

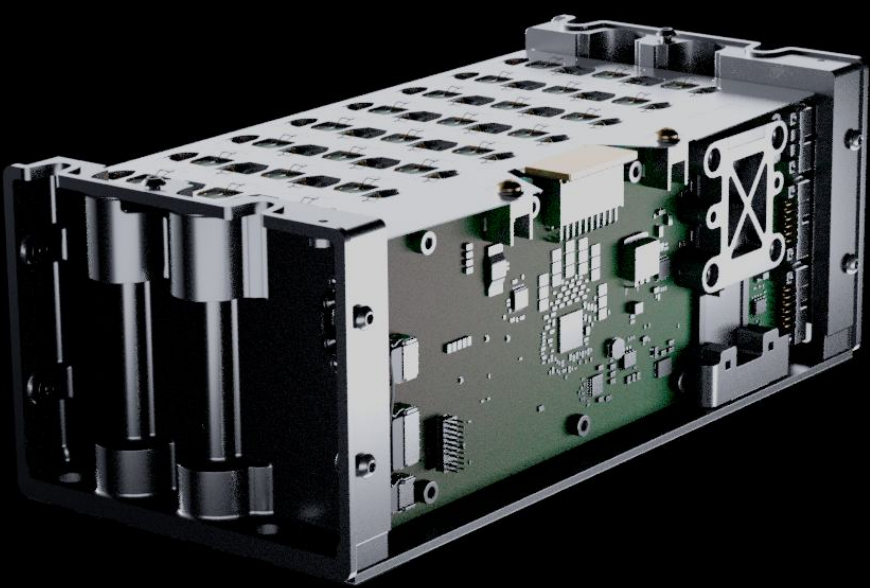
Built to perform.
Easy to integrate.
Ready to fly.

Pack2 - Lithium-Ion

Pack2 is a fully integrated lithium-ion battery pack built for modern spacecraft, where reliability, seamless integration, and cost-performance matter most. It leverages flightproven components, a streamlined BMS, and softwaretuned behaviour to simplify system integration.

8S3P

28.8V
432 Wh
2.4 kg



LOW-COST, EVAL-READY
MODELS TO ACCELERATE
YOUR MISSION

LEO FLIGHT
HERITAGE 2026

CONFIGURABLE FOR EASE OF
INTEGRATION

● System Specifications

VOLTAGE RANGE	20 V / 28.8 V / 33.6 V
NAMEPLATE ENERGY AT 23°C	432 WH
RATED CURRENT	38 A
COMMS INTERFACE	CAN 2.0
RATED LIFE	5 YEARS LEO
MASS (KG)	2.42 KG
DIMENSIONS (L X W X H)	212.9 X 74.9 X 83.8 MM
MOUNTING	4 X M6

● Thermal & Environmental Limits

CELL DISCHARGE TEMP RANGE	-30°C TO 55°C
CELL CHARGE TEMP RANGE	0°C TO 55°C
RADIATION TID TOLERANCE	35 krad CO-60 Gamma
VIBRATION (QUAL) GEVS	14.1 Grms, 20 Hz-2 kHz, 3 axes
VIBRATION (ACCEP) GEVS	9.7 Grms, 20 Hz-2 kHz, 3 axes
TVAC (QUAL ONLY) GEVS	Op 6 cyc:-30°C to +55°C, Survive: -40°C to +60°C, ≤10 ⁻⁵ Torr
ENCLOSURE MATERIAL	ALUMINIUM, ANODIZED
ENCLOSURE ε	0.82 - 0.86

● BMS Features

Our BMS design applies principles proven across multiple GWh of deployed battery systems, delivering advanced protection, telemetry, and scalability tailored to spacecraft demands.

INTEGRATED BATTERY MANAGEMENT & PROTECTION

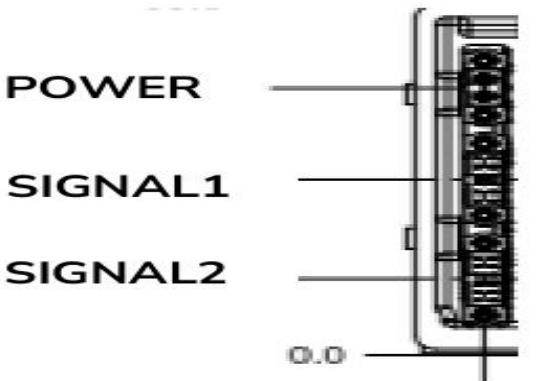
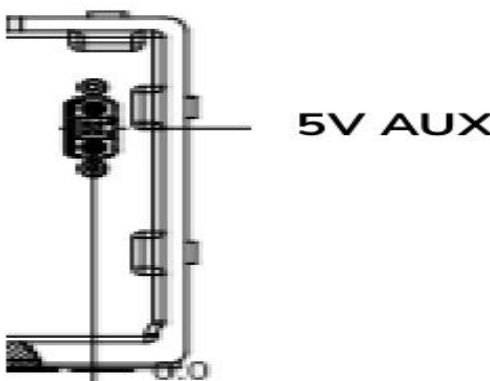
POWERED BY ASIL-D RATED DUAL CORE LOCKSTEP ARM CORTEX R PROCESSOR CORE

INTERNAL HEATERS & AUTONOMOUS THERMAL CONTROL

PRE-CHARGE CAPABLE

● Electrical Interfaces

POWER	HARWIN M80-5000000M5-02-PM3-00-000
SIGNAL1	HARWIN M80-5401205
SIGNAL2	HARWIN M80-5401205
5V AUX POWER	M80-5C10405MU



● Feature Details

PROTECTIONS & MANAGEMENT	OV/UV, OT/UT to protect cells Automated cell balancing Fast acting OC protections Configurable limits and thresholds to suit mission parameters
COMMUNICATION & TELEMETRY	Communication protocol configurable as customers' needs Periodic publication of battery voltage, current & temperature states
SOC ESTIMATION	Battery state of charge estimation to within <10% accuracy across operating ranges
PRE-CHARGE	Bus pre-charge capability with short-circuit protection
HEATERS	Up to 72W of heater power to efficiently reach charge temperatures from cold soak
STORAGE (≤ 90 DYAS AT 100% SOC)	Expect 3-4% loss (~2% permanent, ~1-2% recoverable); recharge before flight if held >3 months

Pack OCV vs SOC for 8S configuration

