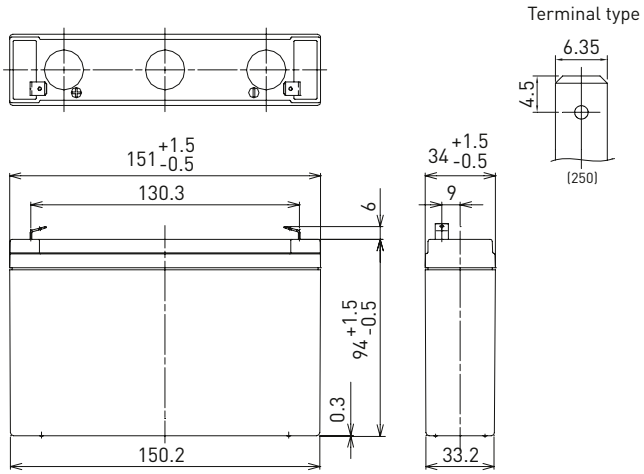
UP-VW0645P

FOR STANDBY POWER SUPPLIES.
EXPECTED TRICKLE DESIGN LIFE: 6 – 9 YEARS AT 20°C
ACCORDING TO EUROBAT.

DIMENSIONS (MM)



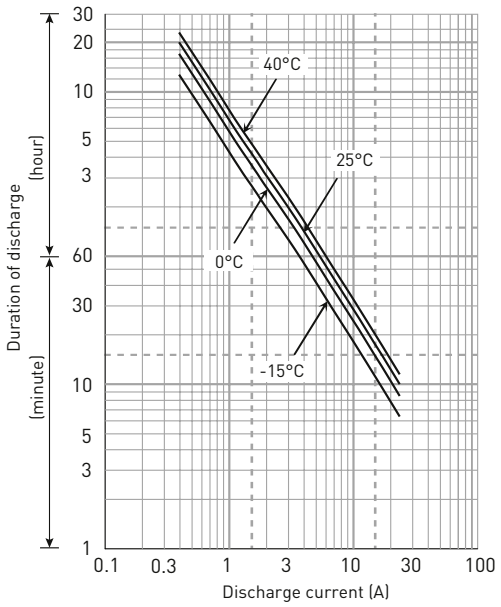
Contents indicated (including the recycle marking, etc.) are subject to change without notice.

Battery case resin: flame retardant (UL94 V-0)

SPECIFICATIONS

Name		UP-VW0645P1
Nominal voltage		6V
Rated power (cell@10MR)		45W
Dimensions	Length	151mm
	Width	34mm
	Height	100mm
Approx. mass		1.30kg
Terminal		Faston 250
Capacity (25°C)	30 minute rate	56W
	15 minute rate	98W
	10 minute rate	135W
	5 minute rate	205W
Impedance	Fully charged battery (25°C)	10mΩ
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 month	91%
	After 6 month	82%
	After 12 month	64%

DURATION OF DISCHARGE VS. DISCHARGE CURRENT



WATT TABLE (25°C)

(Wattage/battery)

Cut-off	3min.	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
4.80V	265	205	135	97.5	79.5	56.0	41.1	32.8	22.6	17.5	13.0	9.99	8.25	6.63	4.39	2.38
4.95V	254	200	131	97.2	78.9	55.9	40.8	32.5	22.1	17.3	12.9	9.92	8.18	6.60	4.37	2.37
5.10V	245	195	129	96.5	78.0	55.5	40.4	32.2	21.7	16.9	12.8	9.86	8.12	6.55	4.33	2.37
5.25V	231	180	123	93.4	75.4	55.0	39.3	31.5	20.8	16.4	12.6	9.85	8.07	6.48	4.31	2.36
5.40V	217	165	117	90.0	73.0	54.5	39.1	30.9	20.6	15.5	12.4	9.66	7.85	6.37	4.26	2.35

AMPERE TABLE (25°C)

(Ampere/battery)

