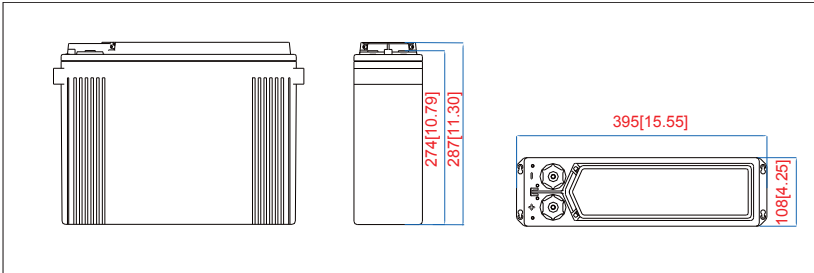


Model: **12NDT100S**



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	30.0 kg
Internal Resistance	Approx 6.11mΩ
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	8~10N·m
Container Material	ABS (V0 optional)

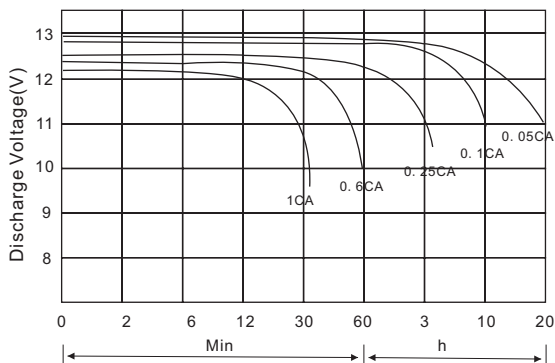
**Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)**

End voltage per cell	1h	2h	3h	4h	5h	8h	10h	12h	20h
1.67V	62.9	39.4	28.1	21.9	18.1	12.0	10.2	8.72	5.60
1.70V	62.4	39.1	27.9	21.8	18.0	11.9	10.2	8.67	5.59
1.75V	61.3	38.5	27.6	21.6	17.8	11.8	10.1	8.62	5.58
1.80V	59.2	37.3	27.0	21.1	17.4	11.6	10.0	8.53	5.52
1.83V	57.1	36.3	26.4	20.7	17.1	11.4	9.8	8.41	5.49
1.85V	55.2	35.3	25.8	20.2	16.7	11.2	9.7	8.28	5.39

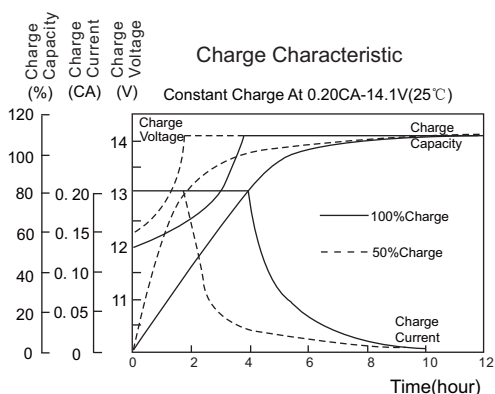
**Constant Power Discharge Characteristics Units: Watts per cell (25°C, 77°F)**

End voltage per cell	1h	2h	3h	4h	5h	8h	10h	12h	20h
1.67V	124	78.8	55.7	43.6	36.0	23.9	20.3	17.3	11.1
1.70V	123	78.5	55.5	43.4	35.8	23.8	20.2	17.2	11.0
1.75V	122	77.8	55.0	43.1	35.5	23.6	20.1	17.1	10.9
1.80V	118	76.1	54.0	42.4	35.0	23.2	19.9	16.9	10.7
1.83V	114	74.3	53.0	41.6	34.4	22.8	19.6	16.7	10.5
1.85V	111	72.5	52.0	40.9	33.8	22.4	19.3	16.4	10.3

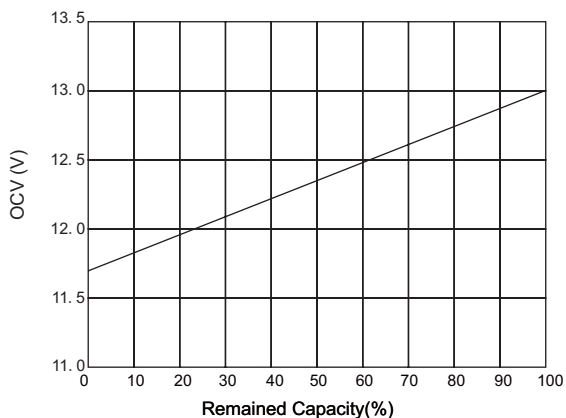
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



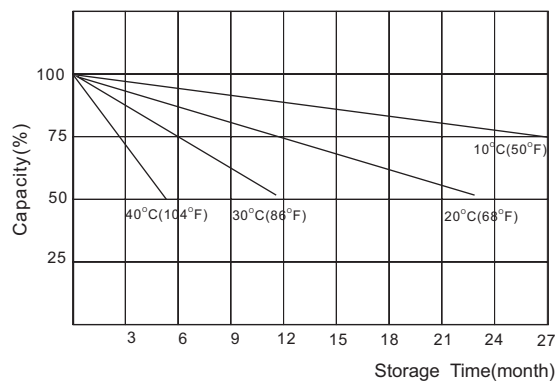
Battery Voltage Vs. Charge Time



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	2.35	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

