

UDC SERIES FlatPak™ 28VDC GROUND POWER UNIT



WALL MOUNT CONFIGURATION
(Shown with optional digital front panel)

STANDARD FEATURES:

- IP55
- Certified to UL 1012
- Indoor/Outdoor (Hangar/Ramp) Use
- Automatic Input Line Monitoring
- 8000 Event Log / Diagnostics
- TCP/IP/Ethernet Interface (Modbus)
- Internal Communication Ports - USB, RJ45 (Ethernet), RS485 (Modbus), & RS232
- External Communication Ports - RJ45 (Ethernet) & USB
- 10% Power Regulation
- Emergency Power "OFF" Switch
- 18-Inch Hazard Area Clearance
- Voltage and Current Monitoring
- Elapsed Time Meter Access
- Front Panel Voltage Adjust ($\pm 10\%$)
- Front Panel Summary Fault Indicators
- Input High Voltage Transient Protection
- Output Current Limit Adjust from 150 to full rated current

APPLICATION:

Since its beginning in 1960, Unitron has specialized in the design and development of reliable solid-state power systems. Through an innovative design, advanced self-diagnostic systems (BITE) and modular construction, Unitron products assure maximum power availability and minimal repair time.

The FlatPak™ Series includes 115/200VAC, 28VDC and 400Hz converters designed for installation where space is limited. The units mount "flat" against a wall, and offer the smallest size to power-rating ratio in the industry.

Unitron's **28VDC FlatPak** provides 425 amps continuous output power, with starting currents from 2000 amps and is capable of running off of 50 or 60Hz sources. The FlatPak power system meets all National Electric Code (NEC) requirements for operation within a hangar environment.

In addition to fixed equipment, Unitron offers 400Hz, 28VDC and combination AC/DC units in mobile and towable configurations.

OPTIONS:

- Alternate 3Ø Input Voltage Range Available - 575-600VAC
- Cable Saddle Accessory
- DC Output Power Cable with Plug (Available in 20, 30, 40, 60 ft. lengths)
- Output Universal Aircraft Safety Interlock Circuit Disconnect (Single Output Only)
- Output Safety Disconnect
- Output 28VDC Aircraft Safety Interlock Circuit Disconnect
- Single or Dual Output Safety Disconnect
- Dual 28VDC output (Contact Factory)
- Alternate Mounting Configurations Available
- Lockable Front Door
- Custom Paint & Decals (Standard Color - White)
- CSA Certified
- UltraLite™ Upgrade Package

MECHANICAL SPECIFICATIONS:

Size:	See Figure 1
Weight:	240lbs. (109kg.)
Enclosure:	NEMA 3RX Corrosion Resistant
Cooling:	Forced Convection

SPECIFICATIONS / STANDARDS:

2006/95/EC*	Low Voltage Directive
ISO 1540	Characteristics of aircraft electrical system
ISO 6858	Aircraft ground support electrical supplies
MIL-STD-704F	Aircraft electric power characteristics
MIL-STD-1472	Human Engineering Design Criteria

This product was manufactured in a plant whose quality management system is registered to ISO 9001:2008.



GENERAL SPECIFICATIONS

INPUT:

Voltage	208-240V or 380-480V, ± 10%, 3Ø, 3 or 4 wire plus ground (Specify manual tap position at time of order)
Frequency	50 - 60 Hz ± 10%
Phase Rotation	Any
Protection	Over/undervoltage, loss of phase, overcurrent, short circuit. Voltage transient protection IAW IEEE C62.41.1, Location Cat. B/C
Inrush Current	No greater than 100% of full load current

