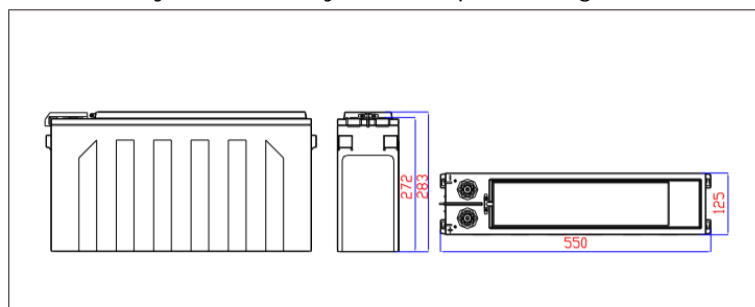


## Model: 12NDT-170S

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.



## Specifications

Battery Model	12NDT170S
Nominal Voltage	12V
Rated Capacity	170Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	51.5 kg
Internal Resistance	Approx 4.63mΩ
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	42.5 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)

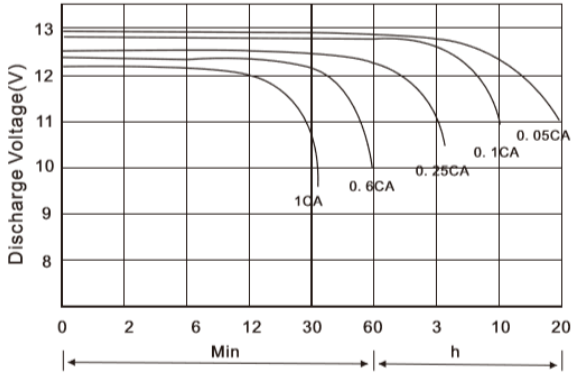
End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	455	248	163	136	113	66.8	48.8	38.7	32.2	27.6	21.5	17.8	15.3	9.74	8.36
1.67V	422	244	161	134	111	66.1	48.2	38.2	31.8	27.3	21.3	17.6	15.1	9.36	7.92
1.70V	402	241	160	133	110	65.7	47.9	37.9	31.6	27.1	21.2	17.5	15.0	9.31	7.89
1.75V	370	235	159	132	108	64.9	47.5	37.6	31.2	26.8	21.0	17.4	14.9	9.30	7.83
1.80V	333	216	150	128	106	64.8	47.2	37.4	31.1	26.7	20.8	17.0	14.5	9.14	7.64
1.83V	310	213	146	124	102	62.9	46.4	36.8	30.6	26.2	20.6	16.8	14.3	8.84	7.39
1.85V	286	197	139	120	101	62.5	45.8	36.5	30.4	26.1	20.2	16.4	13.7	8.15	6.70

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

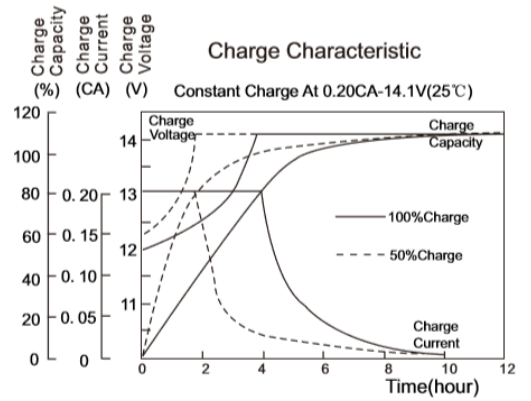
End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	784	477	321	268	222	135	96.9	76.7	63.5	54.4	42.6	35.2	30.1	19.4	16.5
1.67V	735	471	319	266	220	133	96.0	76.0	63.2	54.2	42.4	35.0	29.9	19.2	16.3
1.70V	715	466	318	265	219	132	95.9	75.9	63.1	54.1	42.3	34.9	29.8	19.1	16.2
1.75V	679	454	313	263	216	131	95.4	75.6	62.8	53.9	42.0	34.7	29.7	18.9	16.1
1.80V	602	414	294	253	212	130	94.6	74.9	62.3	53.5	41.6	33.6	28.1	17.1	14.3
1.83V	556	405	288	247	206	129	94.1	74.5	61.8	52.8	40.9	33.4	28.0	16.5	13.5
1.85V	546	386	279	242	203	128	93.8	74.4	61.6	52.4	40.1	32.3	26.9	15.6	12.7

## Model: 12NDT-170S

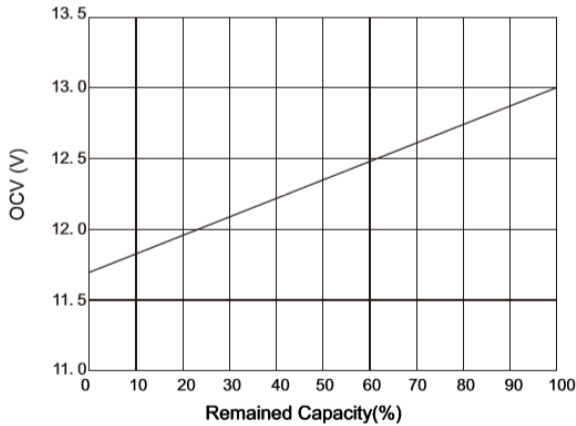
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



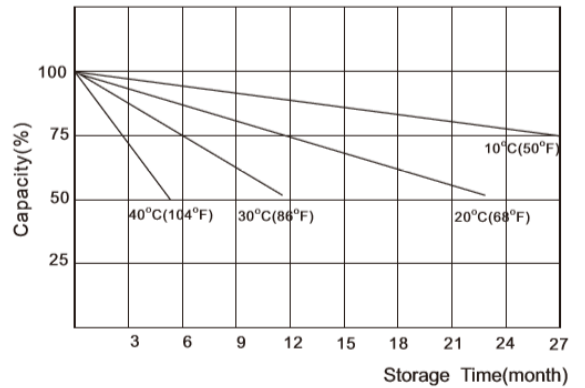
Battery Voltage Vs. Charge Time



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

