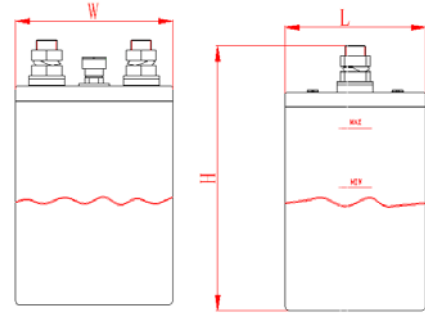


KPL300 NI-CD BATTERY DATA SHEET

Battery Type

Battery Model: KPL300
Brand: CHANGHONG
Nominal Capacity: 300Ah
Nominal Voltage: 1.2V
Recommended Discharge Duration: $t \geq 3h$
Work Temperature: $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$



Physical Properties

Height(H): $\leq 348\text{mm}$
Length(L): $\leq 167\text{mm}$
Width(W): $\leq 164\text{mm}$
Max. Weight: $\leq 14.0\text{kg}$
Electrolyte Type: $\text{E3}(1.2\text{g}/\text{cm}^3 \text{KOH} + 20\text{g}/\text{L LiOH} \cdot \text{H}_2\text{O})$
Electrolyte Volume: 2.1L

Structure

Container Material: PP
Separator Material: PP
Terminal Size: M20
Terminal Qty.: $\oplus 1/\ominus 1$
Connection Torque: $30 \text{ N.m} \pm 1 \text{ N.m}$

Plates Type

Positive: Pocket type plates
Negative: Pocket type plates

Cable

Sectional area of cables: $\geq 50\text{mm}^2$

Recommended Charging Method

- Dual-voltage charging setting (25°C):
Equalizing charging: $1.60\text{V} \sim 1.65\text{V}$
Floating Charging: $1.43\text{V} \sim 1.45\text{V}$
- Single-voltage charging setting: $1.45\text{V} \sim 1.50\text{V}$

Internal Resistance/Short-circuit current

Internal Resistance: 0.40mΩ~0.48mΩ

Short-circuit current: 3000A

Discharge Performance

Performance after prolonged float charge of fully charged cells available current at 20°C ± 5°C

End off voltage V/cell	Hours							Minutes						Seconds		
	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
1.00	30.9	38.3	60.0	96.0	126	148	181	242	270	288	317	346	420	451	540	581
1.05	30.6	38.1	59.4	93.1	116	131	155	196	217	225	250	293	337	369	443	481
1.10	30.0	36.8	56.4	78.2	96.9	108	130	153	164	180	200	207	275	300	365	400
1.14	29.5	34.6	49.7	67.9	78.0	85.1	98.9	123	130	135	152	177	224	246	305	338

Performance after charging the battery for 8 hrs with 0.2I_A at 20°C ± 5°C

End off voltage V/cell	Hours							Minutes						Seconds		
	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
1.00	30.9	38.3	60.0	96.0	135	166	213	291	333	360	396	432	524	570	684	736
1.05	30.7	38.1	59.5	93.1	128	152	189	246	275	288	324	396	456	499	599	650
1.10	30.0	37.1	57.6	86.0	114	132	162	198	216	240	270	288	382	416	508	556
1.14	29.5	36.0	54.0	78.0	97.7	112	132	168	180	192	216	252	325	357	442	483

The discharging performance data shown in our data sheet is ideal laboratory test data of newly produced single cells under laboratory conditions. These data is only for your reference, it can not be used as final performance test acceptance criteria for the products.