

FLOODED

**NATIONWIDE
BATTERY**

MARINE

GOLF

INDUSTRIAL

AUTO

SPECIAL
APPLICATIONS

SOLAR

LEAD-CALCIUM BATTERY

KCT-450

KCT SERIES

- Voltage: 2V
- Reserve Capacity: 450 Ah@8hr rate to 1.75VPC @ 77F
- Weight: 94 lbs (42.6 kg)
- Length: 5.59 in (142 mm)
- Width: 10.44 in (265 mm)
- Height: 18.25 in (464 mm)
- Positive Plate Height: 11.38 in (289 mm)
- Negative Plate Height: 11.38 in (289 mm)
- Separator: Microporous with fibrous glass mat
- Container: Thermoplastic, transparent (SAN)
- Cover: PVC flame retardant, UL 94-V0
- Recommended Float Voltage: 2.17-2.22 V/cell (calcium)
- Terminals: Two, 1-inch (25 mm) square posts
- Plates per Cell: 11



FOR TELECOMMUNICATIONS APPLICATIONS

The NEBS-approved KCT battery offers a wide range of capacities within a small footprint, making it ideal for a range of Telecom applications. KCT lead-calcium stationary batteries can be found in telephone central offices, mobile telephone switching offices, cable headend sites, fiber optic regenerator sites, microwave repeater sites, telephone and internet network nodes, and more.

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**C&D
TECHNOLOGIES**

MODEL **KCT-450**
 VOLTAGE **2V**
 CAPACITY **450Ah @ hr to 1.75VPC**
 CONTAINER **Thermoplastic, transparent (SAN)**
 COVER **PVC flame retardant, UL 94-V0**
 BATTERY TYPE **Lead-Calcium**
 PLATES PER CELL **11**

2V

PRODUCT + PHYSICAL SPECIFICATIONS

Serie	Model	Voltage	Cell(s)	Terminal Quantity	Dimensions ^c Inches (mm)			Weight Lbs. (kg)
					Length	Width	Height ^f	
KCT	KCT-450	2	1	2	5.59 (142)	10.44 (265)	18.25 (464)	94 (42.6)

ELECTRICAL SPECIFICATIONS

VPC	Ah @ 8hr Rate	NOMINAL RATE @ 77F (+25C) IN 1.215 SPECIFIC GRAVITY (INCLUDES CONNECTION DROP)								
		AMPERES (per cell)								
		1 HR	2 HR	3 HR	4 HR	5 HR	6 HR	8 HR	10 HR	24 HR
1.75	450	202	138	110	91	80	70	55	48	23
1.80	440	187	131	104	87	75	66	53	47	23
1.84	414	160	119	95	80	70	62	50	44	22
1.86	387	145	110	88	75	66	58	47	41	20
1.88	360	125	98	82	70	62	55	44	39	19
1.90	344	105	88	75	65	58	52	43	37	19
1.92	294	82	70	61	54	48	44	37	32	17

CHARGING INSTRUCTIONS

Charger Voltage Settings (at 77°F/25°C)					
System Voltage	2V	4V	24V	48V	125V
Bulk / Equalize Charge	2.35	4.70	28.20	56.40	141.00
Float Charge	2.22	4.44	26.64	53.28	133.20
High Voltage Alarm	2.45	4.90	29.40	58.80	147.00
Low Voltage Alarm	1.75	3.50	21.00	42.00	105.00
Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.					

CHARGING TEMPERATURE COMPENSATION

Add	Subtract
0.005 volt per cell for every 1°C below 25°C 0.0028 volt per cell for every 1°F below 77°F	0.005 volt per cell for every 1°C above 25°C 0.0028 volt per cell for every 1°F above 77°F

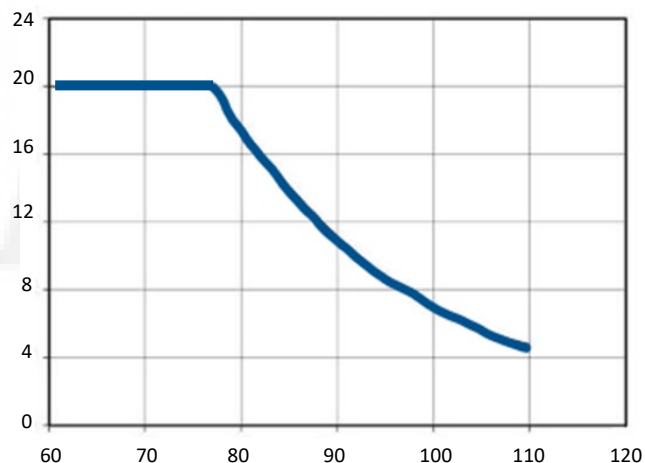
OPERATIONAL DATA

Operating Temperature	Self Discharge
Recommended operating temperature range 60F (15 C) – 90F (32 C) Limit Operating Range 32F (0 C) – 120F (49 C)	Less than 3% per month depending on storage temperature conditions

STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

Percentage Charge	Cell	Specific Gravity
100	2.06 - 2.08	1.210 - 1.220
75	2.03 - 2.04	1.185 - 1.195
50	2.00 - 2.01	1.160 - 1.170
25	1.97 - 1.98	1.135 - 1.145
0	1.95 or less	1.110 - 1.120

BATTERY LIFE v AMBIENT TEMPERATURE



FOR TELECOMMUNICATIONS APPLICATIONS

Capacity: 270 to 720 Ampere-hours

C&D Technologies flooded batteries are engineered to provide superior performance and reliability over the life of the product. These batteries are designed using proprietary techniques and quality components and materials for reduced maintenance and extended battery life.

FEATURES & BENEFITS

- Electrical testing (capacity test) on every cell prior to shipping assures performance of every battery upon delivery.
- Proprietary vacuum-assisted, bottom-pour, positive-grid casting assures void-free grid quality resulting in 20 year service life.
- Waterbath charging results in consistently formed plates for reliable performance out of the box (no cycling required in the field).
- Suspended positive plates permit free growth without pressure on jar and cover.

SAFE OPERATION

- Standard flame-retardant covers enhance battery plant safety with self-extinguishing properties, LOI>32%, UL 94V-0.
- Low-evaporation, flame-arrester vent to extend watering intervals and prevent external sparks from reacting with the hydrogen inside the cell.

COST SAVINGS

- Transparent container allows visual inspection of plates
- Soft rubber post seal minimizes stress on post reducing maintenance requirements
- Computer controlled heli-arc welded post seals result in consistent and reliable seals for less maintenance and longer product life

APPLICATIONS

- Telephone Central Offices
- Mobile Telephone Switching Office
- Cable Head End Sites
- Fiber Optic Regenerator Sites
- Microwave Repeater Sites
- Telephone & Internet Network Nodes