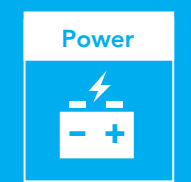


	TB17	TB20	TB30	TB40	TB44	TB60
CAPACITY	17 amp-hour nominal at 23°C/73°F	20 amp-hour nominal at 23°C/73°F	30 amp-hour nominal at 23°C/73°F	40 amp-hour nominal at 23°C/73°F	46 amp-hour nominal at 23°C/73°F	60 amp-hour nominal at 23°C/73°F
WEIGHT	16 lbs. (7.26 kg)	19.5 lbs. (8.85 kg)	27.7 lbs. (12.56 kg)	36.6 lbs. (16.60 kg)	51.7 lbs. (23.45 kg)	52.9 lbs. (23.99 kg)
CHARGE VOLTAGE	28 VDC nominal	28 VDC nominal		28 VDC nominal		28 VDC nominal
OUTPUT VOLTAGE	26.4 VDC nominal	26.4 VDC nominal		26.4 VDC nominal		26.4 VDC nominal
OUTPUT CURRENT	500A continuous, 840A max	525A continuous, 960A max	575A continuous, 1440A max	525A continuous, 1500A max	750A continuous, 1500A max	425A continuous, 1500A max
RECHARGE TIME	30 minutes for complete recharge when the battery is fully discharged	Configurable Charge Current Limiting; 15 minutes for full recharge when configured for maximum charge current		Configurable Charge Current Limiting; 15 minutes for full recharge when configured for maximum charge current	15 minutes for complete recharge when the battery is fully discharged on a typical aircraft	Configurable Charge Current Limiting; 15 minutes for full recharge when configured for maximum charge current
DIMENSIONS	7.2" L x 7.4" W x 6.0" H	9.1" L x 8.6" W x 8.8" H	12.5" L x 8.6" W x 8.8" H	9.1" L x 14.7" W x 8.8" H	10.9" L x 10.5" W x 10.1" H	12.5" L x 14.7" W x 8.8" H
PROTECTION	Overcharge, over-discharge, over-current, short circuit, over-temperature, under-temperature and charge current limiting	Overcharge, over-discharge, over-current, short circuit, over-temperature, under-temperature and charge current limiting		Overcharge, over-discharge, over-current, short circuit, over-temperature, under-temperature and charge current limiting	Overcharge, over-discharge, over-current, short circuit, over-temperature and under-temperature	Overcharge, over-discharge, over-current, short circuit, over-temperature, under-temperature and charge current limiting
TECHNOLOGY	Advanced NanoPhosphate® lithium-ion cell chemistry	Advanced NanoPhosphate® lithium-ion cell chemistry		Advanced NanoPhosphate® lithium-ion cell chemistry		Advanced NanoPhosphate® lithium-ion cell chemistry
USEFUL LIFE	8 years (average)	8 years (average)		8 years (average)		8 years (average)
COMMUNICATION	Battery status to the cockpit Discrete, RTD	Built-in Test (BIT) Indicator ARINC 429, Analog, Discrete, RTD		Built-in Test (BIT) Indicator ARINC 429, Analog, Discrete, RTD	ARINC 429 data to the cockpit Serial, Discrete, RTD	Built-in Test (BIT) Indicator ARINC 429, Analog, Discrete, RTD
MAINTENANCE	Two-year maintenance intervals	On-condition Service indication via discrete output, LED indication and ARINC 429		On-condition Service indication via discrete output, LED indication and ARINC 429	Two-year maintenance intervals	On-condition Service indication via discrete output, LED indication and ARINC 429
OPERATING TEMPERATURE	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)		-40°C to 70°C (-40°F to 158°F)		-40°C to 70°C (-40°F to 158°F)
CONFIGURATION	7P8S; 7 parallel x 8 in series	8P8S; 4 parallel x 8 in series x 2	12P8S; 4 parallel x 8 in series x 3	16P8S; 4 parallel x 8 in series x 4	19P8S; 1 parallel x 8 in series x 19	24P8S; 4 parallel x 8 in series x 6
CASE	Anodized aluminum, blue	Anodized aluminum, blue		Anodized aluminum, blue	Powder-coated steel, blue	Anodized aluminum, blue
CONNECTION	Terminals, Cannon plugs for communications MS3509 (optional)	MS3509 Quick disconnect, Power Mil Circular for communications		MS3509 Quick disconnect, Power Mil Circular for communications	MS3509 Quick disconnect, Cannon plugs for communications	MS3509 Quick disconnect, Power Mil Circular for communications
VENT KIT	Available	Available		Available		Available
CERTIFICATION	FAA TSO certified to C179a ETSO certified to C179a RTCA DO-311 qualified RTCA DO-160G qualified UNDOT/IATA qualified	FAA TSO-C179b (Class A-4B) RTCA DO-311A RTCA DO-160G RTCA DO-178C DAL A UNDOT/IATA		FAA TSO-C179b (Class A-4B) RTCA DO-311A RTCA DO-160G RTCA DO-178C DAL A UNDOT/IATA	FAA TSO certified to C179a ETSO certified to C179a RTCA DO-311 qualified RTCA DO-160G qualified UNDOT/IATA qualified	FAA TSO-C179b (Class A-4B) RTCA DO-311A RTCA DO-160G RTCA DO-178C DAL A UNDOT/IATA
WARRANTY	Two-year limited	Two-year limited		Two-year limited		Two-year limited

