

UCG28-12



Physical Specification

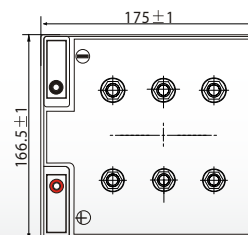
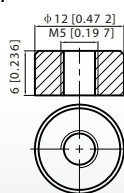
Part Number:	UCG28-12
Length:	166.5 ± 2 mm (6.56 inches)
Width:	175 ± 2 mm (6.89 inches)
Container Height:	125 ± 2 mm (4.92 inches)
Total Height (with terminal):	125 ± 2 mm (4.92 inches)
Approx Weight:	Approx 8.7 kg (19.2lbs)

Specifications

	Nominal Voltage	12V	
	Nominal Capacity (20HR)	28.0AH	
Terminal Type	Standard Terminal	F12	
	Optional Terminal	-	
Container Material	Standard Option	ABS	
	Flame Retardant Option (FR)	ABS (UL94:VO)	
Rated Capacity	26.0 AH/1.30A	(20hr,1.80V/cell, 25°C / 77°F)	
	24.2 AH/2.42A	(10hr,1.80V/cell, 25°C / 77°F)	
	20.8 AH/4.16A	(5hr,1.75V/cell, 25°C / 77°F)	
	18.1 AH/6.03A	(3hr,1.75V/cell, 25°C / 77°F)	
	14.3 AH/14.3A	(1hr,1.60V/cell, 25°C / 77°F)	
Max Discharge Current	312A (5s)		
Internal Resistance	Approx 13.5mΩ		
Discharge Characteristics	Operating Temp. Range	Discharge: -20 ~ 55°C (-4 ~ 131°F)	
		Charge: 0 ~ 40°C (32 ~ 104°F)	
		Storage: -20 ~ 50°C (-4 ~ 122°F)	
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
	Cycle Use	Initial Charging Current less than 6.5A.Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C	
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C	
	Capacity affected by Temperature	40°C (104°F)	103%
25°C (77°F)		100%	
0°C (32°F)		86%	
Design Floating Life at 20°C	12 Years		
Self Discharge	Ultracell batteries may be stored for up to 6 months at 25°C(°77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.		

Dimensions

F12 Terminal



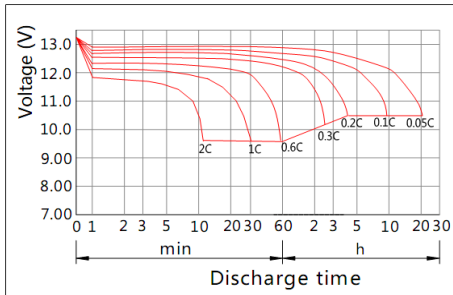
Constant Current Discharge (Amperes) at 20°C

F.V/ Tim e	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	22.0	17.3	13.2	11.0	6.99	5.33	4.41	3.81	3.29	2.91	2.63	2.40	2.27	1.25
1.80V/cell	25.2	19.3	14.5	12.2	7.57	5.71	4.68	4.00	3.45	3.05	2.75	2.52	2.37	1.30
1.75V/cell	28.3	21.2	15.7	13.0	8.02	6.03	4.90	4.16	3.58	3.16	2.84	2.60	2.42	1.33
1.70V/cell	30.5	22.7	16.7	13.8	8.50	6.28	5.06	4.29	3.70	3.26	2.93	2.67	2.48	1.34
1.67V/cell	31.7	23.6	17.3	14.3	8.72	6.48	5.19	4.38	3.76	3.31	2.97	2.70	2.50	1.36
1.60V/cell	34.4	25.3	18.5	15.2	9.07	6.74	5.38	4.51	3.85	3.38	3.02	2.76	2.55	1.38

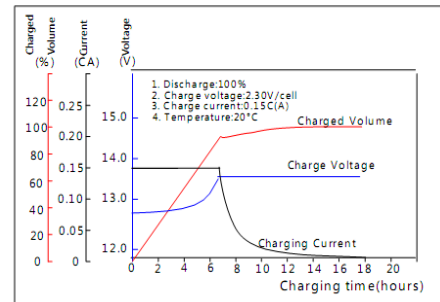
Constant Power Discharge (Watts) at 20°C

F.V/ Tim e	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	42.1	33.3	25.5	21.5	13.7	10.4	8.68	7.52	6.52	5.78	5.23	4.78	4.53	2.49
1.80V/cell	47.6	36.8	28.0	23.6	14.7	11.1	9.17	7.88	6.82	6.03	5.46	5.02	4.72	2.59
1.75V/cell	52.9	40.1	30.0	25.1	15.6	11.8	9.57	8.16	7.04	6.23	5.62	5.16	4.81	2.64
1.70V/cell	56.4	42.6	31.6	26.4	16.4	12.2	9.86	8.39	7.27	6.43	5.78	5.29	4.92	2.67
1.67V/cell	58.0	43.8	32.5	27.2	16.7	12.5	10.1	8.54	7.36	6.50	5.86	5.35	4.97	2.69
1.60V/cell	62.2	46.4	34.7	28.8	17.3	13.0	10.4	8.78	7.52	6.62	5.95	5.45	5.06	2.73

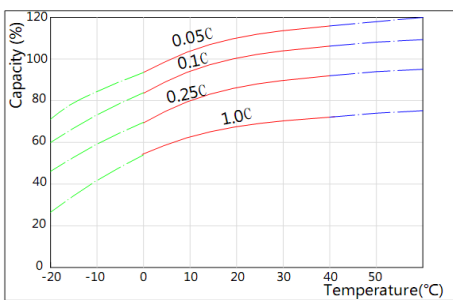
Discharge Characteristics



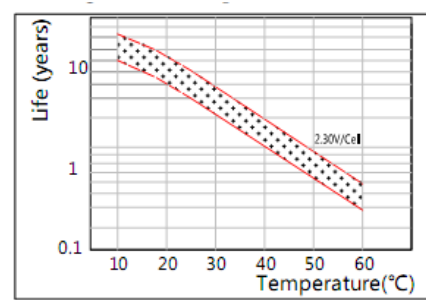
Float Charging Characteristics



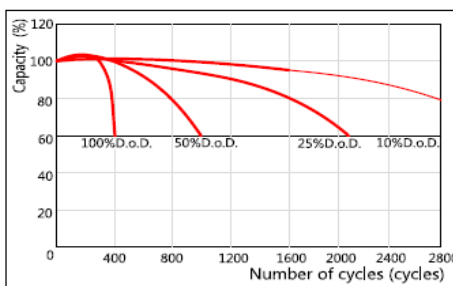
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

