



Premium Series

# DATASHEET

Premium High Power 14S Series



## PRODUCT OVERVIEW

The Premium High Power 14S Series is engineered for the largest, most demanding drone platforms requiring extremely high discharge currents at 50.4V. Built with Amprius SA124, rated for 180A pulse discharge from a 5Ah cell with just 5mΩ internal resistance, these packs deliver burst-load response for heavy-lift cargo drones and multi-rotor platforms under maximum payload, while maintaining low voltage sag under transient loads.

## APPLICATIONS



### Commercial Drones

Agriculture, Cargo, Missions, Tactical



### Robotics

Warehouse, Cargo, Missions, Tactical

## CONNECTORS

For models with Smart BMS:

- **AS150U** Connector (Power + Communication)
- **Han® MPC30** Connector (DroneCAN support)
- **Han® MPC60** Connector (DroneCAN support)

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                          |                                         |                                                |                                                |
|------------------------------------|-----------------------------------------|------------------------------------------------|------------------------------------------------|
|                                    |                                         | TN14S4P-SA124-01                               | TN14S8P-SA124-01                               |
| ELECTRICAL SPECIFICATIONS          |                                         |                                                |                                                |
| Cell Configuration                 |                                         | 14S 8P                                         | 14S 8P                                         |
| Nominal Voltage                    |                                         | 50.4 V                                         | 50.4 V                                         |
| Nominal Capacity                   |                                         | 20 Ah                                          | 40Ah                                           |
| Energy                             |                                         | 1,008Wh                                        | 2,016 Wh                                       |
| Charge Voltage                     |                                         | 58.8V                                          | 58.8V                                          |
| Cut-off Voltage                    |                                         | 35V                                            | 35V                                            |
| Energy Density                     |                                         | 250 Wh/kg                                      | 250 Wh/kg                                      |
| CURRENT PARAMETERS                 |                                         |                                                |                                                |
| Max Continuous Discharge Current   |                                         | 200 A (10C)                                    | 400 A (10C)                                    |
| Max Pulse Discharge Current (≤30s) |                                         | 720 A (36C)                                    | 1,440 A (36C)                                  |
| Max Charge Current                 |                                         | 30 A (2C)                                      | 60 A (2C)                                      |
| PHYSICAL SPECIFICATIONS            |                                         |                                                |                                                |
| Dimensions (L x W x H)             |                                         | 100 x 80 x 350 mm<br>100 x 72 x 350 mm(no BMS) | 200 x 80 x 350 mm<br>200 x 72 x 350 mm(no BMS) |
| Weight                             |                                         | 4 kg                                           | 8 kg                                           |
| Enclosure Material                 |                                         | PVC Shrink Wrap                                | PVC Shrink Wrap                                |
| ENVIRONMENTAL SPECIFICATIONS       |                                         | PERFORMANCE SPECIFICATIONS                     |                                                |
| Operating Temperature              | Charge: 0°C to 45°C                     | Cycle Life                                     | ~900 cycles (+1C/-1C, 100% DoD, to 80% SOH)    |
|                                    | Discharge: -20°C to 60°C                | Designed to Meet                               | CE, UN 38.3, RoHS, IEC 62133                   |
| Storage Temperature                | Short-term (<1 month):<br>-20°C to 45°C | Warranty                                       | 12 months                                      |
|                                    | Long-term (>1 month):<br>0°C to 25°C    |                                                |                                                |
| Humidity                           | ≤85% RH                                 |                                                |                                                |

GOT QUESTIONS?  
GET IN TOUCH WITH US

Dan-Tech Energy GmbH

 [www.danenergy.com](http://www.danenergy.com)

 Max-Planck-Str. 7, Berlin 12489 Germany

 +49 (030) 5770-34433

 [info@danenergy.com](mailto:info@danenergy.com)