



TECHNISCHES DATENBLATT BATTERIESPEICHER

Smart String ESS 2.0

Noise Performance Baseline (Preliminary)



1.4 Test Equipment

Test Items	equipment	Model	Factory No.	Calibration Validity Period
Noise test	LMS 40 data collecting instrument	SCM2E05	25214004	2023-07-20~2024-07-19
	Microphone sensor	46AE	471533	2024-01-31~2025-01-30
	acoustic calibrator	CAL200	19062	2023-07-29~2024-07-28
	tape measure	DL9005B	848678	2023-10-29~2024-10-28

1.5 Test Conditions

No.	Working Condition
Working condition 1	temperature 25°C, charge and discharge 0.25CP, Charge/discharge interval 2h
Working condition 2	temperature 40°C, charge and discharge 0.25CP, Charge/discharge interval 2h
Working condition 3	temperature 25°C, charge and discharge 0.33CP, Charge/discharge interval 2h
Working condition 4	temperature 40°C, charge and discharge 0.33CP, Charge/discharge interval 2h
Working condition 5	temperature 25°C, charge and discharge 0.5CP, Charge/discharge interval 2h
Working condition 6	temperature 40°C, charge and discharge 0.5CP, Charge/discharge interval 2h

2500	49.68	76.94
3150	47.31	74.85
4000	44.74	72.30
5000	42.06	69.71
6300	39.60	67.99
8000	35.17	63.58
10000	31.16	59.88

2.2.6 Octave band spectrum of sound power level (Working condition 6)

1/3 octave (Hz)	average sound pressure level (dBA)	average sound power level (dBA)
50	24.55	47.10
63	32.28	56.32
80	37.10	61.09
100	42.13	66.43
125	49.51	74.19
160	66.32	92.39
200	53.64	78.70
250	56.81	81.73
315	67.53	92.92
400	60.75	86.91
500	64.21	91.15
630	66.00	92.28
800	66.50	93.04
1000	65.55	92.23
1250	63.27	90.21
1600	61.94	89.15
2000	59.09	86.75
2500	56.43	84.73
3150	54.08	82.72
4000	51.44	80.16
5000	48.41	77.19
6300	46.17	75.82
8000	41.35	71.37
10000	36.37	67.10

1600	52.78	45.22	51.56	63.05	57.62
2000	50.07	42.74	48.64	60.43	55.35
2500	48.30	40.27	45.86	58.74	52.42
3150	45.88	38.18	42.97	57.04	49.94
4000	43.51	35.38	40.64	54.64	47.17
5000	40.40	32.18	38.11	51.78	44.94
6300	37.40	29.26	35.21	50.54	42.63
8000	33.28	25.60	30.24	45.34	38.31
10000	28.96	21.93	25.98	41.64	34.30

2.4.6 octave spectrum of sound pressure level (Working condition 6)

1/3 octave (Hz)	Front side (dBA)	Right side (dBA)	Rear side (dBA)	Left side (dBA)	Upper side (dBA)
50	24.14	22.25	23.79	28.12	24.57
63	31.13	27.37	30.67	37.56	33.50
80	34.29	32.03	35.51	42.79	39.03
100	40.30	35.38	39.77	48.14	44.55
125	48.86	42.45	47.56	56.35	50.90
160	65.52	60.03	64.67	73.49	67.17
200	53.19	45.64	52.00	59.13	55.79
250	56.87	48.25	55.10	61.98	59.11
315	67.78	58.05	66.14	72.35	70.14
400	59.83	51.16	59.02	68.63	62.83
500	63.76	54.51	61.69	73.37	65.92
630	64.13	56.67	63.42	73.85	68.88
800	64.53	56.90	63.33	73.62	70.15
1000	62.82	54.72	62.50	73.38	69.76
1250	60.57	52.46	60.39	71.63	67.12
1600	59.41	51.15	59.10	70.56	65.57
2000	56.29	47.97	55.91	67.94	63.06
2500	53.75	44.75	53.05	66.46	60.18
3150	51.49	42.58	50.13	64.78	57.70
4000	48.79	39.81	47.93	62.46	54.79
5000	45.23	36.16	45.18	59.24	52.24
6300	42.83	33.45	42.62	58.23	49.90

8000	38.08	28.27	37.57	53.31	45.36
10000	32.78	23.27	32.37	48.81	40.46

Note: This is an early version. Huawei may change the above information without notice. The corresponding data is for reference only and cannot be directly used as the committed value. The actual performance data in the market prevails.