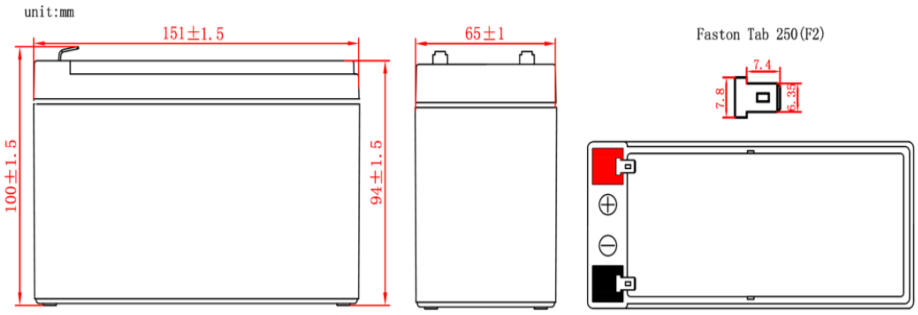
POWER-XTRA PXEC9-12 - 12V 9 Ah VRLA Battery

EcoLead Series

Dimensions

Overall Height (H)	Container Height (H)	Lenght (L)	Widht (W)
Unit: mm 102±1.5	95±1.5	151±1.5	65±1.0



Features

PXEC series are the universal battery, which adopt the AGM valve Control technology and high purity raw materials. The battery own the advantage of high consistency, good performance and long cycle Life. The battery are applicable to UPS/EPS, medical equipment and safety system.

Specification

Internal Cell	9
Nominal Voltage	12
Capacity	9Ah @ 20hr-rate to 1.6V/cell @25°C (77°F)
Weight	Approx. 2.4 kg±3%
Max. Discharging Current	135A(5sec)
Internal resistance	Approx. 18 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F)
	Charge: -15°C~40°C (5°F~104°F)
	Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C(77°F±5°F)
Float Charging Voltage	13.5~13.8V VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	1.8A
Equalization and Cycle Service	14.4~15.0V VDC/unit average at 25°C (77°F)
Self Discharge	Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	F2-Faston Tab250
Container Material	ABS (UL 94-HB)

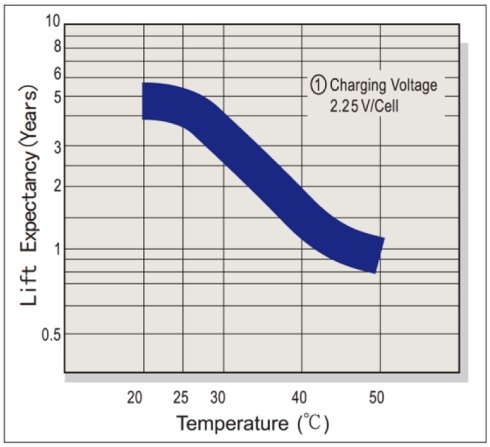
Constant Current Discharge Characteristics Unit:A (25°C,77°C)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	30.8	16.6	9.51	5.44	2.37	1.598	0.852	0.457
1.67V	30.2	16.1	9.42	5.38	2.35	1.585	0.849	0.455
1.7V	29.8	15.8	9.36	5.34	2.34	1.576	0.846	0.454
1.75V	28.3	15.1	9.16	5.20	2.30	1.550	0.837	0.450
1.8V	25.5	14.0	8.80	4.96	2.22	1.502	0.819	0.441
1.85V	19.8	11.8	8.12	4.53	2.02	1.399	0.774	0.423

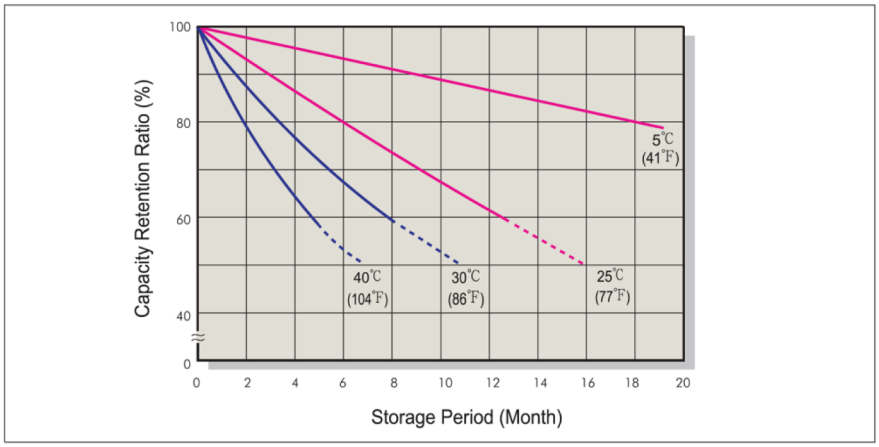
Constant Power Discharge Unit:W (25°C,77°C)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	53.0	31.6	18.37	10.34	4.68	3.057	1.677	0.905
1.67V	50.6	30.1	18.23	10.25	4.63	3.043	1.669	0.903
1.7V	49.0	29.1	18.13	10.19	4.61	3.030	1.663	0.901
1.75V	44.8	26.9	17.82	10.02	4.53	2.983	1.642	0.893
1.8V	38.6	23.9	17.14	9.70	4.37	2.882	1.608	0.876
1.85V	30.0	20.1	15.81	9.01	4.02	2.730	1.531	0.844

