

# APR Drone Battery Pack – 300 Wh/kg

Drones operating in defense environments face demanding thermal conditions. The APR Drone Battery Pack combines high energy density NMC cells with integrated dielectric immersion cooling, delivering stable performance from -50°C to +55°C, fast recharge in 18 minutes and a 2000-cycle service life. Capacity, voltage and form factor are customizable to platform requirements.

## Operational in extreme temperature

Integrated heater and cooler using dielectric liquid maintains stable cell temperature across -50°C to +55°C.

## Maximized flight time

High energy density NMC technology delivers up to 300 Wh/kg at system level.

## Long service life, fast charging

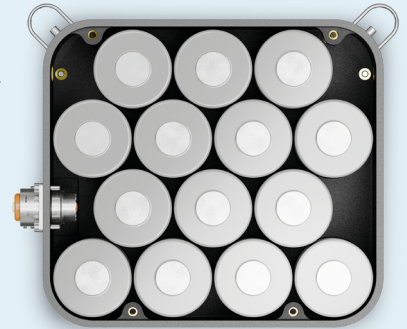
2000 cycles at over 80% capacity retention, with fast charge from 10 to 80% in 18 minutes.

## Custom design

Voltage, capacity and form factor are configurable to fit your platform.

## Applications

Defense UAV platforms operating in demanding environments require power systems that perform without compromise. From arctic reconnaissance to desert surveillance, this battery pack is designed for electric drones where mission reliability and performance are non-negotiable. Typical applications include long-endurance ISR drones, logistics UAVs and autonomous systems operating in extreme conditions.



ENERGY 2.2 kWh SERIAL: 31040161  
VOLTAGE 50.4 V VER: R1A  
OPERATION TEMP -50 TO +55 C  
CHARGE CURRENT 117 A  
OUTPUT CURRENT 132 A (264 A)  
+ DC-OUT - COM

## Technical Data

Cell configuration	14S 1P
Battery cell and chemistry	4695 NMC
Energy density (pack level)	Up to 300 Wh/kg
Battery pack nominal voltage	50.4 V
Battery pack capacity	44 Ah
Battery pack energy	2.2 kWh
Battery pack operating voltage	42 – 60 V
Max discharge (30s burst)	3 C (6 C)
Operating temperature	-50°C - +55°C
IP rating	IP67
Battery module weight	approx 7.3 kg
Cycle life @ 1C (25 °C)	2000 cycles > 80 %
Fast charge 10 to 80 % (25 °C)	18 min

## About APR

APR Technologies is a Swedish deep tech company developing high-performance liquid cooling solutions for data centres, space, defense, telecom and battery applications. With 70+ patents, APR controls and redirects cooling flow at chip scale, removing thermal barriers to technological progress while saving energy and enabling higher compute density. Headquartered in Enköping, Sweden.

Disclaimer This battery pack is a demonstration unit developed for evaluation and testing in electric drone applications. The specifications, performance characteristics, and other technical data provided in this datasheet are preliminary, and subject to change without notice. This product is not a production-ready unit and has not been fully validated for durability, safety, or regulatory compliance required for drones. It may not meet applicable standards, certifications, or requirements.

