



Premium Series

DATASHEET

Premium High Density 6S Series



PRODUCT OVERVIEW

The Premium Series – High Energy Packs are built around Amprius SA504 pouch cells, known for their ultra-high gravimetric energy density (383Wh/kg) and exceptional discharge power. These models are intended for integration with external BMS or smart chargers, offering performance freedom for system integrators who require maximum flexibility.

APPLICATIONS



Commercial Drones

High-performance drones, UAV propulsion systems (backup or main), Military-grade



Robotics

Compact mobile robots, Military-grade

CONNECTORS

- Han® MPC30 Connector (Power)
- Han® MPC60 Connector (Power)
- XT90 Connector (Power)
- Molex Micro-Fit 6/8-pin Connector (Balancing)

KEY ADVANTAGES

Ultra-lightweight (383Wh/kg gravimetric density)

High discharge performance for mobile platforms

No BMS – ideal for advanced integrators with external BMS needs

Compact pouch form factor

** The above features apply only for battery models with smart BMS.

M O D E L

TN6S1P-SA504

TN6S2P-SA504

ELECTRICAL SPECIFICATIONS

Cell Configuration	6S 1P	6S 2P
Nominal Voltage	20.4V	20.4V
Nominal Capacity	11.05Ah	22.10Ah
Energy	225Wh	451 Wh
Charge Voltage	25.2V	25.2V
Cut-off Voltage	15V	15V
Energy Density	383 Wh/kg	383 Wh/kg

CURRENT PARAMETERS

Max Continuous Discharge Current	66.3 A (6C)	132.6 A (6C)
Max Pulse Discharge Current ($\leq 30s$)	88.4 A (8C)	176.8A (8C)
Max Charge Current	10.8 A typical (1C) 21.6 A max (2C)	21.6 A typical (1C) 43.2 A max (2C)

PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)	42 x 54 x 170 mm	84 x 54 x 170 mm
Weight	0.7 kg	1.4 kg
Enclosure Material	PVC Shrink Wrap	PVC Shrink Wrap

ENVIRONMENTAL SPECIFICATIONS

PERFORMANCE SPECIFICATIONS

Operating Temperature	Charge: 0°C to 60°C	Cycle Life	~300 cycles @ 100% DOD ~700 cycles @ 70% DOD
	Discharge: -20°C to 60°C		Designed to Meet CE, UN 38.3, RoHS, IEC 62133
Storage Temperature	Short-term (<1 month): -20°C to 45°C	Warranty	12 months
	Long-term (>1 month): 0°C to 25°C		
Humidity	$\leq 85\%$ RH		

**GOT QUESTIONS?
GET IN TOUCH WITH US**

Dan-Tech Energy GmbH

www.danenergy.com

Max-Planck-Str. 7, Berlin 12489 Germany

+49 (030) 5770-34433

info@danenergy.com