



Premium Series

DATASHEET

Premium High Power & Density 6S Series



PRODUCT OVERVIEW

The Premium 6S Series is engineered for advanced UAVs and professional drones requiring extended flight times and lightweight packs. This series leverages ultra-high-energy cells Reliance INR21700-RS60 to deliver exceptional gravimetric energy density, optimized for long-endurance operations and high power performance.

APPLICATIONS



Commercial Drones

Agriculture, Cargo, Missions, Tactical



Robotics

Warehouse, Cargo, Missions, Tactical

CONNECTORS

For models with Smart BMS:

- AS150U Connector (Power + Communication)

For models without Smart BMS, providing cell balancing capability:

- XT90 Connector (Power)
- Molex Micro-Fit 16-pin Connector (Balancing)

PROTECTION FEATURES

Overcharge Protection
Over-discharge Protection
Overcurrent Protection
Short Circuit Protection
Temperature Monitoring and Protection

COMMUNICATION INTERFACES

CANBUS
RS485
UART

ADDITIONAL FEATURES

State of Charge (SOC) Estimation
Cell Balancing
Remote Monitoring Capability

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

M O D E L

TN6S1P-RS60-01

TN6S3P-RS60-01

ELECTRICAL SPECIFICATIONS

Cell Configuration	6S 1P	6S 3P
Nominal Voltage	21.6V	21.6V
Nominal Capacity	6Ah	18Ah
Energy	130Wh	390Wh
Charge Voltage	25.2V	25.2V
Cut-off Voltage	15V	15V
Energy Density	302 Wh/kg	302 Wh/kg

CURRENT PARAMETERS

Continuous Discharge Current	50 A (8.3C)	150A (8.3C)
Max Continuous Discharge Current ($\leq 30s$)	80 A (13.3C)	240 A (13.3C)
Max Charge Current	12 A (2C)	36 A (2C)

PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)	25 x 80 x 150 mm 25 x 72 x 150 mm(no BMS)	75 x 80 x 150 mm 75 x 72 x 150 mm(no BMS)
Weight	0.53 kg	1.44 kg
Enclosure Material	PVC Shrink Wrap	PVC Shrink Wrap

ENVIRONMENTAL SPECIFICATIONS

PERFORMANCE SPECIFICATIONS

Operating Temperature	Charge: -20°C to 60°C	Cycle Life	~500-700 cycles to ~65-70% capacity (25°C)
	Discharge: -40°C to 80°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		

**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