



OX DRIVE BATTERY

Powered by Electric GT

ENERGY
MODULES



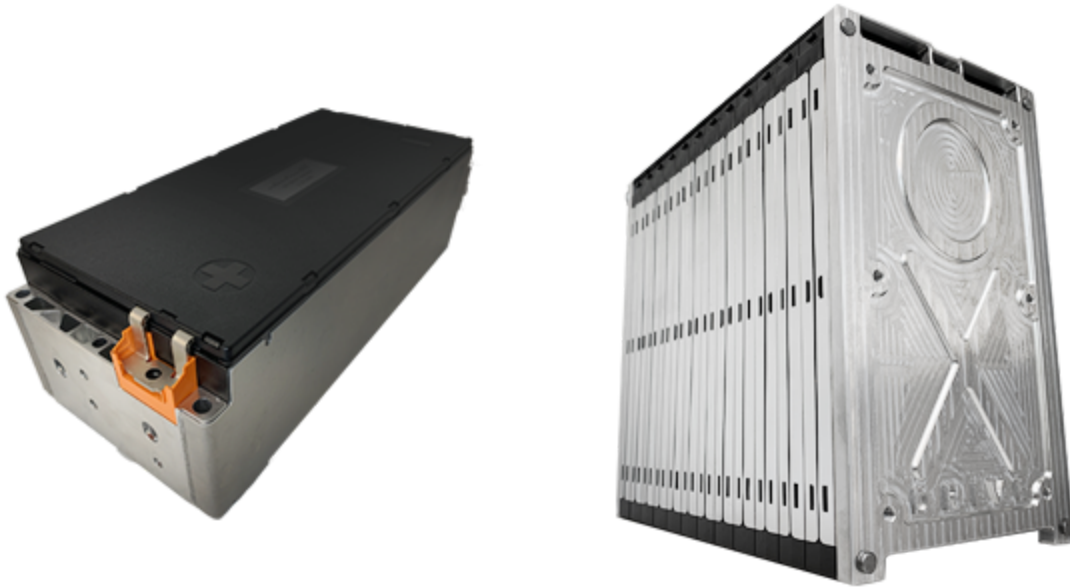
POWER
MODULES





OX DRIVE BATTERY

Powered by Electric GT



Overview

The OX-Drive Battery line represents the core energy source for Powered by Electric GT's new Plug & Play EV product lines. OXD Batteries are an ideal solution for Automotive Aftermarkets, Electric Vehicles and Energy Storage Systems. The Ox-Drive Battery is available in both Energy and Power module formats consisting of nickel manganese cobalt Lithium Ion chemistry. These are high-quality new battery modules offered by Electric GT. OX-Drive Modules are designed to offer application flexibility, affordability, availability and durability.



OX-Drive **Energy** Battery

The OX-Drive **Energy** (OXDE) modules are a compact modular format with versatile fitment dimensions, alternative voltage configurations, robust construction, advanced battery chemistry, and OEM level of safety and protection.

Density and Fitment: Battery density is comparable to the Tesla 5.3kWh Module and a granular packaged size (approximately shoe box size vs dresser drawer) which allows for a wide range of new battery fitment possibilities. Modules are constructed with built in fusing, venting and short circuit device, the OX-Drive **ENERGY** Modules offer OEM level safety and protection.

Performance: OXDE offers excellent performance and safety over an even wider range of SOC and Temperatures. These modules perform very well in challenging cold environments and under heavy demand. The modules will accept full DC Fast Charging currents all the way to 0°C(32°F). Max Discharge current is available down to 20% SOC at moderate temps (15°C/59°F).



OX-Drive **Power** Battery

The OX-Drive **Power** (OXDP) modules are a solid go-to battery both for providing power dense solutions and custom configurations.

Density and Fitment: These Power Pouch cell format modules are stackable and custom configurable enabling battery paralleling to occur at the CELL level. Battery Paralleling cannot be achieved with other or used OEM modules.

Performance: OXDP modules have a much higher rated output for performance applications than the OXDE. The high pulse discharge rates of 8C are perfect for high-performance EV systems.