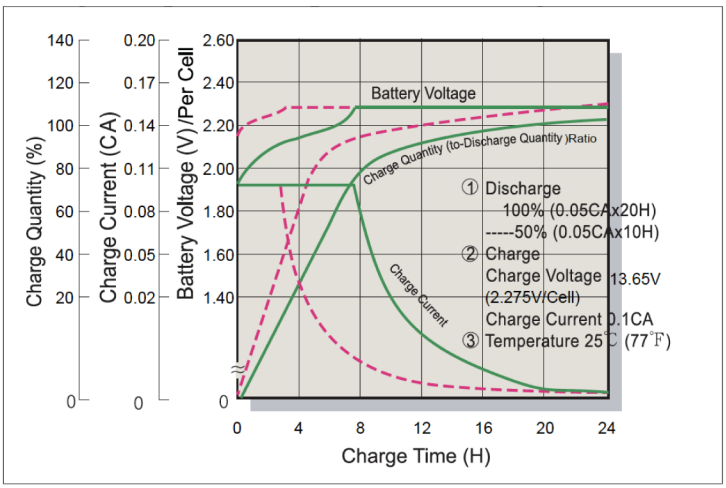
• Trickle (or Float) Design Life



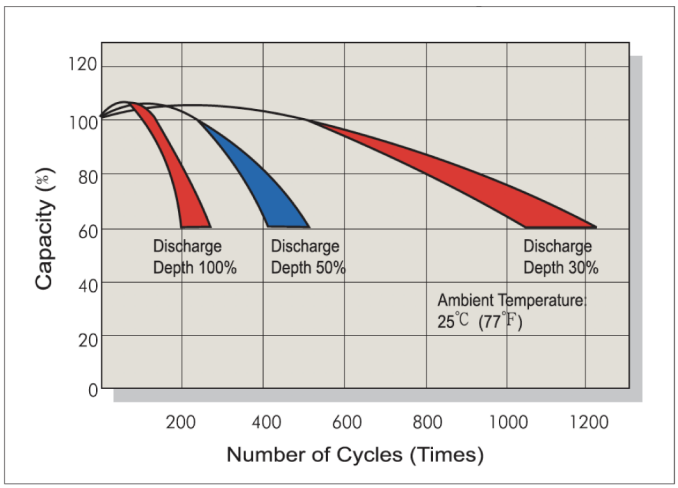
• Capacity Retention Characteristic



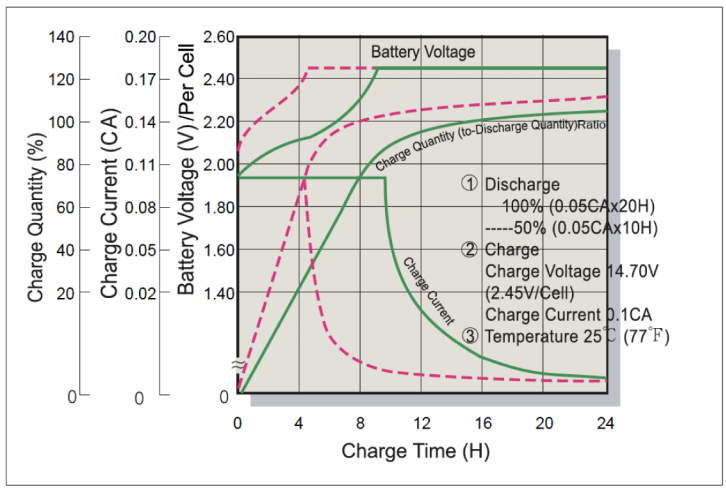
• Battery Voltage and Charge Time for Standby Use



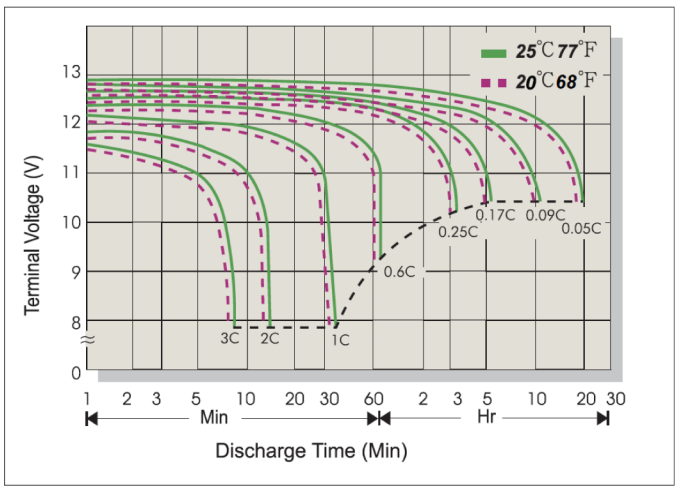
• Cycle Service Life



• Battery Voltage and Charge Time for Cycle Use



• Terminal Voltage (V) and Discharge Time



• Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temprature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.3C
Standby	25°C(77°F)	2.275	2.25~2.30	

• Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.6
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

• Effect of temperature on capacity(20HR)

Temperature	Dependency of Capacity(20HR)
40°C	103%
25°C	100%
0°C	85%
-15°C	65%

• Self-discharge Characteristics

Storage Time	Preservation Rate
3 months	91%
6 months	82%
12 months	64%