

Advanced Lithium-ion Battery

TB14

Manufactured by Mid-Continent Instrument Co., Inc.



Delivers more power per pound than any other aircraft battery

The TB14 is designed for smaller, 28-volt fixed-wing aircraft. It delivers cooler and faster engine starts and ensures superior performance in extreme temperatures $(-20^{\circ}\text{C to } +70^{\circ}\text{C})$.

The lithium-ion main ship battery offers on-condition maintenance and features built-in charge current limiting to protect your aircraft's alternator or generator without needing to install additional equipment. The TB14 delivers intelligent cockpit communication via RS-232, analog and discrete signals.

Product features

CAPACITY 13 amp-hour nominal at 23°C/73.4°F

WEIGHT 6430014-2 10.0 lbs. (4.54 kg) 6430014-21 12.2 lbs. (5.53 kg)

TECHNOLOGY Advanced iron phosphate lithium-ion cell chemistry

EFFICIENCY Higher voltage during engine start —

Less wear, less maintenance and

increased useful life

PERFORMANCE 35 minutes (at 28 amps average) for

complete recharge when the battery

is fully discharged

Superior high-temperature and cold-weather performance from

-20°C to +70°C (-4°F to +158°F)

ENERGY DENSITY More than 1 amp-hour per pound

PROTECTION Overcharge, over-discharge, over-current,

short circuit, over-temperature, undertemperature and charge current limiting

COMMUNICATION RS-232, Analog, Discrete

MAINTENANCE On-condition

DESIGNED AND Wichita, Kansas, USA

MANUFACTURED

WARRANTY Two-year limited

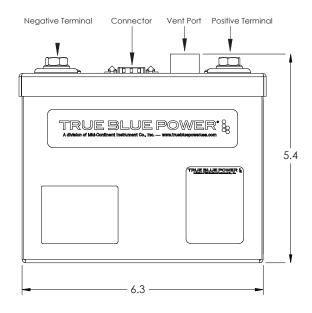
Kansas

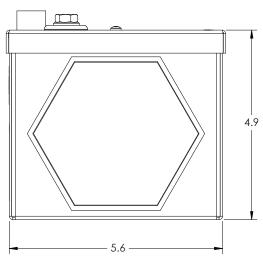
9400 East 34th Street North Wichita, Kansas 67226 USA Tel 316.630.0101 800.821.1212 Fax 316.630.0723 tbp@mcico.com

California

9722 Topanga Canyon Boulevard Chatsworth, California 91311 USA Tel 818.786.0300 800.345.7599 Fax 818.786.2734 tbp@mcico.com

truebluepowerusa.com





Technical specifications

CAPACITY	13 amp-hour nominal at 23°C/73.4°F
CHARGE VOLTAGE	28.8 VDC nominal
OUTPUT VOLTAGE	26.4 VDC nominal
OUTPUT CURRENT	100A continuous, 850A max
TECHNOLOGY	Advanced iron phosphate lithium-ion cell chemistry
PROTECTION	Overcharge, over-discharge, over-current, short circuit, over-temperature, under-temperature and charge current limiting
ENERGY DENSITY	76 Wh/kg 121 Wh/liter

WEIGHT 6430014-2 10.0 lbs. (4.54 kg) 6430014-21 12.2 lbs. (5.53 kg)

DIMENSIONS 6.3" L x 5.6" W x 4.9" H

CONFIGURATION 2P8S; 2 parallel cells x 8 series cells

LIFE EXPECTANCY 8 years (average)

MAINTENANCE On-condition

CASE 6430014-2 Anodized aluminum, blue

6430014-21 Stainless steel

-20°C to 70°C (-4°F to 158°F)

CERTIFICATION FAA TSO C179b (Class A-4B)

RTCA DO-311A RTCA DO-160G RTCA DO-178C DAL A UNDOT/IATA

Product comparison

	Battery Technology	Voltage Output	Capacity (1C rate)	Weight	Maintenance	Useful Life
TB14	Lithium-ion (6430014-2)	26.4 VDC	13 amp-hour	10 lbs.	On-condition	8 years (average)
	Lead-acid	24 VDC	13.6 amp-hour	29.5 lbs.	Annual	2 – 4 years
	Nickel-cadmium	24 VDC	15 amp-hour	36.8 lbs.	200 – 400 hours	5 – 10 years

OPERATING

TEMPERATURE

