

stored energy solutions for a demanding world

**Narada**

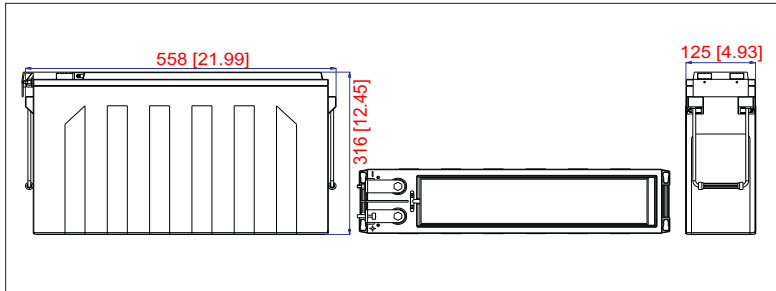
Model: **AG12V200**

**AcmeG Series**

The AcmeG range front access gel batteries is designed based on the Acme series. Using the polymer gel electrolyte with real front access structure. The state of the art internal and external design ensures AcmeG the high reliability and makes the installations quite simple and safe when placed on a standard relay rack tray or in a closed cabinet. The design float life is 12 years at 20°C(68°F).



**Dimensions—mm [inch]**



**Specifications**

Battery Model	AG12V200
Nominal Voltage	12V
Rated Capacity	200Ah - 20A for 10h to 1.80V/cell @25°C(77°F)
Typical Weight	61.0 kg
Internal Resistance	Approx 3.50mΩ
Temperature Ranges	Operation (maximum): -40°C to 50°C(-40°F to 122°F)
	Operation (recommended): 15°C to 25°C(59°F to 77°F)
	Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	50 A
Equalize and Cycle Service	2.35V~2.40V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 90% after 90 days storage(25°C/77°F)
Terminal	M6 Female
Terminal Hardware Torque	8 ± 1.0Nm
Container Material	ABS (V0 optional)

**Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)**

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	554	348	229	168	138	78.8	55.9	44.1	37.5	32.0	25.3	20.4	17.5	10.9	9.13
1.67V	519	342	226	168	136	78.1	55.6	44.1	37.2	31.7	25.1	20.3	17.4	10.8	9.05
1.70V	501	336	222	167	135	77.7	55.4	44.0	37.1	31.6	25.0	20.2	17.3	10.7	9.01
1.75V	475	321	213	164	134	77.1	55.1	43.8	36.9	31.2	24.8	20.1	17.2	10.6	8.93
1.80V	427	295	201	156	130	75.5	54.2	43.3	36.3	30.7	24.6	20.0	17.1	10.6	8.89
1.83V	389	276	191	150	128	73.5	53.2	42.8	35.5	29.9	24.3	19.8	16.9	10.5	8.84
1.85V	370	263	187	144	124	71.5	52.3	42.2	35.0	29.6	24.0	19.6	16.8	10.5	8.79

**Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)**

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	967	642	411	330	281	166	118	91.9	77.3	65.8	50.5	43.3	37.5	22.9	19.1
1.67V	914	625	408	328	279	166	118	91.5	77.0	65.6	50.4	43.2	37.4	22.8	19.0
1.70V	881	613	406	327	278	165	117	91.3	76.7	65.5	50.3	43.2	37.3	22.7	19.0
1.75V	814	590	398	322	274	164	117	90.8	76.2	65.1	49.9	43.1	37.2	22.4	18.9
1.80V	748	558	386	312	267	161	114	89.7	75.1	64.6	49.6	42.9	37.0	22.1	18.9
1.83V	726	528	374	304	260	156	112	88.6	74.0	63.9	49.4	42.6	36.7	21.9	18.8
1.85V	712	504	366	297	254	153	109	87.5	72.7	63.1	49.1	42.5	36.5	21.6	18.8

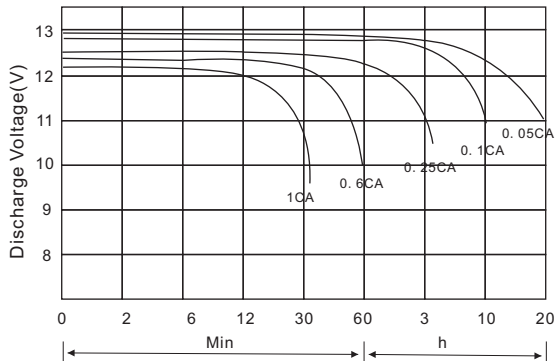
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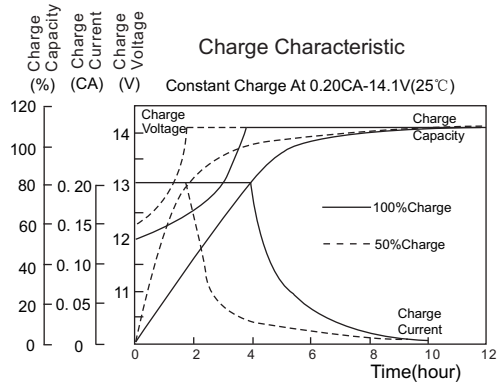
Model: **AG12V200**

**AcmeG Series**

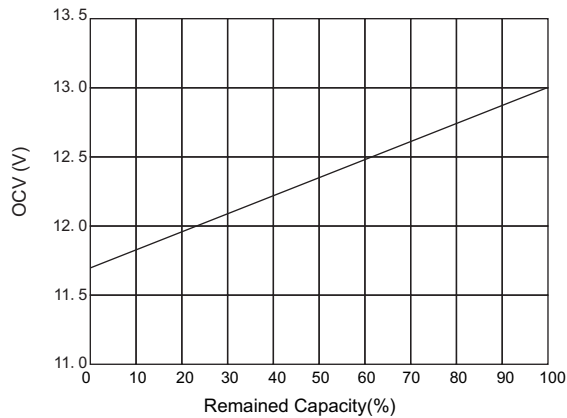
Terminal Voltage(V) vs. Discharge Time (25°C, 77°F)



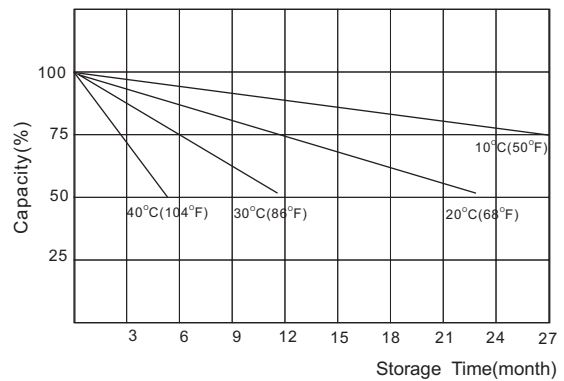
Battery Voltage vs. Charge Time



Relationship of OCV vs. State of Charge



Capacity Retention Characteristic



**Charging Procedures**

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle	25°C	2.40	2.35~2.40	0.25C
Standby	25°C	2.25	2.23~2.27	

**Discharge Current VS. Discharge Voltage**

Final Discharge Voltage V/Cell	1.80	1.70	1.55	1.30
Discharge Current (A)	0.2C ≥ (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

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