Cut-off	3min.	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
4.80V	47.7	36.8	23.9	17.0	13.7	9.57	6.99	5.57	3.82	2.95	2.19	1.67	1.38	1.11	0.732	0.397
4.95V	45.8	35.9	23.5	16.9	13.6	9.55	6.95	5.50	3.75	2.93	2.17	1.66	1.37	1.10	0.729	0.396
5.10V	44.1	35.0	23.0	16.8	13.5	9.49	6.88	5.46	3.67	2.86	2.15	1.65	1.36	1.09	0.721	0.394
5.25V	41.6	32.3	22.0	16.3	13.0	9.40	6.70	5.35	3.53	2.77	2.11	1.64	1.35	1.08	0.718	0.393
5.40V	39.0	29.6	20.9	15.7	12.6	9.32	6.67	5.25	3.50	2.62	2.08	1.62	1.31	1.06	0.710	0.391

All mentioned values are average values

UP-VW0645P

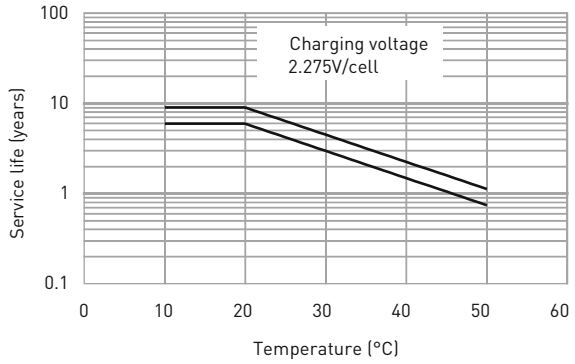
CHARGING METHOD (25°C)

Trickle use	Control voltage: 6.80V - 6.90V Initial current: 1.20A or smaller

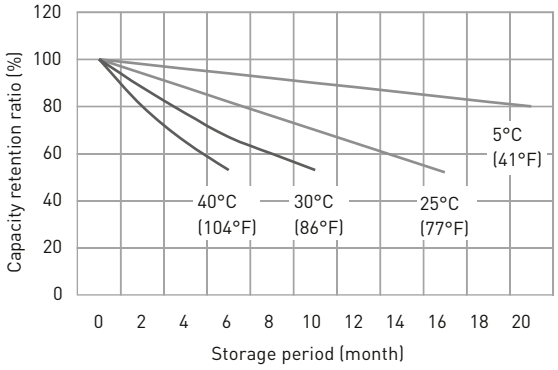
CUT-OFF VOLTAGE

Discharge current	0.400A - 1.60A	1.60A - 4.00A	4.00A - 8.00A	8.00A - 16.0A	16.0A - 24.0A
Cut-off voltage	5.25V	5.10V	4.95V	4.65V	4.35V

