



Sound/Speaker System Battery

6FM20 (12V20Ah)




LONGWAY speaker batteries are designed and developed according to the characteristics of instant large current, deep discharge, easy over-discharge and high-frequency vibration required in the use of speaker. The product has the advantages of long cycle life, good performance of large current discharge, low self-discharge rate, strong recovery ability of over-discharge, strong anti-vibration ability, etc., which can meet the special performance requirements of speaker batteries. Products pass UL, CE, RoHS certification, and can be shipped by sea or air.



General Feature	Applications
<ul style="list-style-type: none"> High reliability, safe without leakage, can be used in any position Excellent recovery performance after deep discharge Environmentally friendly products Meet EU battery directive RoHS and REACH standards Maintenance free Widely applicable temperature range, can be used at -20°C~60°C Low self-discharge rate. The average monthly self-discharge rate of the battery is less than 2.5% (It is recommended to recharge after storage for 6 months or before use) 	<ul style="list-style-type: none"> Outdoor battery speaker Portable video speaker Outdoor song on-demand stereo Wireless Bluetooth speaker Wireless line array speaker Square dance speaker And company meeting, wedding hosting, outdoor activities and other audio

Performance	Dimensions												
Nominal Voltage 12V (6cell)													
Capacity @25°C													
20hr Rate (1.00A) 20.8Ah @ to 1.75V/cell													
3hr Rate (5.00A) 16.5Ah @ to 1.70V/cell													
27min Rate (20.00A) 13.6Ah @ to 1.60V/cell													
Weight Approx (5.90 ± 3%)kg (13.01lbs)													
Internal Resistance Approx 11.3mΩ fully charged @25°C													
Maximum Discharge Current 165A(3sec)													
Terminal F5													
Operating Temperature Range Discharge:-20°C~60°C; Charge:0°C~50°C Storage:-20°C~40°C	<table border="1"> <tr> <td>Length</td> <td>181mm</td> <td>7.13inch</td> </tr> <tr> <td>Width</td> <td>77 mm</td> <td>3.03inch</td> </tr> <tr> <td>Height</td> <td>166mm</td> <td>6.57inch</td> </tr> <tr> <td>Total height</td> <td>166mm</td> <td>6.57inch</td> </tr> </table>	Length	181mm	7.13inch	Width	77 mm	3.03inch	Height	166mm	6.57inch	Total height	166mm	6.57inch
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Container Material ABS(UL94 HB)/UL94-V0 Optional													

Battery use
Cycle use <ol style="list-style-type: none"> Limit the initial charging current to no more than 6.00A Keep charging voltage at 14.40-15.00 V/unit, and continue charging at least 3 hours after the charging current reduces to 0.40A to ensure full charge The compensation coefficient of charging voltage and temperature is -5mv/cell /°C
Float use <ol style="list-style-type: none"> Limit the initial charging current to no more than 6.00A Keep charging voltage at 13.50-13.80 V/unit. When the voltage reaches the constant voltage the current gradually decreases until the battery is fully charged and continues to charge The compensation coefficient of charging voltage and temperature is -3mv/cell /°C




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 KY-IOP-LW12-20 B0.May 2023

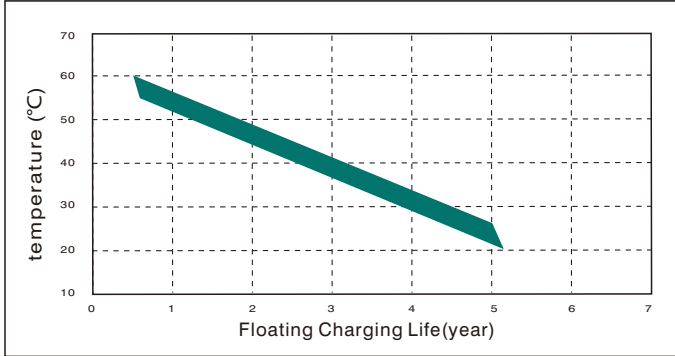
Note: This information usually describes use only and is not intended to make any warranties or promises regarding the battery, Battery specifications and battery design are subject to change without prior notice. Please contact LONGWAY Battery for the latest information