See our application examples to assist in finding the right configuration.



OX DRIVE **ENERGY**

Battery Pack Application Examples

OxDrive **ENERGY** 2.22kWh

Battery Pack Configuration Options

Energy (kWh)	Num of Modules	Num of Cells	Module Ah	Mod Voltage (nominal/ Max)	Voltage nom/max	Peak Amps	Lbs/Kg
106.6	48	192	151	14.8 / 17.2	710 / 825	600	1200 / 538
95.5	43	172	151	14.8 / 17.2	636 / 739	600	1075 / 482
79.9	36	144	151	14.8 / 17.2	532 / 619	600	900 / 404
64.4	29	174	102	22.2 / 25.8	643 / 748	410	725 / 325
53.3	24	144	102	22.2 / 25.8	532 / 619	410	600 / 269
53.3	24	96	151	14.8 / 17.2	355 / 412	600	600 / 269
46.6	21	84	151	14.8 / 17.2	310 / 361	600	525 / 236
35.5	16	96	102	22.2 / 25.8	355 / 412	410	400 / 180
31.1	14	84	102	22.2 / 25.8	310 / 361	410	350 / 157



OX DRIVE **POWER**

Battery Pack Application Examples

OxDrive **POWER** 2.66kWh

Battery Pack Configuration Options

<i>Energy (kWh)</i>	<i>Num of Modules</i>	<i>Num of Cells</i>	<i>Module Ah</i>	<i>Mod Voltage (nominal/ Max)</i>	<i>Voltage nom/max</i>	<i>Peak Amps</i>	<i>Lbs/Kg</i>
114.4	43	172	180	14.8 / 16.8	636 / 722	1440	1419 / 645
95.8	36	144	180	14.8 / 16.8	532 / 604	1440	1188 / 540
85.1	32	96	240	11.1 / 12.6	355 / 403	1800	1056 / 480
77.1	29	174	120	22.2 / 25.2	643 / 730	960	957 / 435
74.5	28	84	240	11.1 / 12.6	310 / 352	1800	924 / 420
63.8	24	144	120	22.2 / 25.2	532 / 604	960	792 / 360
63.8	24	96	180	14.8 / 16.8	355 / 403	1440	792 / 360
55.9	21	84	180	14.8 / 16.8	310 / 352	1440	693 / 315
42.6	16	96	120	22.2 / 25.2	355 / 403	960	528 / 240



OX DRIVE **POWER**

Battery Pack Application Examples

OxDrive **POWER** 5.33 kWh

Battery Pack Configuration Options

Energy (kWh)	Num of Modules	Num of Cells	Module Ah	Mod Voltage (nominal/ Max)	Voltage nom/max	Peak Amps	Lbs/Kg
117.3	22	176	180	29.6 / 33.6	651 / 739	1440	1474 / 665
95.9	18	144	180	29.6 / 33.6	532 / 604	1440	1206 / 544
85.3	16	96	240	22.2 / 25.2	355 / 403	1800	1072 / 484
74.6	14	168	120	44.4 / 50.4	621 / 705	960	938 / 423
74.6	14	84	240	22.2 / 25.2	310 / 352	1800	938 / 423
64.0	12	144	120	44.4 / 50.4	532 / 604	960	804 / 363
64.0	12	96	180	29.6 / 33.6	355 / 403	1440	804 / 363
42.6	8	96	120	44.4 / 50.4	355 / 403	960	536 / 242



OX DRIVE ENERGY 2.2kWh

Module SPECIFICATIONS

OXDE 151Ah 3.7vdc

PARAMETER	MIN	Nominal/Cont	MAX	UNIT
Cells	-	4	-	Cells in Series
Module Voltage	12.0	14.8	17.2	Vdc
Cell Voltage	3.0	3.7	4.3	Vdc
Charge Current	-	225*	300(10s)*	Amps
Discharge Current	-	300*	600(10s)*	Amps
Module Energy	2200	2234	-	Watt-Hours

