



GPU ULTRA STARTER UST4130

ENERGY TO FLY

The **GPU Ultra Starter UST4130** is a device developed by **ENERCRAFT** to improve engine starts in planes and helicopters. It provides **GREEN ENERGY**, extends engine life, and operates efficiently in any weather and environmental conditions.

ENERCRAFT's GPU Ultra Starters combine the most advanced energy storage technology, designed by electronic engineer Eduardo Urquizú, an aviation specialist and pilot.

They incorporate a unique **hybrid battery** configuration that combines the advantages of LiFeMnPO4 lithium cells and ultracapacitors, achieving a peak current that allows for faster aircraft engine starts. This design offers:

- * **Clean, Surge-Free Power:** Specifically regulated to protect sensitive avionics and electrical systems.
- * **Extended Component Life:** Preserves both the turbine's internal health and the aircraft's main battery longevity.
- * **All-Weather Reliability:** Guaranteed peak current delivery even in non-ideal environmental conditions.
- * **Dual-Purpose Functionality:** Operates as both a high-capacity starter and a continuous 10-Amp GPU.

The UST4130 embodies ENERCRAFT's commitment to innovation and excellence, establishing itself as the gold standard for quality in Ground Support Equipment (GSE).



GPU ULTRA STARTER 4130

AC INPUT	Single-phase outlet 85-264 VAC, 2 Amp. Freq. 47/63Hz
DIRECT SOLAR PANEL	127 - 370 VDC
DC OUTPUT	28.5 VDC (30.6 @ full load) Peak cranking current: 3500 Amps GPU mode: 10 Amps continuous duty
CHARGING TIME	90 minutes from total discharge @ 25°C
TEMPERATURE RANGE	-40°C to 70°C (Operating) -50°C to 85°C (Storage)
DIMENSIONS	558 mm x 355 mm x 228 mm
WEIGHT	23 kg (including cable and AN2551 connector)
CABLE	1.75 mts Standard 3 PINS NATO AN2551 (50mm ²)
PROTECTION	Electronic sensors & fuses
COOLING	Integrated cooling system

FEATURES & DESIGN

1

Incorporating the Li test technology



- Innovative **ENERCRAFT** design.
- First to integrate Lithium and Ultracapacitor technology.
- Operation in any climatic and environmental condition.
- Guaranteed peak current, even without a full charge.
- Extends and preserves the aircraft's main battery life.
- Provides more engine starts per charge.
- Clean energy for more efficient engine starts.
- DUAL UNIT: Operates as both a Starter and a 10 Amp GPU.

2

Intelligent Data Interface & Analytics - AI-Driven Smart Display



- High-Resolution Real-Time Monitoring: Displays system voltage and State of Charge (SoC %).
- Engine Start Curve Visualization: On-screen graphic representation of the aircraft's cranking sequence to monitor ITT and engine health.
- AI-Powered Analytics: Integrated capability for post-operation analysis using Artificial Intelligence.



3

Protective Case



- Fully waterproof.
- NANUK® patented latching system.
- Robust and impact-resistant.
- Modern design.

4

Portable Equipment



- Lightweight.
- "All-in-one" concept.
- Full single-handed operation.
- Two-stage retractable handle.
- Reinforced metal padlock holes.
- Polyurethane wheels with stainless steel bearings.

The UST Family units have been engineered and rigorously tested by **ENERCRAFT** to deliver state-of-the-art technology in energy management and power delivery.