The NanoPhosphate®  
Lithium-ion Advantage

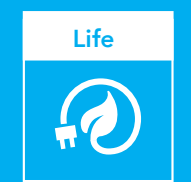
Game-changing Technology



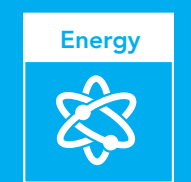
Superior power by weight or volume in a cost effective solution



NanoPhosphate® is stable chemically, providing the foundation for safe systems



Excellent calendar and cycle life with consistent performance over extended use



Higher useable energy means greater battery utilization and lower cost

## How lithium-ion measures up

Battery Technology	Capacity (1C rate)	Weight	Voltage Output	Useful Life	Maintenance
<b>TB17 Lithium-ion Aircraft Battery</b>	17 amp-hour	16 lbs.	26.4 VDC	8 years (average)	2 years
Lead-acid Battery	17 amp-hour	43 lbs.	24 VDC	2 – 4 years	Annual
Nickel-cadmium Battery	17 amp-hour	38.5 lbs.	24 VDC	5 – 10 years	200 – 400 hours

Battery Technology	Capacity (1C rate)	Weight	Voltage Output	Useful Life	Maintenance
<b>TB20 Lithium-ion Aircraft Battery</b>	20 amp-hour	19.5 lbs.	26.4 VDC	8 years (average)	On-condition
Lead-acid Battery	17 amp-hour	43 lbs.	24 VDC	2 – 4 years	Annual
Nickel-cadmium Battery	17 amp-hour	38.5 lbs.	24 VDC	5 – 10 years	200 – 400 hours

Battery Technology	Capacity (1C rate)	Weight	Voltage Output	Useful Life	Maintenance
<b>TB30 Lithium-ion Aircraft Battery</b>	30 amp-hour	27.7 lbs.	26.4 VDC	8 years (average)	On-condition
Lead-acid Battery	28 amp-hour	62 lbs.	24 VDC	2 – 4 years	Annual
Nickel-cadmium Battery	27 amp-hour	54.3 lbs.	24 VDC	5 – 10 years	200 – 400 hours

Battery Technology	Capacity (1C rate)	Weight	Voltage Output	Useful Life	Maintenance
<b>TB40 Lithium-ion Aircraft Battery</b>	40 amp-hour	36.6 lbs.	26.4 VDC	8 years (average)	On-condition
Lead-acid Battery	42 amp-hour	86 lbs.	24 VDC	2 – 4 years	Annual
Nickel-cadmium Battery	44 amp-hour	80 lbs.	24 VDC	5 – 10 years	200 – 400 hours

Battery Technology	Capacity (1C rate)	Weight	Voltage Output	Useful Life	Maintenance
<b>TB44 Lithium-ion Aircraft Battery</b>	46 amp-hour	51.7 lbs.	26.4 VDC	8 years (average)	2 years
Lead-acid Battery	42 amp-hour	86 lbs.	24 VDC	2 – 4 years	Annual
Nickel-cadmium Battery	44 amp-hour	80 lbs.	24 VDC	5 – 10 years	200 – 400 hours

Battery Technology	Capacity (1C rate)	Weight	Voltage Output	Useful Life	Maintenance
<b>TB60 Lithium-ion Aircraft Battery</b>	60 amp-hour	52.9 lbs.	26.4 VDC	8 years (average)	On-condition
Lead-acid Battery	53 amp-hour	98 lbs.	24 VDC	2 – 4 years	Annual
Nickel-cadmium Battery	53 amp-hour	105 lbs.	25.2 VDC	5 – 10 years	200 – 400 hours



## Lithium-ion Aircraft Batteries

PRODUCT COMPARISON CHART

- TB17 (17 amp hour)
- TB20 (20 amp hour)
- TB30 (30 amp hour)
- TB40 (40 amp hour)
- TB44 (46 amp hour)
- TB60 (60 amp hour)