*SOC and Temperature Dependant

OXDE 102Ah 3.7vdc

PARAMETER	MIN	Nominal/Cont	MAX	UNIT
Cells	-	6	-	Cells in Series
Module Voltage	18.0	22.2	25.8	Vdc
Cell Voltage	3.0	3.7	4.3	Vdc
Charge Current	-	150	200(10s)*	Amps
Discharge Current	-	200*	410(10s)*	Amps
Module Energy	2200	2234	-	Watt-Hours

*SOC and Temperature Dependant

OX Drive ENERGY Temperatures (see PG#.. for more detailed specs)

Parameter	Min	Max	Unit
Discharge Temp	-30	55	C
Charging Temp	-20	55	C
Storage Temp	20	35	C

OX Drive ENERGY Density(see PG#.. for more detailed specs)

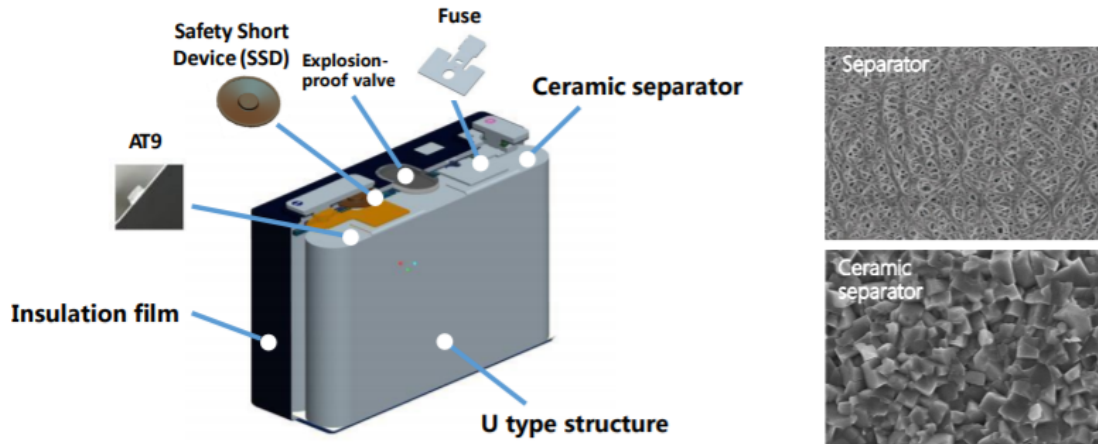
Weight	1.7kg
Volumetric Density	490Wh/L
Energy Density	228 Wh/kg

OX Drive ENERGY GB/T 31485-2015

Over-Charge	Pass
Short	Pass
Crush	Pass



Cell Safety Features and Testing



Test Item	Safety Design Solution
Over charge	High pressure gas additive + Safety short circuit device (SSD)+Fuse
External short circuit	Fuse
Internal short circuit	Ceramic side cathode(AT9)+ceramic separator+special processing
Crush	U type structure + High strength AL case
Heat	Electrolyte additive + Ceramic separator

Mounting Orientations



Insert HERE _____

NO.	Abuse Test	GBT 31485-2015	Result
1	Over-Charge	-100%SOC, RT -1C charge 1h or cell voltage reaches 1.5 times of charging limit voltage	No Fire, No explosion
2	Over-Discharge	-100%SOC, RT -1C DC 90min, rest 1h	No Fire, No explosion
3	Crush	-100%SOC, RT -Φ150mm crush head, crush to 30% displacement or crush force reaches to 200KN	No Fire, No explosion
4	Hotbox	-100%SOC, RT -Heating from RT to 130°C at the rate of 5°C/min, keep 130°C for 30min	No Fire, No explosion
5	Short	-100%SOC, RT -External resistance less than 5mohm, hold short circuit for 10min	No Fire, No explosion
6	Drop	-100%SOC, RT -Drop to concrete floor with both terminal downward from 1.2m height, 1h observation	No Fire, No explosion