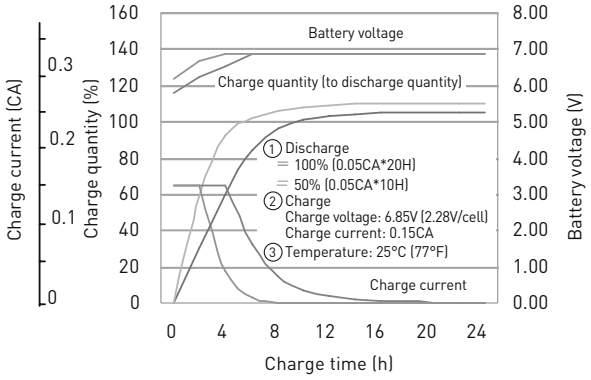
INFLUENCE OF TEMPERATURE ON TRICKLE LIFE



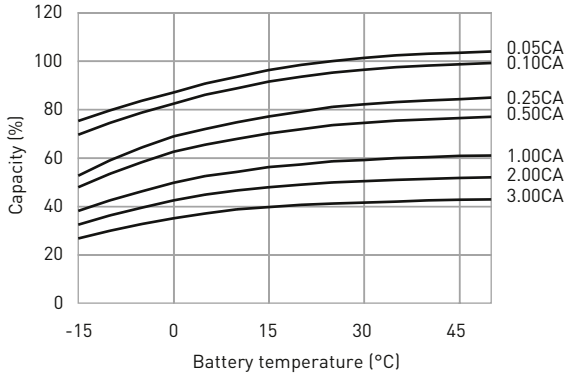
RESIDUAL CAPACITY TEST RESULT



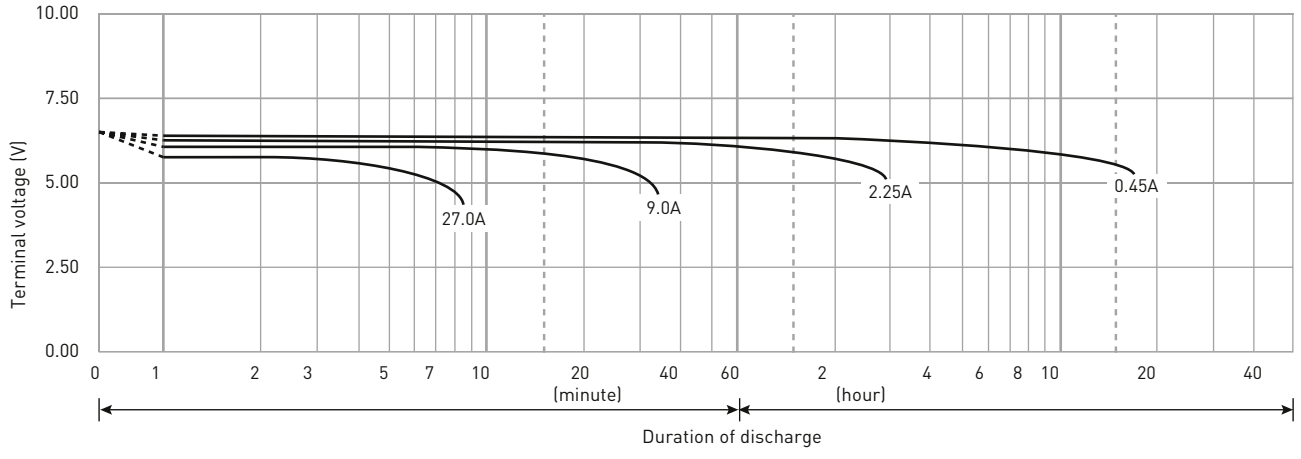
CONSTANT-VOLTAGE CONSTANT-CURRENT CHARGE CHARACTERISTICS FOR TRICKLE USE



DISCHARGE CAPACITY BY TEMPERATURE AND BY DISCHARGE CURRENT



DISCHARGE CHARACTERISTICS



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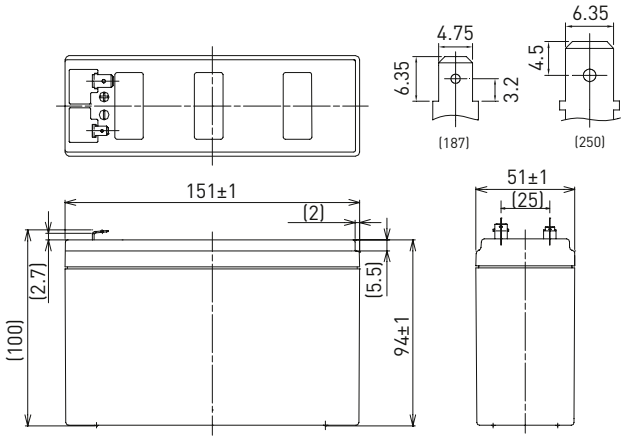
UP-VWA1232P

FOR STANDBY POWER SUPPLIES.
EXPECTED TRICKLE DESIGN LIFE: 6 – 9 YEARS AT 20°C
ACCORDING TO EUROBAT.

