

FLOODED

**NATIONWIDE
BATTERY**

MARINE

GOLF

INDUSTRIAL

AUTO

SPECIAL
APPLICATIONS

SOLAR

LEAD-CALCIUM BATTERY 2XTHP-31

XT SERIES

- Voltage: 4V
- Reserve Capacity: 1478 Ah@8hr rate to 1.75VPC @ 77F (1.215 s.g.)
- Weight: 525 lbs (238 kgs)
- Length: 15.27 in (388 mm)
- Width: 14.32 in (364 mm)
- Height: 22.92 in (582 mm)
- Plates per Cell: 31
- Electrolyte: Sulfuric acid, 1.215 s.g. nominal @77°F (25°C)
- Separator: Microporous with fiberglass retaining mat; U-wrapped
- Container: Thermoplastic, transparent
- Cover: High-impact, flame-retardant thermoplastic (UL94 V-0)
- Recommended Float Voltage: 2.21-2.22 VPC (1.215 s.g.)
- Terminals: Two, 5/8 x 2 in copper blade posts with dual-bolt holes per cell



plates



LEAD CALCIUM BATTERIES FOR UPS AND SWITCHGEAR APPLICATIONS

Capacities from 3.08 to 6.323 Kilowatts per cell

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.

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**C&D
TECHNOLOGIES**

MODEL **2XTHP-31**
 VOLTAGE **4V**
 CAPACITY **1478Ah @ 8hr to 1.75VPC (1.215 s.g.)**
 CONTAINER **Thermoplastic, transparent**
 COVER **High-impact, flame-retardant thermoplastic (UL94 V-0)**
 BATTERY TYPE **Lead-Calcium**

4V

PRODUCT + PHYSICAL SPECIFICATIONS

Serie	Model	Voltage	Cell(s)	Terminal Quantity	Dimensions ^c Inches (mm)			Weight Lbs. (kg)
					Length	Width	Height ^f	
XT	2XTHP-31	4	2	2	15.27 (388)	14.32 (364)	22.92 (582)	525 (238)

ELECTRICAL SPECIFICATIONS

NOMINAL RATES TO 1.75 VPC AVERAGE @ 77°F (25°C) — AMPERES								
SPEC. GRAVITY	1 MIN	15 MIN	30 MIN	1 HR	2 HR	3 HR	5 HR	8 HR
1.215	2597	2018	1543	1019	—	439	283	185
1.250	2835	2203	1685	1112	666	479	—	—

NOMINAL RATES TO 1.67 VPC AVERAGE @ 77°F (25°C) — KILOWATTS PER CELL						
SPEC. GRAVITY	1 MIN	5 MIN	10 MIN	15 MIN	20 MIN	30 MIN
1.215	5.792	5.208	4.604	4.111	3.705	3.08
1.250	6.323	5.685	5.026	4.488	4.045	3.363

CHARGING INSTRUCTIONS

Charger Voltage Settings (at 77°F/25°C)					
System Voltage	2V	6V	24V	48V	125V
Bulk / Equalize Charge	2.35	7.05	28.20	56.40	141.00
Float Charge	2.25	6.75	27.00	54.00	135.00
High Voltage Alarm	2.45	7.35	29.40	58.80	147.00
Low Voltage Alarm	1.75	5.25	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

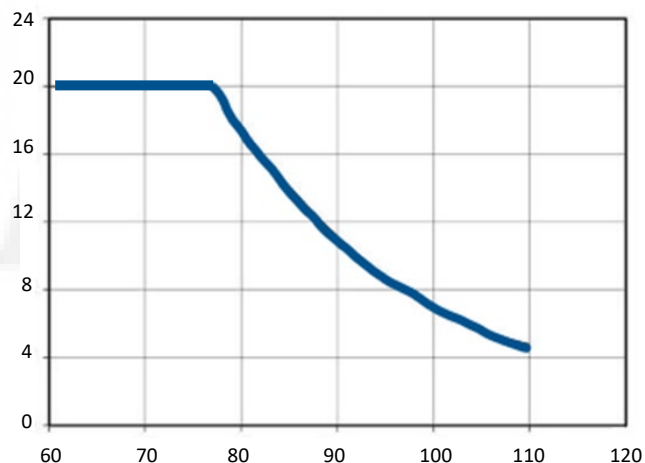
OPERATIONAL DATA

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



2XTHP-31 Lead-Calcium Battery



FOR TELECOM, SWITCHGEAR & CONTROL, AND UPS APPLICATIONS

Capacity 1478 Ampere-hours @ 8hr rate
TWO TERMINALS PER UNIT

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

- Low-maintenance lead-calcium alloy extends watering intervals
- Design is optimized for high-rate, short duration discharges
- Soft rubber post bushing minimizes stress on post seal, leak-free design using heli-arc process unique to C&D
- Flame retardant covers standard to enhance battery plant safety
- Electrical testing to 100% capacity assures performance of every battery
- Warranty for cycle duty or float service is available
- Hardened, lead-alloy terminals or copper-inserted posts provide better conductivity and tighter connections requiring less maintenance
- 20 year life expectancy in float service at 77°F (25°C) ambient temperature

APPLICATIONS

- Data Centers
- Network Operations Centers
- Industrial Process Control Facilities
- Internet Hosting Sites
- Semiconductor Manufacturing
- Banks & Financial Markets
- Power Generation Plants
- Hospitals & Testing Laboratories
- Emergency 911 Response Centers

XT

- Proven quality
- High performance
- Fully tested
- Wide range of KW ratings
- Higher ratings and lower cost than XT-Plus

WARRANTY CRITERIA FOR LIMITED CYCLE SERVICE

DURATION OF DISCHARGE	WARRANTED CYCLE LIFE
0.0 to 0.5 minutes	2,700 events
0.5 to 1.5 minutes	525 events
1.5 to 4.0 minutes	206 events
4.0 to 15.0 minutes	94 events

Based on discharges at 15-minute rate to minimum voltage of 1.67 Vpc

XT PLUS

- All the benefits of the XT
- More available discharge cycles

XT Plus is ideal for sites with frequent blackouts and brownouts or locations that require the batteries to be cycled frequently to test other system components.

WARRANTY CRITERIA FOR LIMITED CYCLE SERVICE

DURATION OF DISCHARGE	WARRANTED CYCLE LIFE
0.0 to 0.5 minutes	10,500 events
0.5 to 1.5 minutes	2,100 events
1.5 to 4.0 minutes	660 events
4.0 to 15.0 minutes	300 events

Based on discharges at 15-minute rate to minimum voltage of 1.67 Vpc

