

# Neata<sup>®</sup>

+ Super energy

## Deep Cycle Long Life series

Datasheet : NTD12-45(12V45AH)

Nominal Voltage	12V
Number of cell	6
Design Life	12 years
<b>Nominal Capacity 77°F(25°C)</b>	
20 hour rate (2.25A, 10.5V)	45.0Ah
10 hour rate (4.18A, 10.5V)	41.8Ah
5 hour rate (7.34A, 10.5V)	36.7Ah
1 hour rate (24.9A, 9.6V)	27.6Ah
<b>Internal Resistance</b>	
Fully Charged battery 77°F(25°C)	≤8.0mOhms
<b>Self-Discharge</b>	
3% of capacity declined per month at 20°C(average)	
<b>Operating Temperature Range</b>	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	450(5s)
Short Circuit Current	1050A
<b>Charge Methods: Constant Voltage Charge 77°F(25°C)</b>	
Cycle use	2.40-2.45VPC
Maximum charging current	13.5A
Temperature compensation	-30mV/°C
Standby use	13.6-13.8V
Temperature compensation	-20mV/°C



Wide Range Temperature



Warranty



Maintenance Free



Deep cycle Technology



easy use

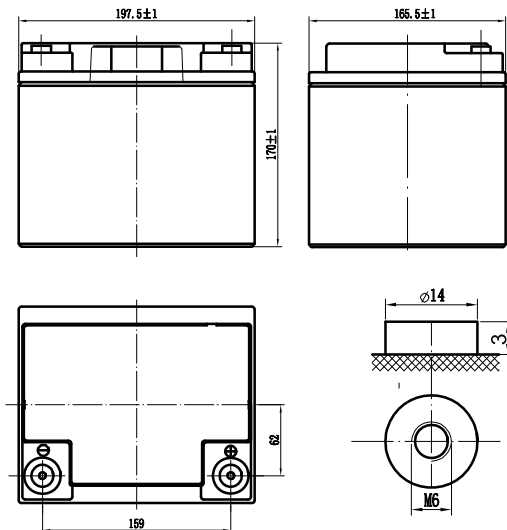


long life

### Mechanical Characteristics

Length(mm / inch)	197.5 / 7.72
Width(mm / inch)	165.5 / 6.54
Height(mm / inch)	170 / 7.17
Total Height(mm / inch)	170 / 7.17
Approx. Weight(Kg / lbs)	13.3 / 29.26

\* Weight deviation: ± 5%



### Technical Characteristics

#### Discharge Constant Current (Amperes at 77°F25°C)

End Point	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	96.0	75.5	44.6	27.6	11.7	7.76	4.26	2.37
1.65V	91.2	72.1	44.4	27.2	11.5	7.62	4.24	2.33
1.70V	86.4	70.8	42.8	26.8	11.2	7.48	4.22	2.30
1.75V	81.6	66.9	38.9	26.5	11.0	7.34	4.20	2.27
1.80V	76.8	64.0	38.0	26.1	10.8	7.26	4.18	2.25

#### Discharge Constant Power (Watts at 77°F25°C)

End Point	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	180	143	96.1	73.1	58.3	32.8	24.3	15.7
1.65V	167	136	84.7	66.3	54.0	30.4	22.6	14.7
1.70V	159	131	81.7	64.0	53.2	30.0	22.3	14.6
1.75V	150	123	79.8	62.8	52.3	29.6	22.1	14.4
1.80V	147	122	78.0	61.7	51.5	29.2	21.8	14.1

(Note)The above characteristics data are average values obtained within three charge/discharge cycles. All data shall be changed without notice, Neata reserves the right to explain and update the information.

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Recognized under CE/IEC and certified by ISO9001 ,14001