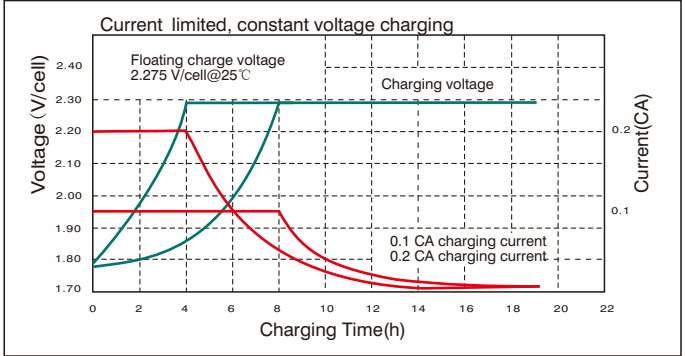
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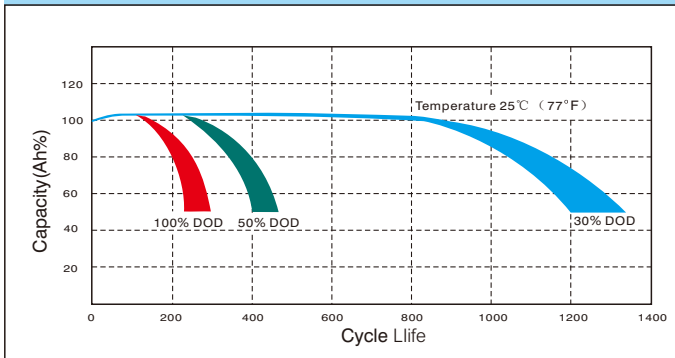
Floating Charging Life VS Temperature



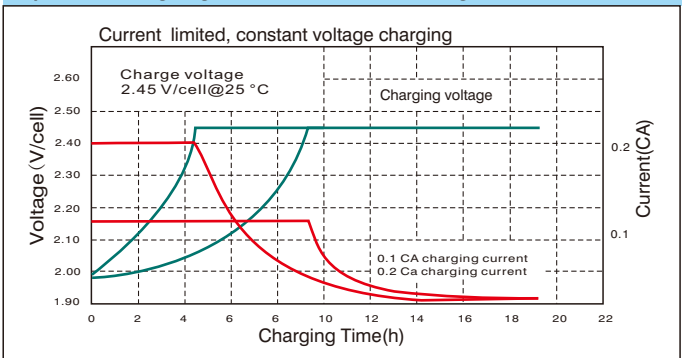
Floating Charging Characteristics Diagram



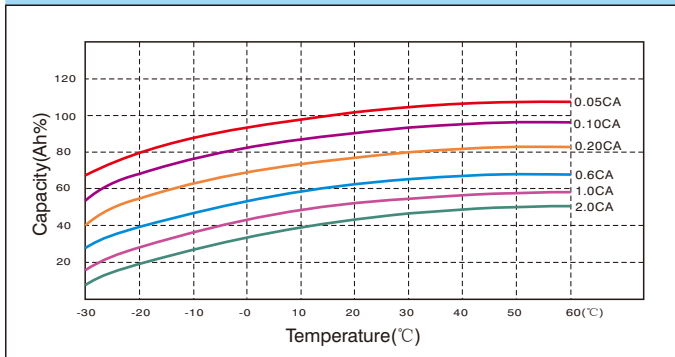
Cycle Life



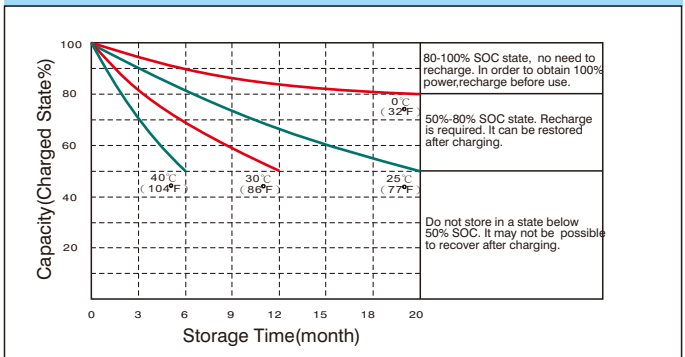
Cycle charging characteristic diagram



Temperature and capacity characteristics



Self-discharge characteristic



Constant current characteristics(A,25°C)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.60	86.0	50.0	38.0	24.0	12.4	9.30	7.51	5.68	3.76	2.03	1.06
9.90	83.4	48.5	36.9	23.3	12.0	9.11	7.44	5.63	3.72	2.02	1.05
10.2	81.7	47.5	36.5	23.0	11.9	8.93	7.40	5.60	3.70	2.01	1.05
10.5	79.1	46.0	35.0	22.1	11.4	8.74	7.33	5.54	3.66	2.00	1.04
10.8	76.8	44.7	34.7	21.9	11.3	8.56	7.25	5.49	3.63	2.00	1.04

Constant power discharge characteristic (W,25°C)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.60	960	564	433	275	144	109	87.9	67.5	44.8	24.4	12.7
9.90	931	547	420	267	139	107	87.0	66.9	44.4	24.2	12.6
10.2	912	536	416	264	138	104	86.6	66.5	44.2	24.1	12.6
10.5	883	519	399	253	132	102	85.7	65.9	43.7	24.0	12.5
10.8	857	504	395	251	131	100	84.8	65.2	43.3	24.0	12.5



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