DIMENSIONS (MM)

Terminal type (option)



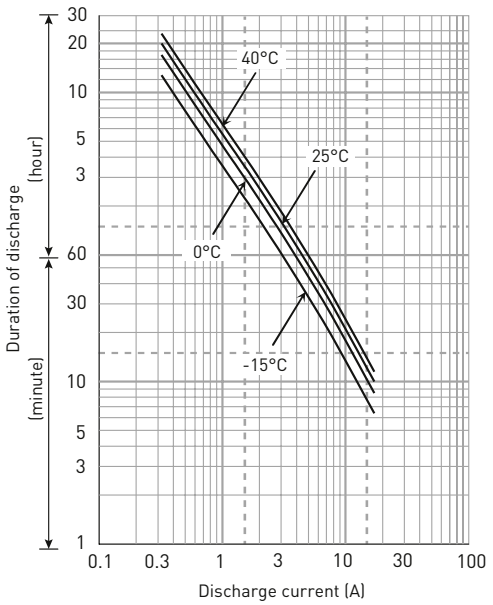
Contents indicated (including the recycle marking, etc.) are subject to change without notice.

Battery case resin: flame retardant (UL94 V-0)

SPECIFICATIONS

Name		UP-VWA1232P1/P2
Nominal voltage		12V
Rated power (cell@10MR)		32W
Dimensions	Length	151mm
	Width	51mm
	Height	100mm
Approx. mass		2.00kg
Terminal		Faston 250 & 187/250
Capacity (25°C)	30 minute rate	97W
	15 minute rate	165W
	10 minute rate	210W
	5 minute rate	339W
Impedance	Fully charged battery (25°C)	25mΩ
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 month	91%
	After 6 month	82%
	After 12 month	64%

DURATION OF DISCHARGE VS. DISCHARGE CURRENT



WATT TABLE (25°C)

(Wattage/battery)

Cut-off	3min.	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	444	339	210	165	130	97.0	71.1	56.9	41.8	31.5	22.5	16.6	13.8	11.7	7.39	3.86
9.9V	418	290	179	157	127	95.0	70.7	55.5	40.9	31.3	22.4	16.5	13.7	11.4	7.36	3.85
10.2V	391	276	174	149	124	93.0	67.7	53.9	38.8	29.6	21.5	15.9	13.2	11.2	7.04	3.72
10.5V	355	251	166	143	118	89.5	65.9	52.8	37.3	28.6	20.3	15.8	13.1	11.1	7.01	3.71
10.8V	318	226	157	137	113	86.0	61.7	48.8	34.8	25.5	19.5	14.6	12.0	10.3	6.53	3.47

AMPERE TABLE (25°C)

(Ampere/battery)

Cut-off	3min.	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	36.9	27.8	17.1	13.7	11.0	8.29	6.06	4.83	3.31	2.56	1.89	1.45	1.19	0.958	0.634	0.344
9.9V	34.7	26.5	16.7	13.0	10.7	8.12	6.02	4.71	3.25	2.54	1.88	1.44	1.18	0.954	0.631	0.343
10.2V	32.5	25.2	16.3	12.3	10.3	7.95	5.77	4.58	3.08	2.40	1.80	1.38	1.14	0.916	0.604	0.331
10.5V	29.5	22.9	15.5	11.8	9.90	7.65	5.61	4.48	2.96	2.32	1.76	1.33	1.07	0.906	0.602	0.320
10.8V	26.4	20.6	14.6	11.3	9.48	7.35	5.26	4.14	2.76	2.07	1.64	1.28	1.03	0.838	0.560	0.309