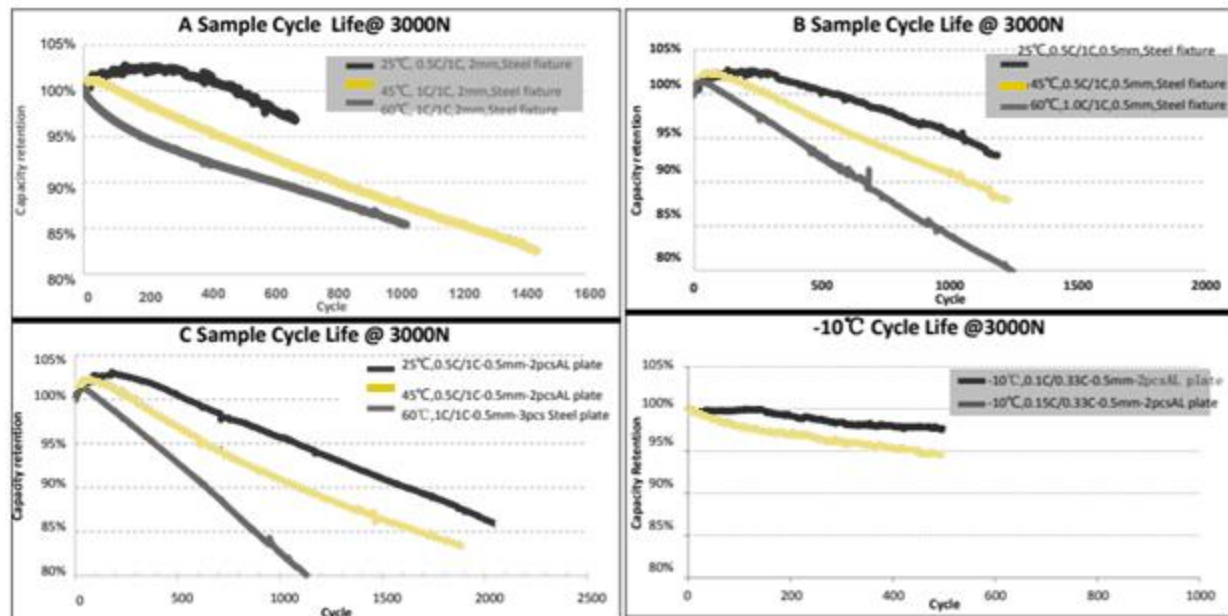


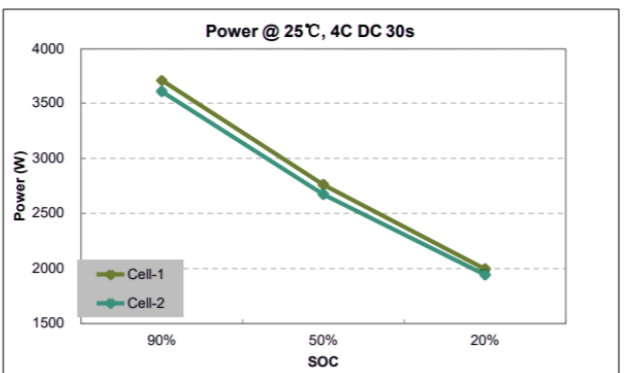
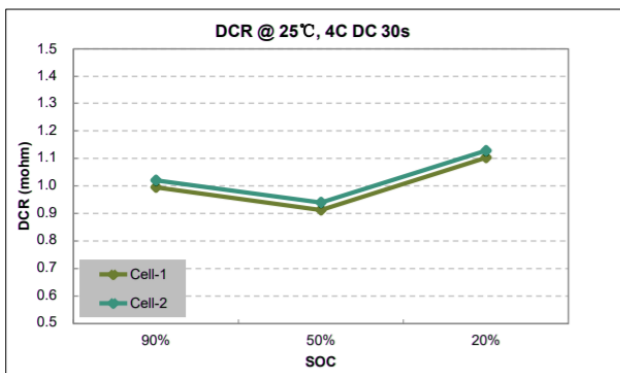
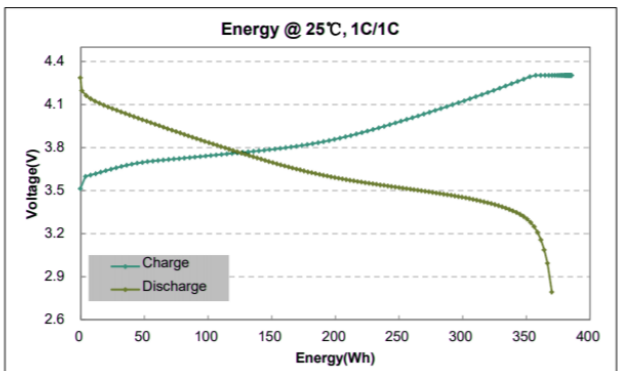
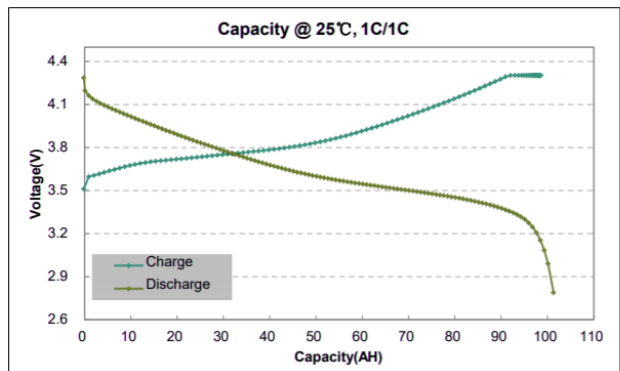
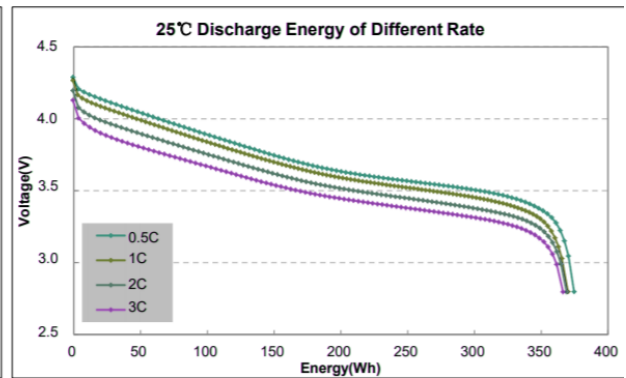
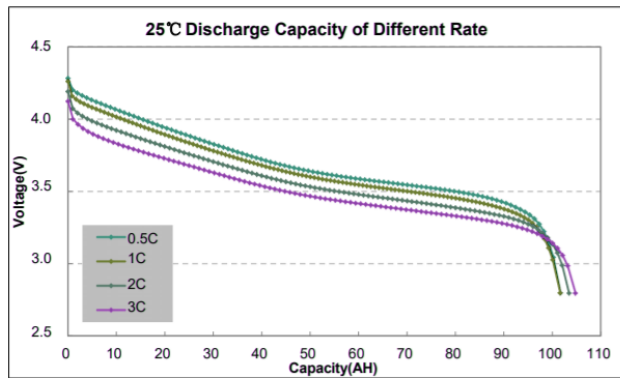
OX DRIVE **ENERGY** CELL Performance Graphs 151Ah Performance Graphs

(Pending Availability)

OX DRIVE **ENERGY** CELL Performance Graphs 102Ah Performance Graphs

• Test Procedures: 25°C/45°C/60°C, 0.5C/1C CC+CV to 4.3V, rest 0.5h, 1C DC to 2.8V, rest 0.5h (3000N)







OX DRIVE **POWER** MODULE SPECIFICATIONS

OXDP 2.66kwh Module Specs:

The 2.66kWh OXDP Modules come in several configurations:

<i>Num of Cells</i>	<i>Module Ah</i>	<i>Mod Voltage (nominal/ Max)</i>	<i>Peak Amps</i>	<i>Lbs/Kg</i>
6	120	22.2 / 25.2	960	33 / 15
4	180	14.8 / 16.8	1440	33 / 15
3	240	11.1 / 12.6	1800	33 / 15

OXDP 5.33kwh Module Specs:

