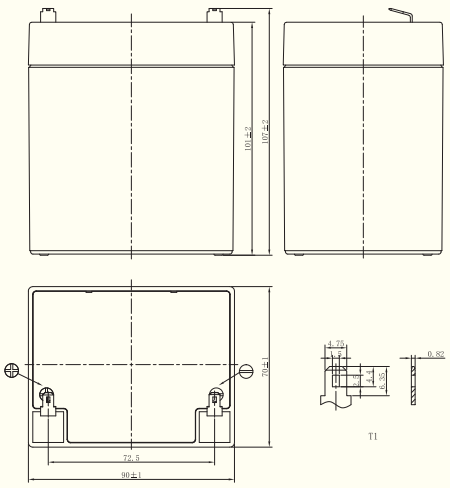
KS12-4.5AH(12V4.5Ah/20HR)

KENSON® Source of energy

RECHARGEABLE BATTERY

Color : ●

Dimensions



- ABS container;
- Absorbent glass mat technology (AGM).

Applications

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- DC power supply
- Auto control system

General Features

- 5 years design life (25˚C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

Standards

- Compliance with IEC 60896 standards EU Battery Directive
- Manufactured by ISO & CE certified Company

Specifications

Nominal Voltage		12V
Capacity (25°C)	20HR (10.50V)	4.50Ah
	10HR (10.50V)	4.20Ah
	1HR (9.60V)	2.93Ah
Dimension	Length	90±2mm
	Width	70±2mm
	Height	100±2mm
	Total Height	105±2mm
Approx. Weight		1.50kg±5%
Terminal type		T1
Internal resistance (Fully charged, 25°C)		Approx. 48mΩ
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 Month	Remaining Capacity: 91%
	6 Month	Remaining Capacity: 82%
	12 Month	Remaining Capacity: 65%
Nominal operating temperature		25°C±3°C (77°C±5°C)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	10°C ~ 50°C (14°F ~122°F)
	Storage	-20°C ~ 50°C (-4°F ~122°F)
Float charging voltage (25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage (25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Standard / Maximum charging current		0.45A / 1.35A
Terminal material		Copper
Maximum discharge current		67.5A (5 sec.)
Designed floating life (25°C)		5 years+

KS12-4.5AH(12V4.5Ah/20HR)

KENSON® Source of energy

RECHARGEABLE BATTERY

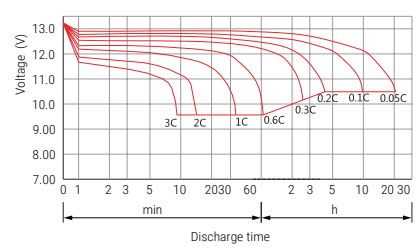
Discharge Table

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	11.3	8.26	6.55	5.35	4.07	2.99	2.44	1.84	1.53	1.09	0.876	0.744	0.637	0.500	0.409	0.220
1.80V/cell	12.2	8.69	6.81	5.51	4.17	3.04	2.48	1.87	1.56	1.11	0.888	0.755	0.645	0.507	0.413	0.222
1.75V/cell	13.1	9.10	7.06	5.68	4.27	3.11	2.53	1.90	1.58	1.13	0.900	0.765	0.653	0.513	0.419	0.225
1.70V/cell	14.1	9.50	7.31	5.84	4.37	3.16	2.57	1.94	1.61	1.14	0.910	0.775	0.662	0.519	0.424	0.227
1.67V/cell	14.8	9.80	7.46	5.95	4.43	3.20	2.60	1.95	1.62	1.15	0.920	0.780	0.667	0.523	0.427	0.229
1.60V/cell	16.0	10.4	7.80	6.17	4.56	3.29	2.66	2.00	1.66	1.17	0.940	0.795	0.679	0.532	0.433	0.231

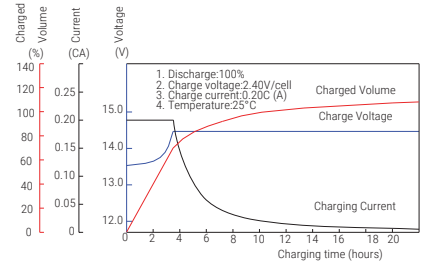
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	21.3	15.8	12.6	10.3	7.86	5.79	4.74	3.59	3.01	2.15	1.73	1.47	1.26	0.990	0.812	0.489
1.80V/cell	23.0	16.5	13.1	10.5	8.02	5.89	4.82	3.65	3.04	2.18	1.75	1.49	1.28	1.01	0.821	0.494
1.75V/cell	24.7	17.2	13.4	10.8	8.18	5.98	4.89	3.69	3.09	2.21	1.76	1.50	1.29	1.02	0.831	0.499
1.70V/cell	26.4	17.9	13.9	11.1	8.33	6.07	4.96	3.74	3.12	2.23	1.79	1.52	1.31	1.03	0.840	0.504
1.67V/cell	27.4	18.4	14.0	11.3	8.42	6.13	5.00	3.77	3.15	2.25	1.80	1.53	1.31	1.04	0.845	0.507
1.60V/cell	29.5	19.3	14.6	11.6	8.63	6.26	5.09	3.83	3.20	2.29	1.83	1.56	1.33	1.05	0.858	0.515

Note: The above characteristics data can be obtained within three charge/discharge cycles.

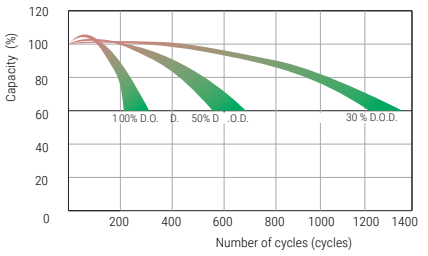
Discharge Characteristics (25°C)



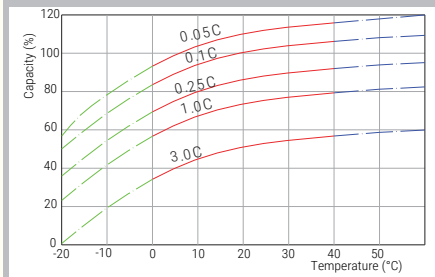
Charging Characteristics (25°C)



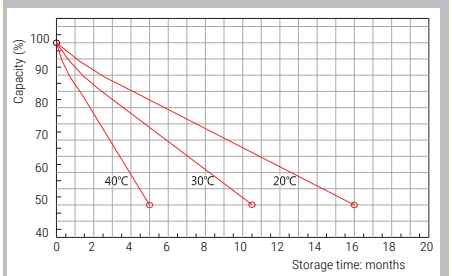
Cycle Life on D.O.D (25°C)



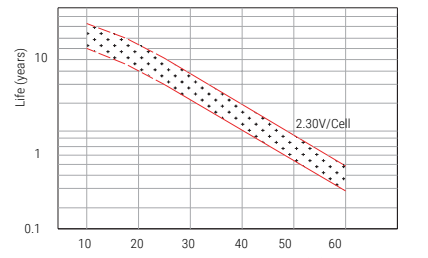
Effect of Temperature on Capacity



Self-discharge Characteristics



Floating Life on Temperature



This specification provided by Lab report might differ from the practically tests.