

stored energy solutions for a demanding world

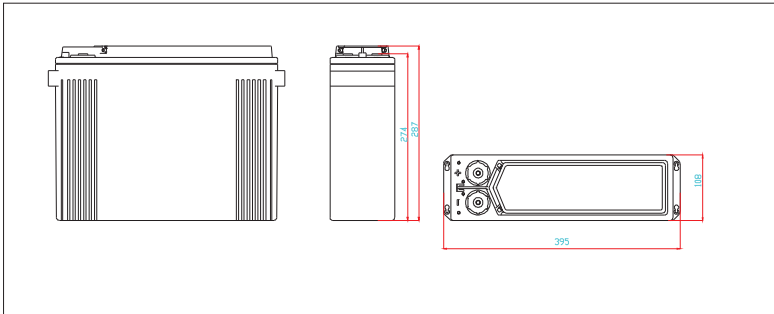
Narada

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 10+ 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 35°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)

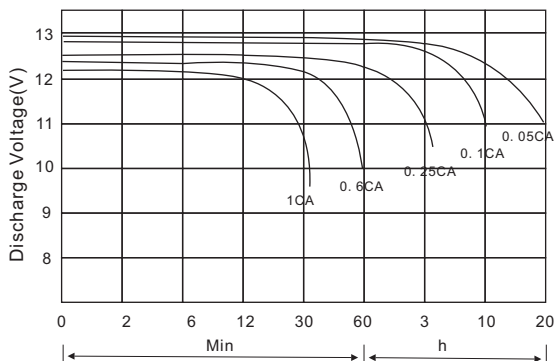
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	295	159	102	81.1	69.2	41.8	30.2	23.1	19.8	16.6	12.9	10.6	8.75	5.55	4.63
1.67V	276	153	100	80.5	68.8	41.6	29.6	23.0	19.6	16.6	12.8	10.5	8.72	5.50	4.59
1.70V	274	150	99.2	79.9	68.3	41.2	29.4	22.8	19.4	16.5	12.8	10.5	8.70	5.49	4.59
1.75V	252	145	98.2	79.4	67.3	40.2	29.1	22.6	19.2	16.4	12.5	10.4	8.67	5.48	4.59
1.80V	226	136	93.8	76.1	65.5	39.8	28.9	22.5	18.6	16.1	12.4	10.2	8.64	5.42	4.58
1.83V	216	124	92.0	73.6	62.7	39.3	27.9	21.5	18.0	15.6	12.3	9.89	8.62	5.41	4.51
1.85V	202	121	85.4	70.6	60.7	37.8	27.1	21.2	17.6	15.1	11.8	9.75	8.58	5.30	4.47

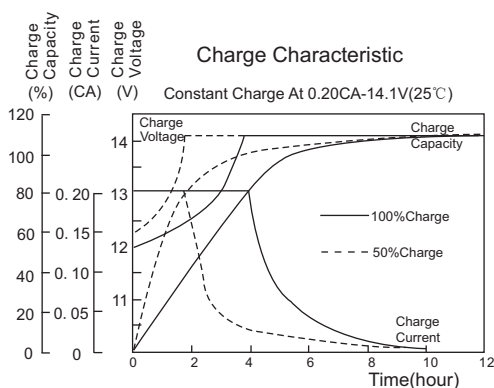
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	492	278	192	154	132	79.5	60.0	46.5	38.7	32.6	25.5	20.6	17.2	11.0	9.20
1.67V	474	273	191	152	131	79.4	59.3	46.5	38.5	32.6	25.2	20.5	17.1	10.9	9.20
1.70V	471	270	191	152	131	79.0	59.3	46.2	38.1	32.6	25.2	20.1	17.0	10.9	9.18
1.75V	440	268	190	152	128	78.5	58.6	46.2	37.9	32.5	24.7	20.0	16.9	10.9	9.18
1.80V	411	254	186	148	128	78.3	58.5	46.0	37.1	32.1	24.6	20.0	16.9	10.9	9.16
1.83V	396	232	183	144	123	77.3	57.1	44.4	36.2	31.2	24.7	19.5	16.6	10.9	9.10
1.85V	375	227	170	139	119	74.9	55.5	43.7	35.4	30.6	24.0	19.3	16.5	10.7	9.03

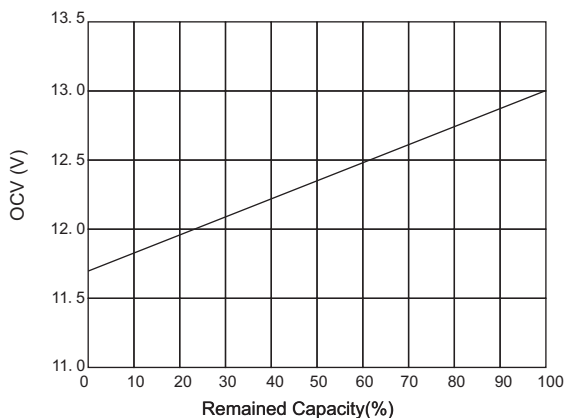
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



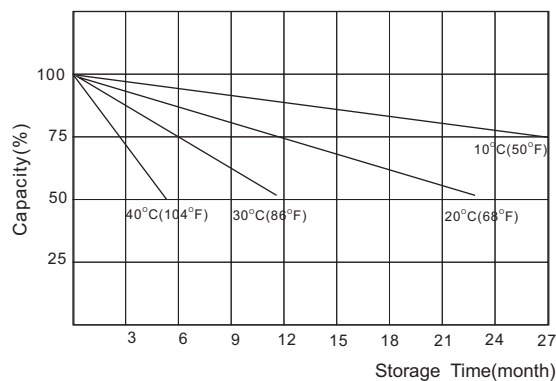
Battery Voltage Vs. Charge Time



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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