

TUBULAR BATTERY



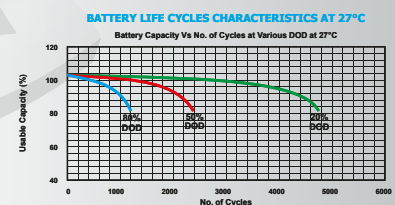
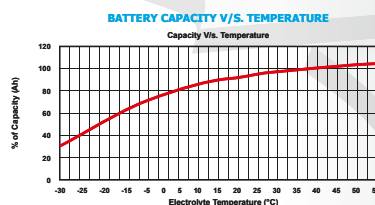
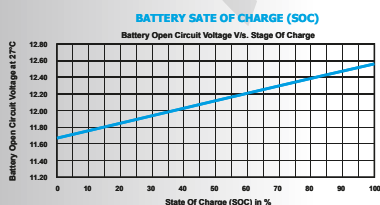
Features:

- Longer Life
- Long Design Life
- Low Maintenance
- Rugged Performance
- High Charge Acceptance
- High Temperature Performance
- Higher AH efficiency > 90% & WH efficiency > 80%



TECHNICAL SPECIFICATIONS

GOLD SERIES		200Ah-12V	260Ah-12V	300Ah-12V
Battery Type		TT200	TT260	TT300
Rated Capacity at 20 hour Rate		200Ah	260Ah	300Ah
Battery Nominal Voltage		12V	12V	12V
Dimensions	Length	503±3mm	503±3mm	503±3mm
	Width	189±2mm	189±2mm	189±2mm
	Height up to Terminal	354±3mm	354±3mm	354±3mm
Fully Charged Battery	Electrolyte Specific Gravity at 27°C	1.250±0.010	1.250±0.010	1.250±0.010
	Battery Weight (with electrolyte)	62Kg.	67Kg.	71Kg.
BATTERY CHARGING				
Constant Voltage Charging (CV)	Maximum Charging current	38.0A	42.0A	47.0A
	Cyclic use	14.40±0.05V	14.40±0.05V	14.40±0.05V
	Float use	13.80±0.05V	13.80±0.05V	13.80±0.05V
Constant Current Charge (CC)	Maximum Charging current	19.0A	21.0A	24.0A
ELECTRICAL PERFORMANCE				
Capacity at 27°C	20 Hour Rate to 10.80V	200.0Ah	260.0Ah	300.0Ah
	10 Hour Rate to 10.80V	167.5Ah	211.0Ah	240.0Ah
	5 Hour Rate to 10.80V	139.5Ah	177.5Ah	205.5Ah
	3 Hour Rate to 10.80V	120.0Ah	153.5Ah	180.0Ah
	1 Hour Rate to 10.50V	84.0Ah	105.5Ah	125.5Ah
Loss of capacity on storage per month at 27°C		< 5.0%	< 5.0%	< 5.0%
Percentage (%) of Ampere-hour - Efficiency		> 92.0%	> 92.0%	> 92.0%
Percentage (%) of Watt-hour - Efficiency		> 78.0%	> 78.0%	> 78.0%

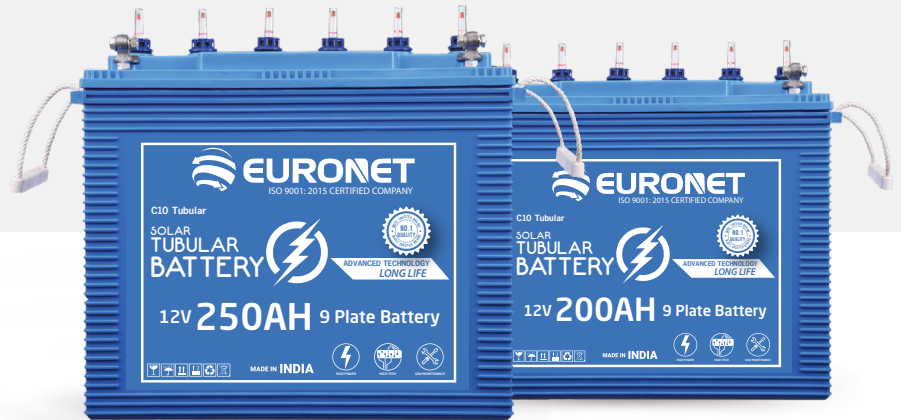


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TECHNICAL SPECIFICATIONS

C10 Tubular 200AH

Nominal Voltage		12 V
Capacity (25°C)	20HR	214 Ah
	10HR	188 Ah
	5HR	168 Ah
Dimension	Length	505 ± 2mm
	Width	180 ± 2mm
	Height	365 ± 2mm
	Total Height	365 ± 2mm
Approx. Gross Weight		67.5 kg (148.8lbs) ± 3%
Terminal type		E
Internal resistance (Fully charged, 25°C)		Approx. 5mΩ
Capacity affected by temperature (10HR)	40°C	102%
	27°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 85%
	6 month	Remaining Capacity: 72%
	12 month	Remaining Capacity: 46%
Nominal operating temperature		25°C ± 3°C (80°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		20A
Maximum discharge current		1600A (5 sec.)
Designed floating life(25°C)		12 years

Battery Specified Capacity Test @ 27 Degree °C

C20@10.5V	C10@10.8V	C5@10.8V	C3@10.8V	C2@10.8V	C1@10.5V
214	188	166	146	128	113
C20@12.60	C20@11.50	C20@11.25	C20@11.00	C20@10.80	C20@10.50
0:00	2:40	3:41	4:32	5:00	5:12

C10 Tubular 250AH

Nominal Voltage		12 V
Capacity (25°C)	10HR	250 Ah
	5HR	218 Ah
	3HR	184 Ah
Dimension	Length	505 ± 2mm
	Width	180 ± 2mm
	Height	365 ± 2mm
	Total Height	365 ± 2mm
Approx. Gross Weight		74 kg (163lbs) ± 3%
Terminal type		E
Internal resistance (Fully charged, 25°C)		Approx. 5mΩ
Capacity affected by temperature (10HR)	40°C	102%
	27°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 85%
	6 month	Remaining Capacity: 72%
	12 month	Remaining Capacity: 46%
Nominal operating temperature		25°C ± 3°C (80°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		20A
Maximum discharge current		1600A (5 sec.)
Designed floating life(25°C)		12 years

Battery Specified Capacity Test @ 27 Degree °C

C10@10.5V	C5@10.8V	C3@10.8V	C2@10.8V	C1@10.8V
238	209	184	162	143
C20@12.60	C20@11.50	C20@11.25	C20@11.00	C20@10.80
0:00	2:55	4:43	5:40	6:22