

stored energy solutions for a demanding world

**Narada**

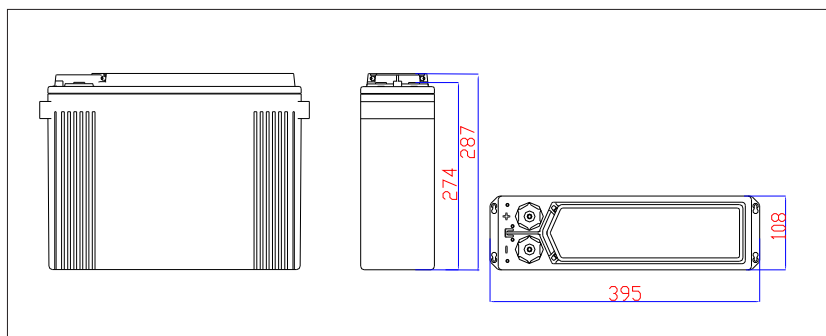
Model: **12NDT100S**

**Acme**

The Acme T range of front access VRLA batteries has been specifically designed for applications using 19" and 23" cabinets, especially telecoms. Reliability is assured with the patented post seal and a state-of-the-art design developed to comply with the latest IEC, British and Telcordia standards. A 12+ years design life and centralised venting system add to the suitability and flexibility of this superior range.



**Dimensions—mm**



**Specifications**

Battery Model	12NDT100S
Nominal Voltage	12V
Rated Capacity	100Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	31.0 kg
Internal Resistance	Approx 5.50mΩ
Temperature Ranges	Operation (maximum): -40°C to 55°C(-40°F to 131°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	25 A
Equalize and Cycle Service	2.35V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 91% after 90 days storage(25°C/77°F)
Terminal	M6 Female
Terminal Hardware Torque	8~10Nm
Container Material	ABS (V0 optional)

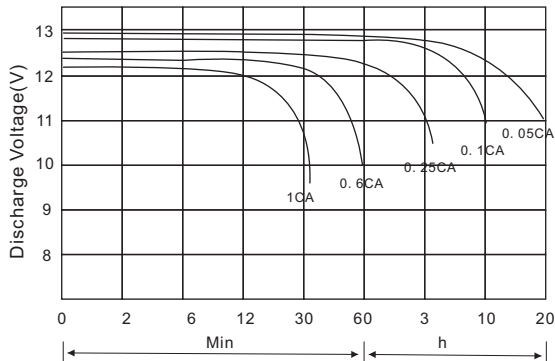
**Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)**

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	340	188	118	87.4	70.0	39.9	28.3	22.1	18.3	15.6	12.1	10.3	8.78	5.65	4.83
1.67V	331	185	117	86.7	69.5	39.6	28.2	22.0	18.1	15.5	12.0	10.2	8.72	5.62	4.80
1.70V	323	183	116	86.1	69.1	39.4	28.0	21.8	18.0	15.4	12.0	10.2	8.67	5.59	4.80
1.75V	306	178	114	84.9	68.2	39.0	27.7	21.6	17.8	15.2	11.9	10.1	8.62	5.58	4.79
1.80V	278	170	110	82.7	66.6	38.2	27.2	21.3	17.6	15.0	11.7	10.0	8.57	5.54	4.78
1.83V	259	162	106	80.2	64.8	37.5	26.8	21.0	17.4	14.9	11.6	9.90	8.48	5.53	4.77
1.85V	248	156	103	78.3	63.4	36.9	26.5	20.8	17.2	14.7	11.5	9.80	8.38	5.46	4.70

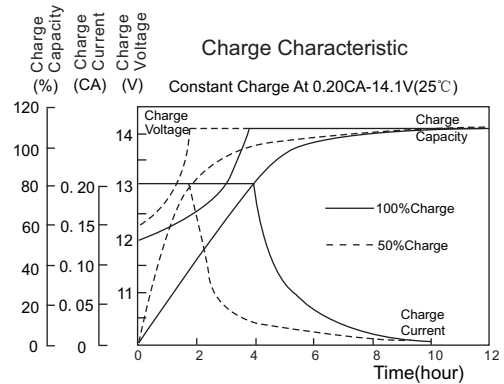
**Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)**

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	594	353	228	172	138	79.9	57.0	44.6	36.9	31.5	24.5	20.8	17.8	11.5	9.84
1.67V	587	349	226	170	137	79.4	56.7	44.4	36.6	31.3	24.3	20.6	17.6	11.3	9.65
1.70V	580	346	224	169	137	79.2	56.6	44.3	36.6	31.2	24.3	20.6	17.6	11.2	9.58
1.75V	559	336	220	166	135	78.6	56.2	44.1	36.4	31.0	24.1	20.4	17.4	11.0	9.38
1.80V	520	321	213	162	132	77.4	55.6	43.6	36.0	30.7	23.9	20.2	17.2	10.9	9.21
1.83V	490	308	206	158	129	76.3	55.0	43.2	35.7	30.5	23.7	20.1	17.0	10.7	9.09
1.85V	468	297	201	154	126	75.1	54.1	42.6	35.2	30.0	23.3	19.7	16.7	10.5	8.85

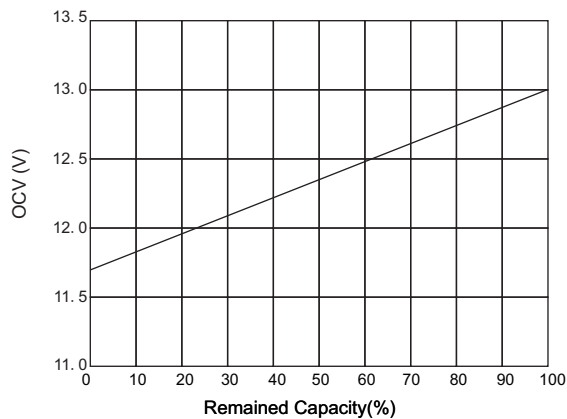
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



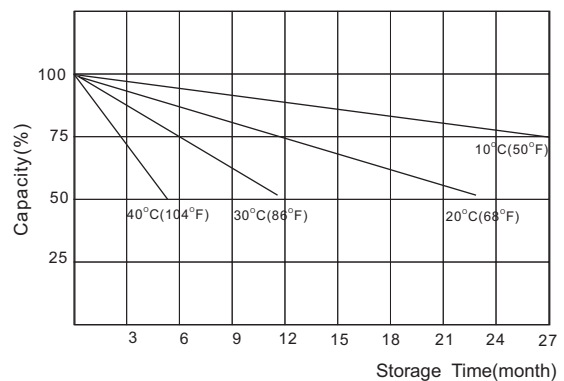
Battery Voltage Vs. Charge Time



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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