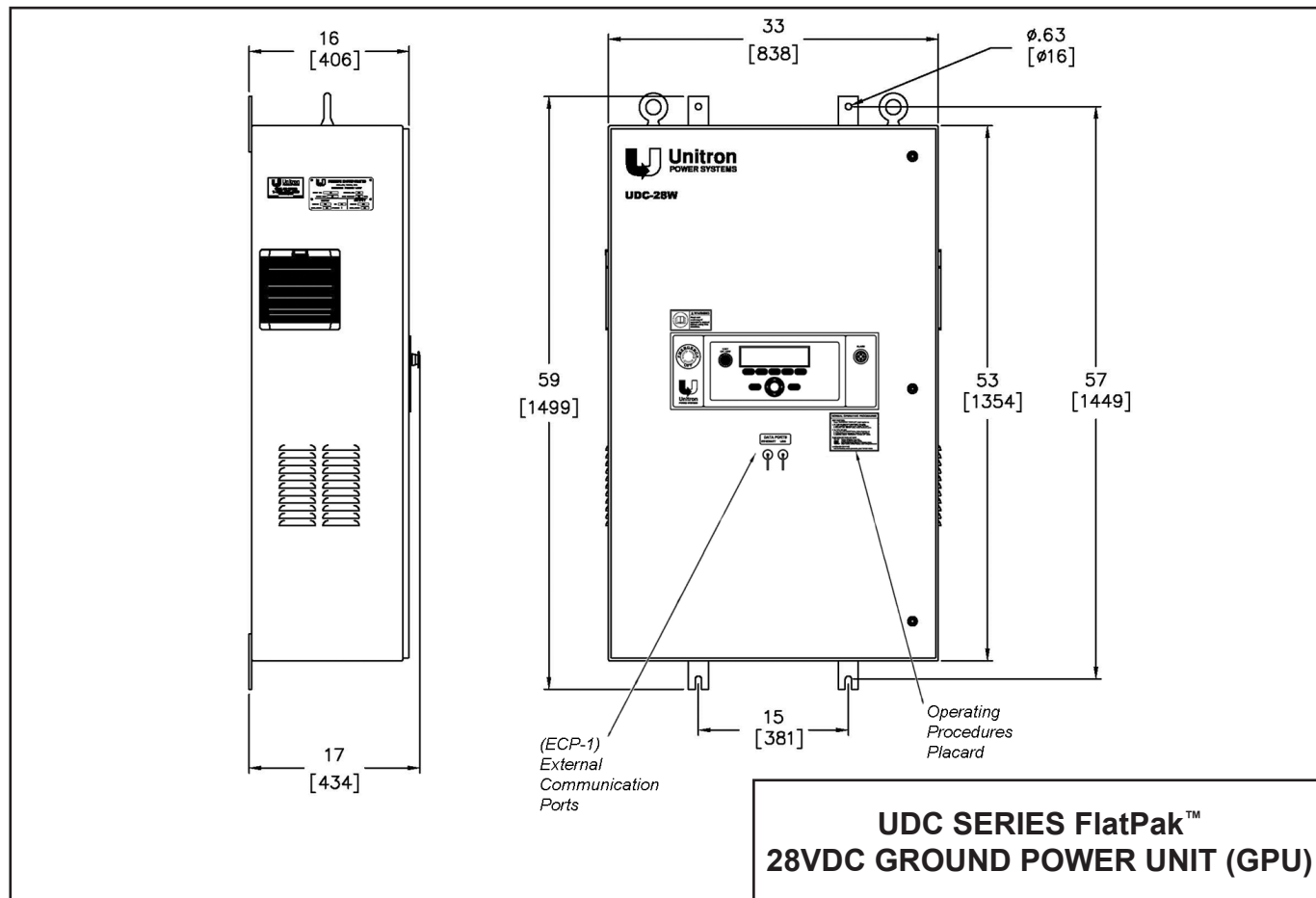
ENVIRONMENTAL:

Acoustical Noise	65 dBA maximum at 5 feet (1.5m)
Temperature Range	-40°C to +55°C
EMI/RFI	Compatible with aircraft systems
Relative Humidity	10 - 95%, Non-Condensing
Ingress of Water	Type 3RX, IP55

OUTPUT:

Full Rated Load	425 amps continuous
Engine Start Capacity (10% duty cycle)	Adjustable up to 1600 amps for 1 minute or 2000 amps for 30 seconds
Overload (10% duty cycle)	600 amps for 1 hour 1000 amps for 10 minutes
Voltage	28 VDC, 2 wire, grounded negative
Voltage Regulation	
• 100% continuous rated load and ±10% input voltage	± 0.5%
• No load to rated load with nominal input voltage	IAW ISO 6858
• Overload with nominal input voltage	See start mode curves
Voltage Adjust	28 VDC ± 10%
Current Limit Adjust	150A to full rated current
Protection	Overload, short circuit, over voltage and safety disconnect
Power Regulation	10%

FIGURE 1



**UDC SERIES FlatPak™
28VDC GROUND POWER UNIT (GPU)**