

# Panasonic

ideas for life

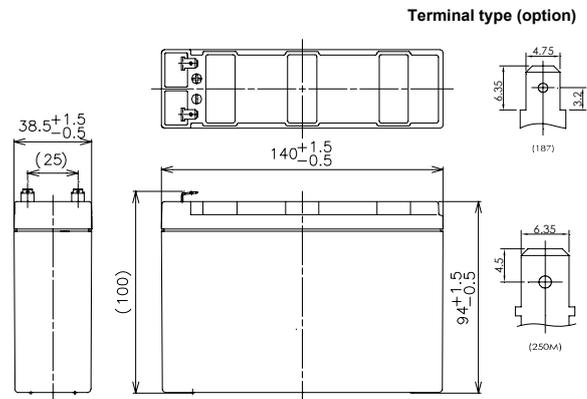
## UP-VW1220

For standby power supplies  
 Expected trickle life: 3 years at 25°C  
 5 years at 20°C



※Contents indicated (including the recycle marking, etc) are subject to change without notice.

### ■Dimensions(mm)



Battery case resin: Flame-retardant (UL94V-0)

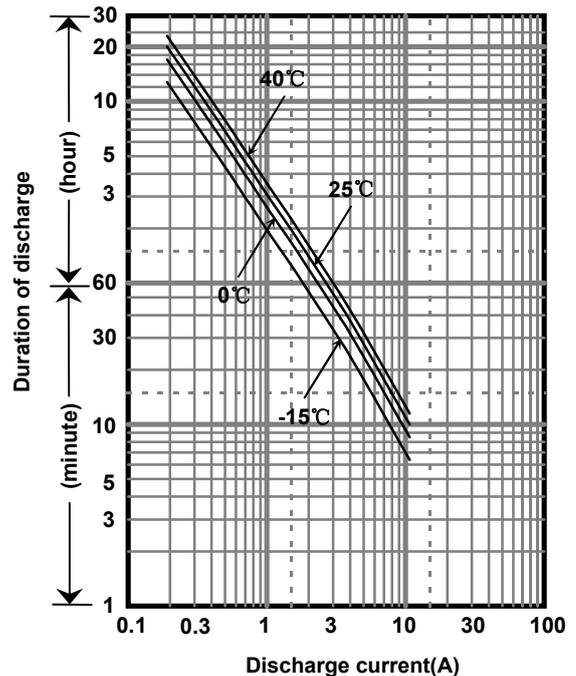
### ■Specification

Nominal Voltage		12V
Rated Capacity(cell@10MR)		20W
Dimensions	Length	140 mm
	Width	38.5 mm
	Height	94 mm
	Total height	100 mm
Approx. Mass		1.30 kg
Terminal		Faston 187 & 250M

### ■Characteristics

Capacity (25 °C)	30 minute rate	57W
	15 minute rate	91W
	10 minute rate	120W
	5 minute rate	180W
Internal Resistance (25 °C)	Fully charged battery	40 mΩ
Temperature Dependency of Capacity (20 hour rate)	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Self Discharge (25 °C)	After 3 months	91%
	After 6 months	82%
	After 12 months	64%

### ■Duration of discharge vs. discharge current



### ■Watt Table(25°C)

Cut-off V	(Wattage/Battery)															
	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	237	180	120	91.0	75.0	57.0	41.8	33.4	23.0	17.8	13.2	10.2	8.39	6.75	4.47	2.42
9.9V	227	173	116	89.1	74.0	54.5	39.3	31.6	21.3	16.7	12.5	9.56	7.88	6.36	4.21	2.29
10.2V	217	167	113	87.0	73.0	52.0	37.9	30.2	20.3	15.9	12.0	9.24	7.60	6.14	4.05	2.22
10.5V	197	152	108	84.5	69.5	49.5	35.4	28.3	18.7	14.8	11.6	8.86	7.26	5.83	3.88	2.12
10.8V	177	137	102	82.0	66.0	47.0	33.7	26.6	17.8	13.4	10.7	8.33	6.77	5.49	3.68	2.02