All mentioned values are average values

UP-VWA1232P

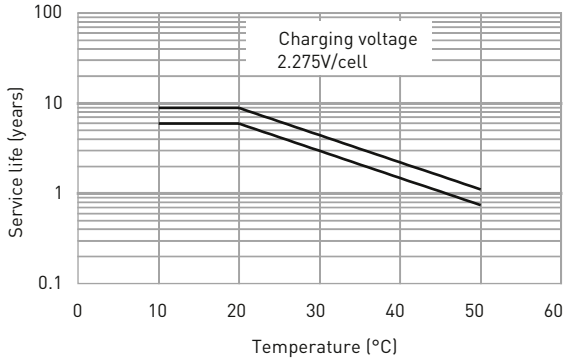
CHARGING METHOD (25°C)

Trickle use	Control voltage: 13.6V - 13.8V Initial current: 0.900A or smaller

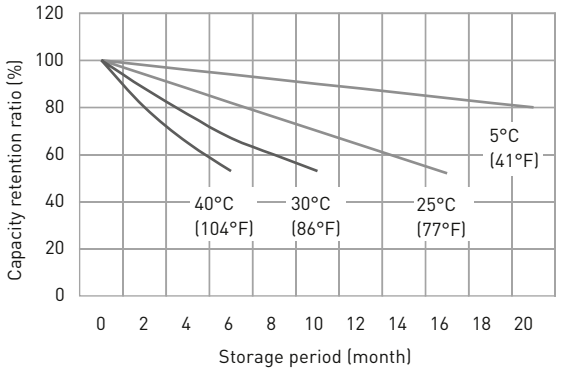
CUT-OFF VOLTAGE

Discharge current	0.300A - 1.20A	1.20A - 3.00A	3.00A - 6.00A	6.00A - 12.0A	12.0A - 18.0A
Cut-off voltage	10.5V	10.2V	9.9V	9.3V	8.7V