The 5.33kWh OXDP Modules come in several configurations:

<i>Num of Cells</i>	<i>Module Ah</i>	<i>Mod Voltage (nominal/ Max)</i>	<i>Peak Amps</i>	<i>Lbs/Kg</i>
12	120	44.4 / 50.4	960	67 / 31
8	180	29.6 / 33.6	1440	67 / 31
6	240	22.2 / 25.2	1800	67 / 31



OX DRIVE **POWER** CELL SPECIFICATIONS

OXDP 30 ah Cell Specification:

OXDP 30Ah 3.7vdc

PARAMETER	MIN	Nominal/Cont	MAX	UNIT
Capacity at 25C	30	-	-	Ah @ 0.3C
Cell voltage	3.0	3.7	4.2	Vdc
DC Resistance	-	0.75	-	mohm
Pulse Charge Current for 10s	-	60	90	Amps
Pulse Discharge Current 10s	-	120	400	Amps
Cell Energy	-	111	-	Watt-Hours

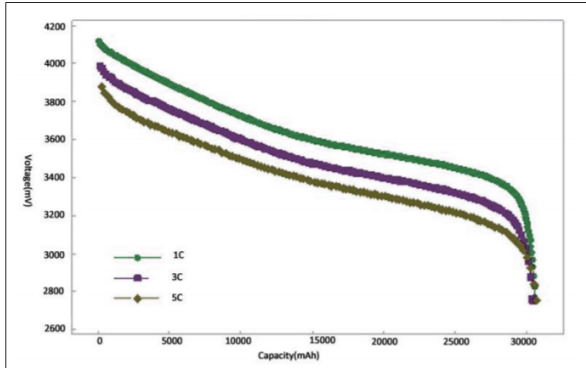
*SOC and Temperature Dependant See PG#..

OX Drive **POWER** Temperatures (see PG#.. for more detailed specs)

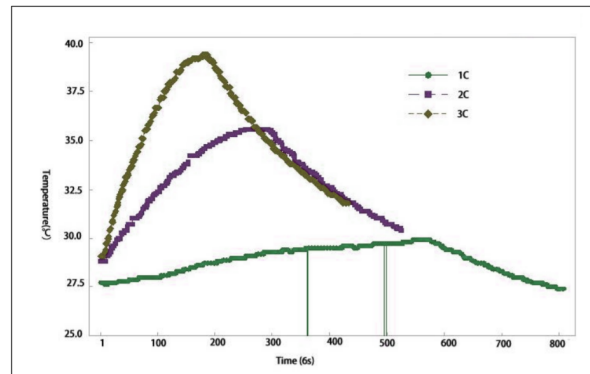
Parameter	Min	Max	Unit
Discharge Temp	-20	55	C
Charging Temp	-0	45	C
Storage Temp	20	35	C

OX Drive **POWER** Density(see PG#.. for more detailed specs)

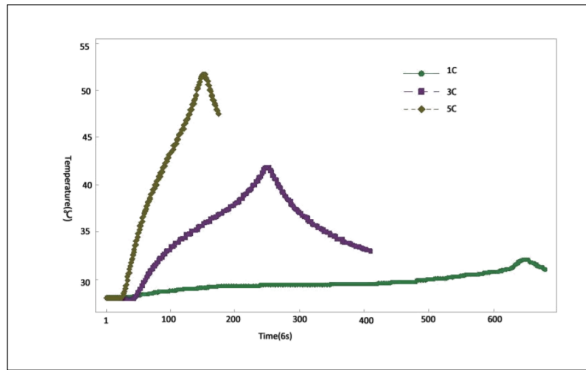
Weight	525g
Volumetric Density	-
Energy Density	211 Wh/kg



25°C continuous discharge 1C, 3C, 5C



Test Procedures: Temperature rise less than 7°C at continuous 2C charge rate, 11°C at continuous 3C charge rate



Test Procedures: Temperature rise less than 15°C at 3C continuous discharge rate, temperature rise less than 25°C at 5C continuous discharge rate

Contact Info@ElectricGT.com for information and orders.