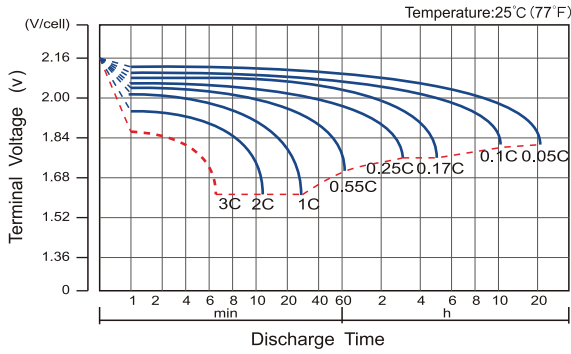


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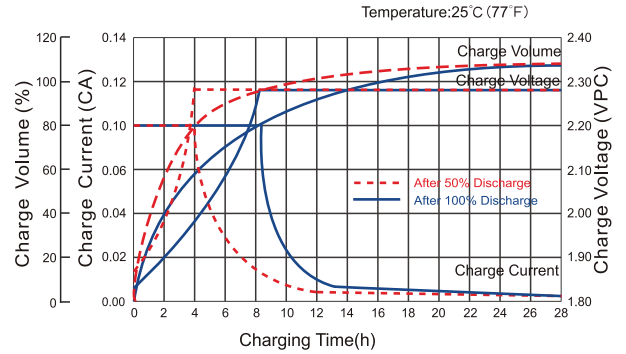
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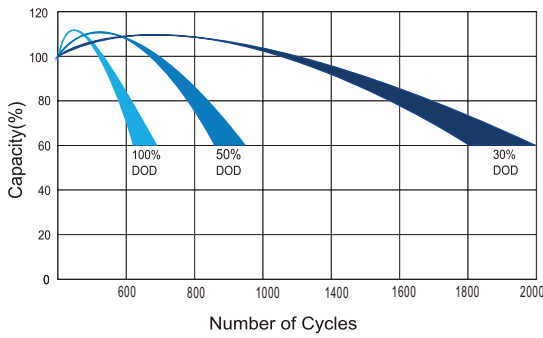
### Discharge Characteristics Curve



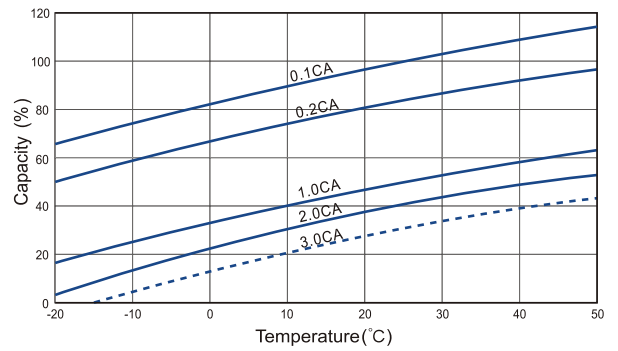
### Charge Characteristic Curve For Standby Use



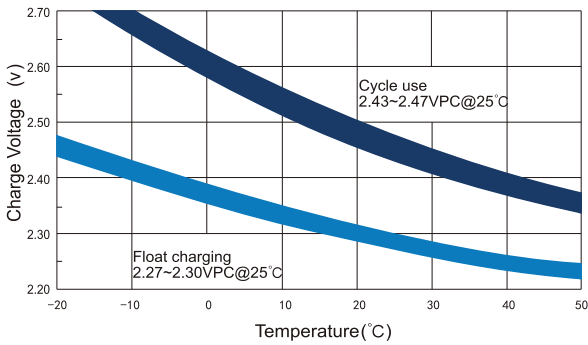
### Cycle Life In Relation To Depth Of Discharge



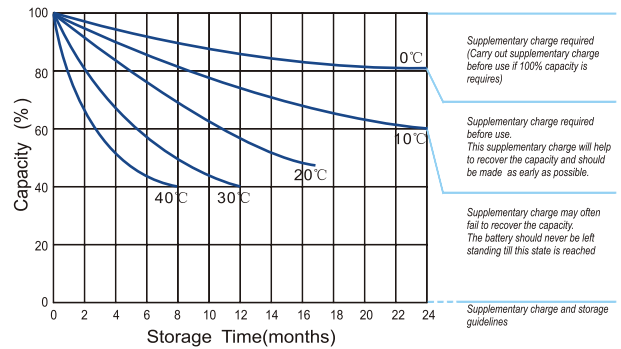
### Temperature Effects On Capacity



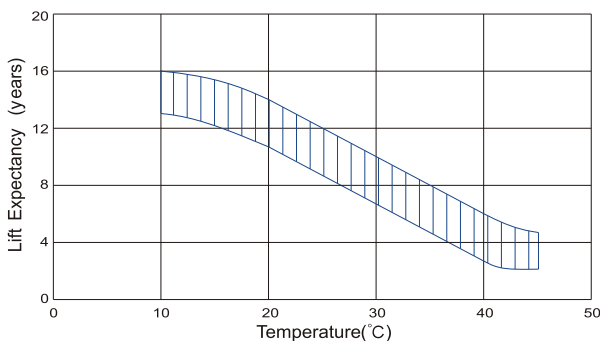
### Relationship Between Charging Voltage And Temperature



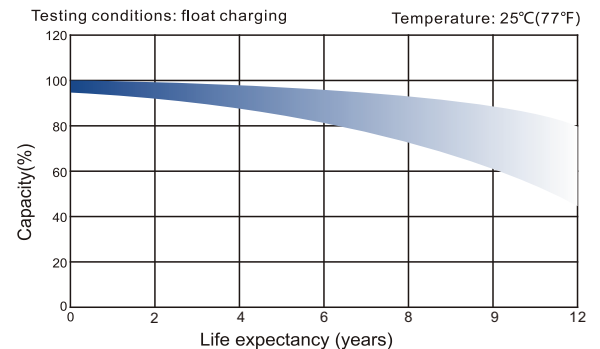
### Storage Characteristics



### Effect Of Temperature On Long Term Life



### Life Characteristics Of Standby Use



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