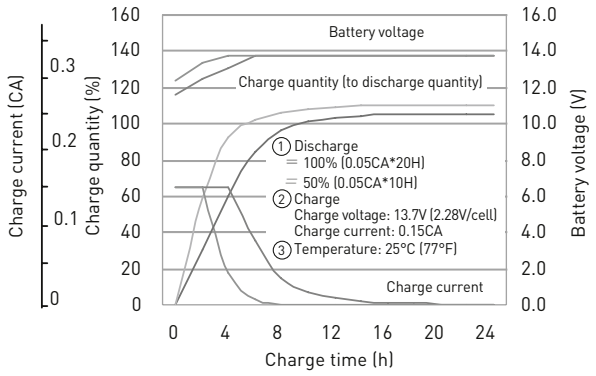
INFLUENCE OF TEMPERATURE ON TRICKLE LIFE



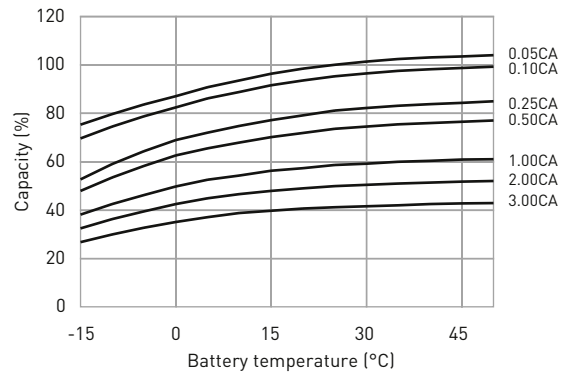
RESIDUAL CAPACITY TEST RESULT



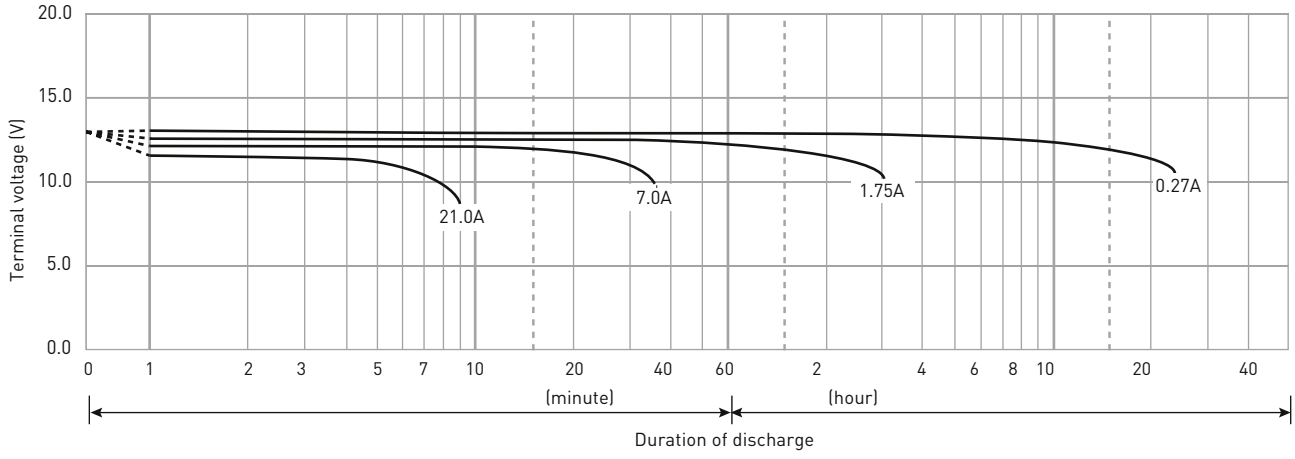
CONSTANT-VOLTAGE CONSTANT-CURRENT CHARGE CHARACTERISTICS FOR TRICKLE USE



DISCHARGE CAPACITY BY TEMPERATURE AND BY DISCHARGE CURRENT



DISCHARGE CHARACTERISTICS



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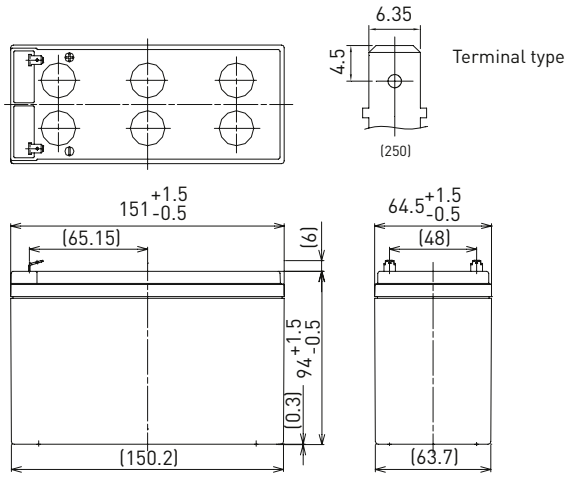
UP-VW1245P

FOR STANDBY POWER SUPPLIES.
EXPECTED TRICKLE DESIGN LIFE: 6 – 9 YEARS AT 20°C
ACCORDING TO EUROBAT.

DIMENSIONS (MM)



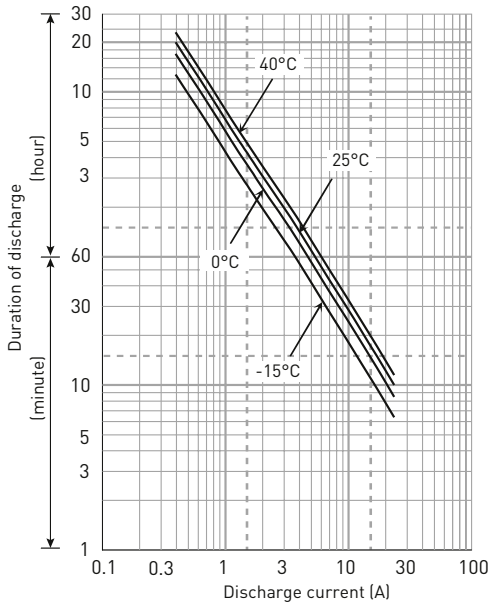
Contents indicated (including the recycle marking, etc.) are subject to change without notice.