### ■Ampere Table(25°C)

Cut-off V	(Ampere/Battery)															
	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	21.3	16.1	10.7	7.91	6.47	4.87	3.56	2.84	1.95	1.50	1.11	0.851	0.701	0.563	0.373	0.231
9.9V	20.4	15.6	10.4	7.75	6.38	4.62	3.35	2.68	1.80	1.41	1.05	0.800	0.658	0.530	0.351	0.217
10.2V	19.5	15.0	10.1	7.57	6.29	4.44	3.23	2.56	1.72	1.34	1.01	0.773	0.635	0.512	0.338	0.211
10.5V	17.7	13.7	9.60	7.35	5.99	4.23	3.02	2.41	1.59	1.25	0.971	0.742	0.606	0.487	0.323	0.202
10.8V	15.9	12.3	9.11	7.13	5.69	4.02	2.87	2.26	1.51	1.13	0.895	0.697	0.565	0.458	0.306	0.193

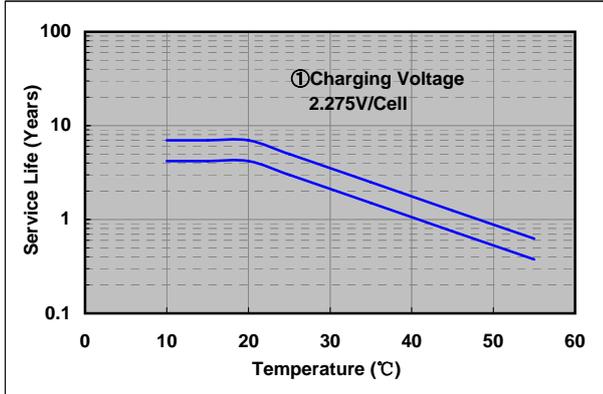
### Charging Method (25°C)

Trickle use	Control voltage:13.6-13.8V Initial current:0.600A or smaller
-------------	---

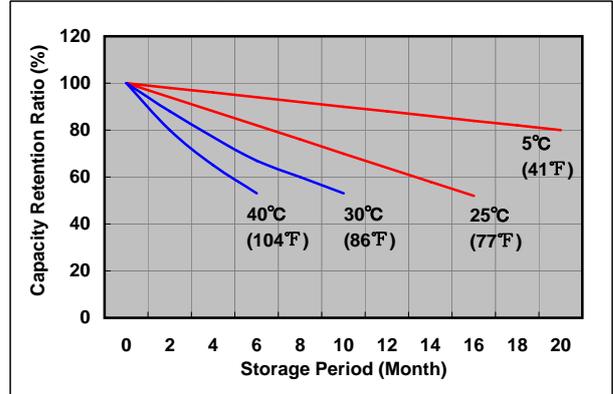
### Cut off voltage

Discharge current	0.200A-0.800A	0.800A-2.00A	2.00A-4.00A	4.00A-8.00A	8.00A-12.0A
Cut off voltage(V)	10.5	10.2	9.9	9.3	8.7

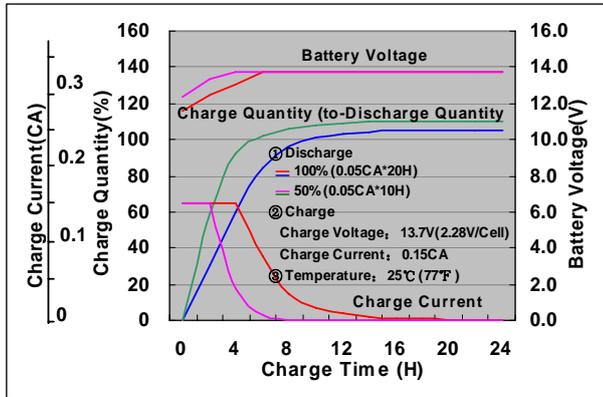
### Influence of Temperature on Trickle life



