

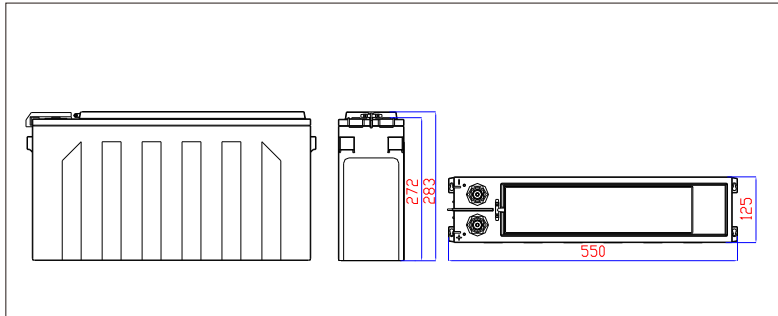
Model: 12NDT150S



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 | 12NDT150S |
|--|---|
| Nominal Voltage | 12V |
| Rated Capacity | 150Ah (10 hour rate) to 1.80V/cell @25°C(77°F) |
| Typical Weight | 48.0 kg |
| Internal Resistance | Approx 5.17mΩ |
| 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 | 37.5 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) |

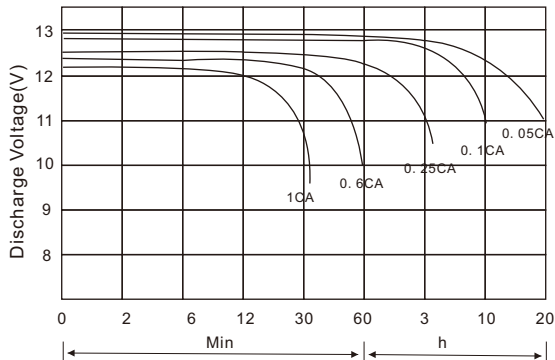
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

| End voltage per cell | 5MIN | 15MIN | 30MIN | 45MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 6HR | 8HR | 10HR | 12HR | 20HR | 24HR |
|----------------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1.60V | 420 | 231 | 148 | 114 | 91.4 | 55.1 | 40.5 | 33.3 | 27.9 | 24.0 | 19.0 | 15.7 | 13.4 | 8.96 | 7.75 |
| 1.67V | 386 | 226 | 146 | 112 | 91.2 | 54.7 | 40.0 | 32.9 | 27.5 | 23.7 | 18.7 | 15.5 | 13.1 | 8.77 | 7.53 |
| 1.70V | 369 | 223 | 145 | 111 | 91.1 | 54.6 | 39.9 | 32.7 | 27.4 | 23.6 | 18.5 | 15.3 | 13.1 | 8.70 | 7.43 |
| 1.75V | 340 | 216 | 144 | 110 | 90.2 | 54.5 | 39.8 | 32.6 | 27.2 | 23.3 | 18.4 | 15.1 | 13.0 | 8.59 | 7.29 |
| 1.80V | 306 | 192 | 134 | 105 | 87.8 | 53.8 | 39.7 | 32.3 | 27.0 | 23.2 | 18.2 | 15.0 | 13.0 | 7.72 | 6.42 |
| 1.83V | 274 | 182 | 129 | 102 | 85.8 | 53.7 | 39.2 | 32.2 | 26.9 | 23.1 | 18.1 | 14.8 | 12.9 | 7.61 | 6.33 |
| 1.85V | 267 | 175 | 124 | 99.0 | 83.2 | 52.4 | 38.9 | 32.1 | 26.8 | 23.0 | 17.9 | 14.6 | 12.9 | 7.49 | 6.22 |

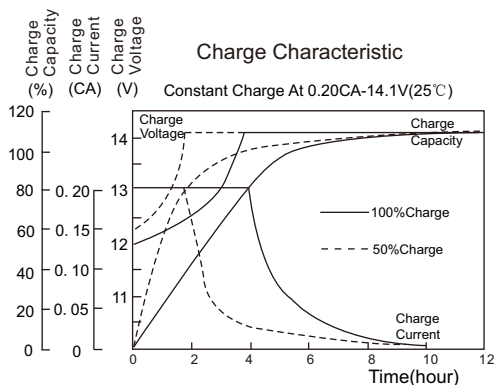
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

| End voltage per cell | 5MIN | 15MIN | 30MIN | 45MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 6HR | 8HR | 10HR | 12HR | 20HR | 24HR |
|----------------------|------|-------|-------|-------|-----|-----|------|------|------|------|------|------|------|------|------|
| 1.60V | 741 | 426 | 286 | 223 | 184 | 115 | 82.8 | 68.0 | 56.6 | 48.6 | 37.9 | 31.1 | 26.4 | 16.7 | 14.2 |
| 1.67V | 688 | 419 | 284 | 221 | 182 | 113 | 82.1 | 67.4 | 56.1 | 48.2 | 37.6 | 30.9 | 26.2 | 16.4 | 13.8 |
| 1.70V | 656 | 414 | 283 | 220 | 181 | 112 | 81.5 | 67.0 | 55.7 | 47.8 | 37.4 | 30.8 | 26.1 | 16.2 | 13.6 |
| 1.75V | 604 | 402 | 279 | 218 | 180 | 111 | 81.2 | 66.9 | 55.5 | 47.7 | 37.1 | 30.6 | 26.0 | 16.1 | 13.5 |
| 1.80V | 563 | 369 | 262 | 208 | 175 | 110 | 80.6 | 66.8 | 55.1 | 47.4 | 37.0 | 30.1 | 25.3 | 15.4 | 12.9 |
| 1.83V | 507 | 347 | 252 | 203 | 172 | 109 | 80.2 | 66.1 | 54.6 | 47.3 | 36.5 | 29.5 | 24.9 | 15.2 | 12.5 |
| 1.85V | 506 | 346 | 249 | 199 | 167 | 105 | 77.8 | 64.1 | 53.5 | 46.0 | 35.9 | 29.4 | 24.7 | 14.4 | 11.8 |

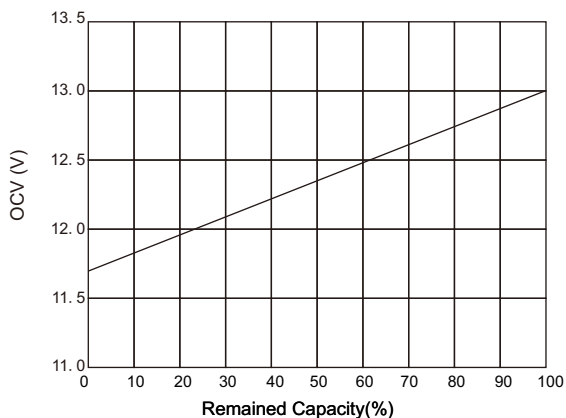
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



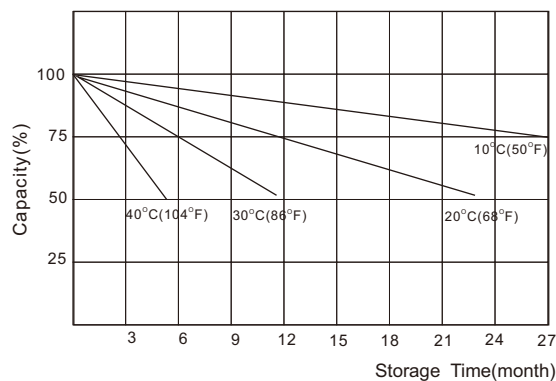
Battery Voltage Vs. Charge Time



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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