Battery case resin: flame retardant (UL94 V-0)

SPECIFICATIONS

Name		UP-VW1245P1
Nominal voltage		12V
Rated power (cell@10MR)		45W
Dimensions	Length	151mm
	Width	64.5mm
	Height	100mm
Approx. mass		2.55kg
Terminal		Faston 250
Capacity (25°C)	30 minute rate	112W
	15 minute rate	195W
	10 minute rate	270W
	5 minute rate	410W
Impedance	Fully charged battery (25°C)	20mΩ
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 month	91%
	After 6 month	82%
	After 12 month	64%

DURATION OF DISCHARGE VS. DISCHARGE CURRENT



WATT TABLE (25°C)

(Wattage/battery)

Cut-off	3min.	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	530	410	270	195	159	112	82.1	65.7	45.2	34.9	26.0	20.0	16.5	13.3	8.79	4.76
9.9V	509	400	263	194	158	111	81.6	65.1	44.3	34.7	25.9	19.8	16.4	13.2	8.75	4.75
10.2V	490	390	258	193	156	110	80.8	64.4	43.4	33.9	25.6	19.7	16.2	13.1	8.65	4.73
10.5V	463	360	246	187	151	109	78.7	63.0	41.7	32.8	25.2	19.5	16.1	13.0	8.62	4.72
10.8V	434	330	234	180	146	108	78.3	61.8	41.3	31.1	24.7	19.3	15.7	12.7	8.52	4.69

AMPERE TABLE (25°C)

(Ampere/battery)

Cut-off	3min.	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	47.7	36.8	23.9	17.0	13.7	9.57	6.99	5.57	3.82	2.95	2.19	1.67	1.38	1.11	0.732	0.397
9.9V	45.8	35.9	23.5	16.9	13.6	9.55	6.95	5.50	3.75	2.93	2.17	1.66	1.37	1.10	0.729	0.396
10.2V	44.1	35.0	23.0	16.8	13.5	9.49	6.88	5.46	3.67	2.86	2.15	1.65	1.36	1.09	0.721	0.394
10.5V	41.6	32.3	22.0	16.3	13.0	9.40	6.70	5.35	3.53	2.77	2.11	1.64	1.35	1.08	0.718	0.393
10.8V	39.0	29.6	20.9	15.7	12.6	9.32	6.67	5.25	3.50	2.62	2.08	1.62	1.31	1.06	0.710	0.391

All mentioned values are average values

UP-VW1245P

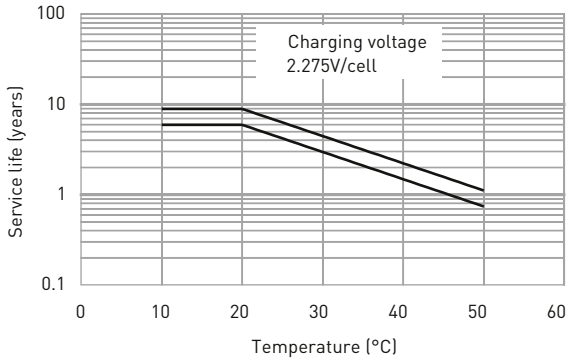
CHARGING METHOD (25°C)

Trickle use	Control voltage: 13.6V - 13.8V Initial current: 1.20A or smaller

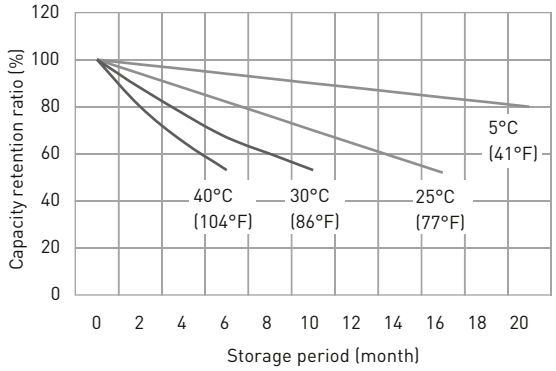
CUT-OFF VOLTAGE

Discharge current	0.400A - 1.60A	1.60A - 4.00A	4.00A - 8.00A	8.00A - 16.0A	16.0A - 24.0A
Cut-off voltage	10.5V	10.2V	9.9V	9.3V	8.7V