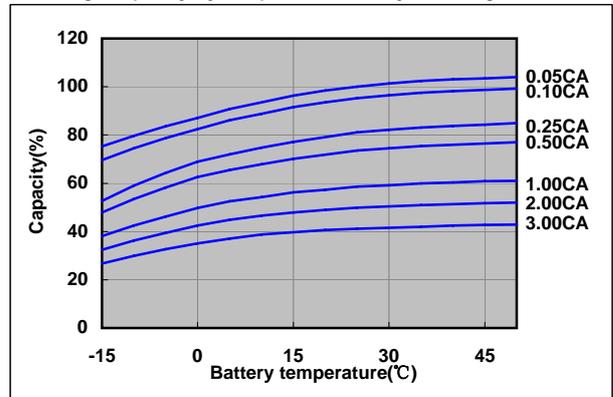
### Residual capacity test result



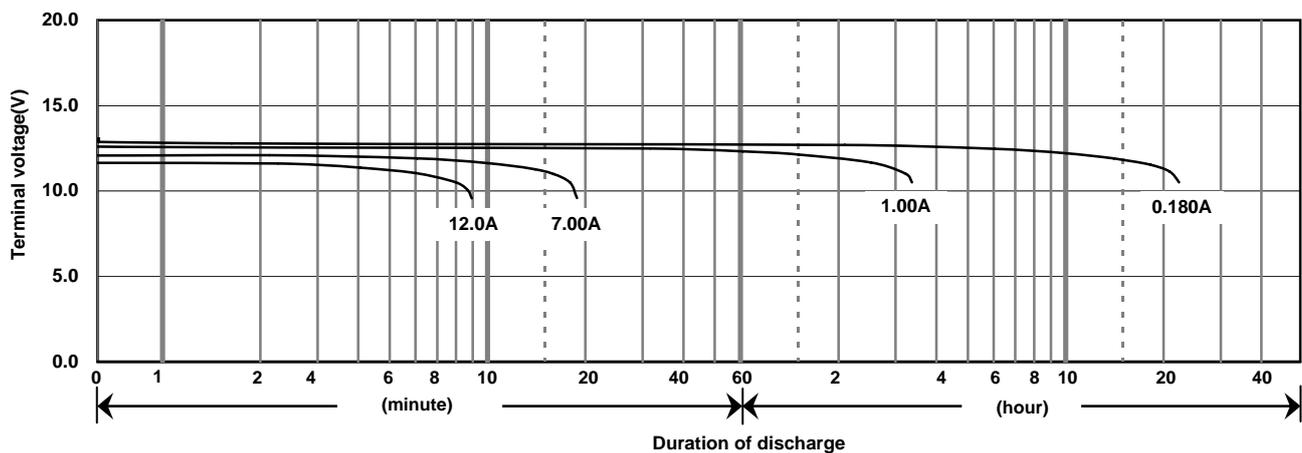
### Constant-voltage constant-current charge characteristics for Trickle use



### Discharge capacity by temperature and by discharge current



### Discharge characteristics(25°C)



### Caution

Due to the potential energy stored in the batteries, Please read 《Precautions for handling the Rechargeable Valve Regulated Lead Acid Batteries》 before using batteries. If improper handling or use of the batteries without understanding 《Precautions for handling the Rechargeable Valve Regulated Lead Acid Batteries》 may result in bodily injury caused by electrolyte leakage, heat generation, or explosion.

## Panasonic Storage Battery (Shenyang) Co., Ltd

NO. 51 Kunminghu Street, Shenyang Economic & Technical Development Zone, 110141 China

Tel: 86 24 25818921

Fax: 86 24 62786318

Website: <http://www.panasonicbattery.cn>

2010.03