

## TBSPP-4S2P77Lithium Ion Smart Battery



Total Battery Solutions Ltd, Lithium Ion Smart battery range is a fully featured primary and one shot secondary protection system with, coulomb counting Fuel Gauge compliant with SMBUS rev.1.1 for battery data and including a manual [5LED] State of Charge (SOC), making the TBS Li-Powerpak a fully reliable and safety compliant smart battery, packed with the latest technology. Housed in a designer box in ABS the Li-PowerPak comes in a wide range of options.

<b>Cell Manufacturer</b>	LG Chem	<b>Battery External Height</b>	46mm
<b>Battery Voltage</b>	14.8V Nom	<b>Battery External Width</b>	97mm
<b>Battery Capacity</b>	5.2Ah	<b>Battery External Depth</b>	68mm
<b>Battery Chemistry</b>	Lithium Ion	<b>Operating Temperature Max</b>	50+ Deg C
<b>Weight</b>		<b>Operating Temperature Min</b>	0 Deg C

### Electrical Performance

Item	Description	value	Unit
II	Nominal max laod	4.5	A
II trip	Nominal trip	5	A
II trip hyst.	Nominal time to trip	3	s
II short 1	Nominal short cct	14	A
II short 1	Nominal time to trip	31	ms
II short 2	Nominal short cct	27.5	A
II short 2	Nominal time to trip	425	us
Overvoltage	any cell	4.3	V
Overvoltage	time to trip	2	S
Undervoltage	any cell	2.3	V
Undervoltage	time to trip	2	S
cell one shot	any cell	4.45	V
cell one shot	time to trip	2	S
iq op	operating current	600	uA
Iq sleep	sleep current	150	uA
Iqshut down	any cell <2.1V	5	uA
temp charge	trip	45	C
temp disch.	Trip	60	C



Fuel Gauge accuracy is +/-1%, it is a trans-impedance type based on a Texas Instruments ASSP. The TBSPP Lithium power pack does not require in field calibration, as cells are high quality Lithium Ion.

### Battery Output

<b>Red</b>	P+	<b>Black</b>	P-	<b>Yellow</b>	SMBUS (Clock)	<b>Green</b>	SMBUS (Data)	<b>Blue</b>	Th
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