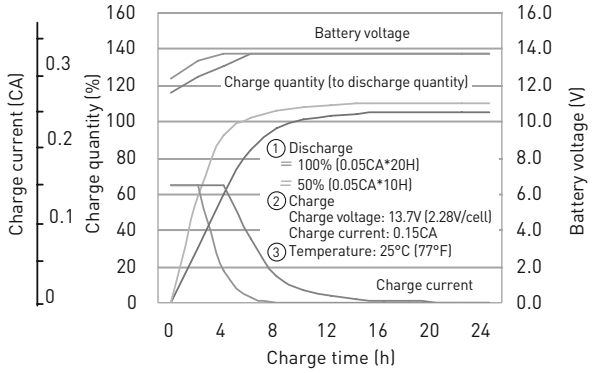
INFLUENCE OF TEMPERATURE ON TRICKLE LIFE



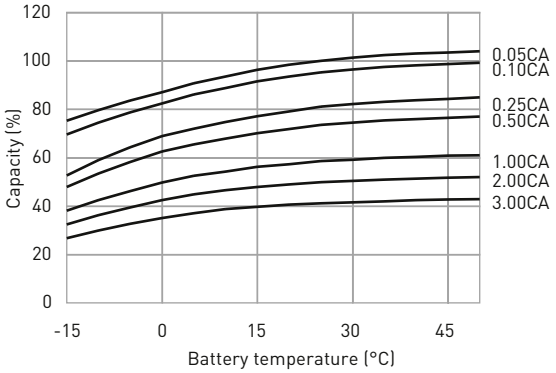
RESIDUAL CAPACITY TEST RESULT



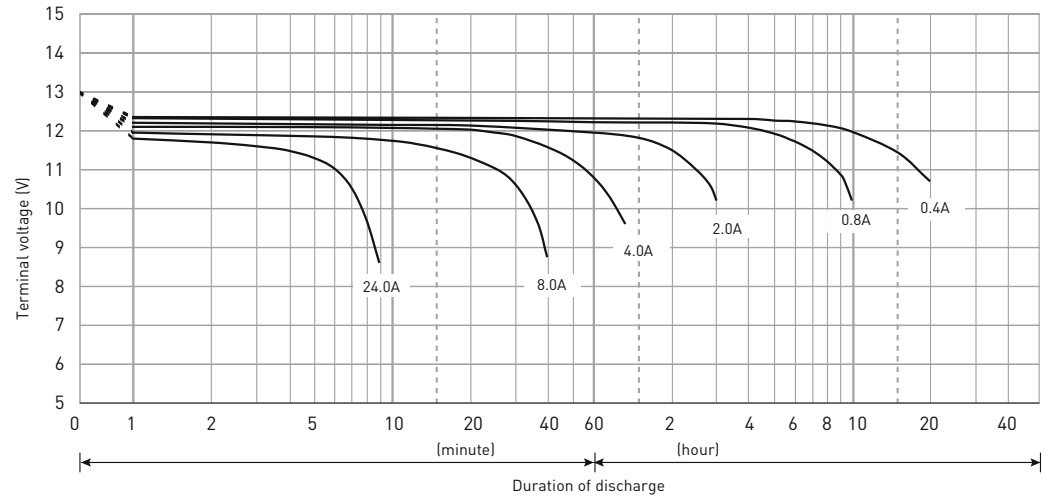
CONSTANT-VOLTAGE CONSTANT-CURRENT CHARGE CHARACTERISTICS FOR TRICKLE USE



DISCHARGE CAPACITY BY TEMPERATURE AND BY DISCHARGE CURRENT



DISCHARGE CHARACTERISTICS



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