30	2.82
1.75V	161	114	91.3	56.0	33.5	20.2	14.5	11.3	9.43	6.45	5.28	2.78
1.80V	146	109	90.0	55.4	33.1	20.1	14.4	11.2	9.40	6.42	5.26	2.74
1.85V	132	104	88.6	54.9	33.0	20.0	14.3	11.1	9.39	6.38	5.22	2.68

CHARACTERISTICS



Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	$(A) \leq 0.2C$	$0.2C < (A) < 1.0C$	$(A) \geq 1.0C$

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	$0.2C \times 2h + 2.4 \sim 2.45V/\text{Cell} \times 24h$, Max. Current 0.3CA
Constant Current	$0.2C \times 2h + 0.1CA \times 12h$
Fast	$0.2C \times 2h + 0.3CA \times 4.0h$

Maintenance & Cautions

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: $-3mV/^{\circ}C/\text{Cell}$.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.