

28–30 volt Portable GPUs and Start Carts

This unique range of 28 volt portable GPUs has been developed to provide more spool-up watts on starter engagement for larger turbine aircraft or helicopters fitted with voltage sensitive Fadec systems, or heavier-current-drawing shaft turbines and turbo-prop aircraft, thus shortening start times and lowering start temperatures. Additionally, this latest system in the new CoolSpool range of portable GPUs has an integral charging and continuous ground power system, able to deliver up to 40 amps of continuous DC power at 28.5–29 volts, for avionics work, shop maintenance, diagnostics, training or demonstrations.

All the CoolSpool models use matched cells to raise the voltage. Using their unique 'power maximiser circuit', the GPU 26 and 52 can be voltage boosted via a 110v AC or 220v AC mains input to their maximum starting voltage, simply by selecting the power boost switch. Voltage will be raised to just below the upper Fadec limit as indicated on the solid state voltmeter. At peak starter engagement on a medium turbine, this can result in almost 9% more power, or with a 1300 amp starter engagement, more than 3200 watts of extra power compared with some other 28 volt packs.

For operators demanding more power, typically through an aircraft upgrade, the CoolSpool 26 can be uprated simply by adding the upgrade module which is inserted between the upper and lower CoolSpool 26 modules to double its turbine starting capacity to 52 amp/hrs.



CoolSpool 130



CoolSpool 130

Features

All models in the new CoolSpool range offer operators a number of significant features over all other types of GPUs on the market:

- Modular design allows rapid upgrade
- Integral 40 amp 28–30 volt DC continuous power supply system as standard
- Certified batteries – fully approved for air transportation
- Genuine 28–30 volt cell capacity, fully balanced
- The best power-to-weight ratio on the market
- Miniaturised integral power supply

‘We are extremely satisfied with the CoolSpool 130. It is rugged, portable and user-friendly. We use it on all our fleet, which includes the ATR 42 and Let 410 ... it offers true value for money. I would not hesitate to recommend it ...’

John Gwaseko, Technical Manager, Precision Air Services Ltd, Dar es Salaam, Tanzania



CoolSpool 52



CoolSpool 26 CoolSpool 52

With modular 40amp 28vDC
integral continuous power supply



Designed for operators of 20 to 80 seat turbo prop
and turbine passenger aircraft in revenue service

CoolSpool 130 28 V. DC BATTERY CART



CoolSpool 130 CoolSpool 260

28v DC Start Cart



Specification

	CoolSpool 26	CoolSpool 52
Peak amps (max)	1200 amps	1800 amps
Amp hours	26 a/hr	52 a/hr
Voltage: standing – off charge, 28.5–29 volts		
With maximiser circuit switch on and mains connected for 15 minutes before start: 29–31 volts		
Continuous DC power (mains connected) 40 amps @ 28.5 volts (without maximiser circuit)		
Power supply: 2 x 20–25 amp paralleled Powervamp advanced micro switchmode power supplies		
Input voltage: 110/220 volts, 50/60 Hz, single phase (selectable)		
Max. mains current at full load: 220 volts: 8 amps 110 volts: 16 amps		

All models are cleared for air transportation and are maintenance-free and can operate in any attitude. Supplied with 2-metre lead and rubber Nato plug, mains input charge lead, instructions and full 12-month warranty.

	Height	Length	Width	Weight
CoolSpool 26	260mm 10.2in	390mm 15.4in	290mm 11.4in	32kg 70.4lbs
CoolSpool 52	500mm 19.7in	390mm 15.4in	290mm 11.4in	62kg 136.4lbs

Specification

	CoolSpool 130	CoolSpool 260
Peak amps (max starting current)	1600 amps	2000 amps
Amp hours	130 a/hr	260 a/hr
Max. power supply output	40	80
Continuous rating (recommended)	30	60
AC input voltage @ 220v	8 amps	16 amps
AC input voltage @ 110v	16 amps	32 amps
Control panel: Digital voltmeter with 'push to view' and watchdog timer		
Mains input plug: standard IEC socket – up to 80 amps via heavy-duty combination on/off switch and integrated circuit breaker – above 80 amps special single- or three-phase supply		
ON/OFF emergency isolator: Heavy-duty double pole push/pull switch with red mushroom knob		
28v DC accessory socket, fused @ 10 amps, suitable for worklight, DC		
Power cells: 5 x 130 amp/hr series connected starved electrolyte gas recombining cells. Cells cleared for air transportation		
Correctly protected in accordance with ICAO regulations		

Height	Length	Width	Weight
720mm/28in	1060mm/42in	710mm/28in	157kg/345.4lbs (CoolSpool 130) 270kg/594lbs (CoolSpool 260)

Tyres: 4 x 260mm x 85mm pneumatic

Integral power supply charging system

110/220v AC selectable single-phase switch mode powersupply/charger. Regulated to 31.2 volts DC. Units comprise 2 x 20 amp TEFC independent switch-mode modules paralleled for reliability. Short circuit protected, current overload protection

NCAGE: KD628

Unit supplied as standard with

- Spare wheel
- Foam fire extinguisher
- 4-metre double insulated DC output cable
- Nato plug
- Frame and casing manufactured from steel sheet and hollow section, finished in powder-coated yellow

Options

- Up-rated 'continuous' DC power
CoolSpool 130 70, 140, 220 amps @ 28v DC
CoolSpool 260 120, 200, 280, 360 amps @ 28v DC
- Trailer board with 12v or 24v lighting
- 3-phase input with 400-450 amp DC continuous power

Powervamp™

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