

ITW GSE

# 1400 28 VDC GPU

Small and powerful solid-state GPU  
600 A (400 A optional)



## LOOKING FOR A SMALL POWERFUL UNIT?

Easy to manoeuvre and not space demanding neither in its mobile nor fixed version. Then the ITW GSE 1400 solid-state GPU is the answer. The solid-state technology means that wear and tear is limited to a minimum since there are no rotating parts. The result is a very reliable and dependable unit that is built to last for a long time. In case of service or repair, the side panels can be completely removed within minutes, thus leaving access to all vital parts.

## INTUITIVE AND EASY-TO-USE INTERFACE

The icon based operator interface is common for all ITW GSE products. It is easy and intuitive and guarantees you correct operation.

The daily operator only has to press the combined start/stop button - nothing more. But he can monitor various parameters such as voltage and current at the display screen. For set-up and maintenance purposes, there is a deeper level dedicated for the technician.

## DOWNLOADS AND UPDATES

The software-based control system means that the ITW GSE 1400 GPU can easily be updated in the future simply by transferring new software from a USB stick/flash drive. Power log and Black Box files for analysis can be downloaded the same way.



It's all about connections



# SPECIFICATIONS

## ITW GSE 1400 28 VDC Ground Power Unit

### Input

	Voltage range	Line Current
<b>600 A</b>	3 x 400 V -10/+15%	3 x 28 A -15/+10%
	3 x 480 V ±10%	3 x 23 A ±10%
<b>400 A</b>	3 x 400 V -10/+15%	3 x 19 A -15/+10%
	3 x 480 V ±10%	3 x 16 A ±10%

- Frequency: 50/60 Hz ± 5%
- Rectification: 6 pulse
- Power factor: 0.91
- Inrush current: None, soft start

### Output

- Current: 600 A continuously (can be limited to 400 A upon request)
- Engine Start Capability: 28 V @ 2000A
- Voltage: 28 VDC (or as adjusted)
- Ripple: less than 2% at full load
- Voltage regulation: <0.5% from no load to full load
- Voltage compensation: 3 V @ 600 A Manual or voltage feed-back via interlock

### Weight

- Fixed unit approx. 120 kg (265 lbs.)
- Mobile unit approx. 240 kg (529 lbs.)

### Efficiency

- Overall efficiency: 0.87
- Stand by losses: 130W
- No load losses: 330W

### Norms and Standards

- ISO 6858:2017(E) Aircraft ground support electrical supplies - General requirements
- BS 2G 219 General requirements for ground support equipment
- MIL-704F Aircraft electric power characteristics
- EN 1915 - 1 & 2 (Machinery - General safety requirements)
- EN 12312-20 (Machinery - Specific safety requirements)
- EN 60204-1 (Machinery - Electrical safety)
- EN 62040-1-1 LVD - Safety standards
- EN 61558-2-6 LVD - Safety standards
- EN 61000-6-2 EMC - Immunity standard
- EN 61000-6-4 EMC - Emission standards

### Environmental

- Operating temperature: -40°C to +56°C (-40°F to +135°F)
- Relative humidity 10-100% non condensing
- Noise level <65 dB(A)@1m

### Overload ratings

- |              |                       |
|--------------|-----------------------|
| <b>600 A</b> | <b>400 A</b>          |
| • 1200 A     | 800 A for 30 seconds  |
| • 1800 A     | 1200 A for 10 seconds |
| • 2100 A     | 1400 A for 5 seconds  |
| • 2400 A     | 1600 A for 2 seconds  |

### Miscellaneous

- MTBF (proven): 100,000 hours
- Ventilation system: min. 25,000 hours
- MTTR: max. 20 minutes
- Communication: TCP/IP, USB

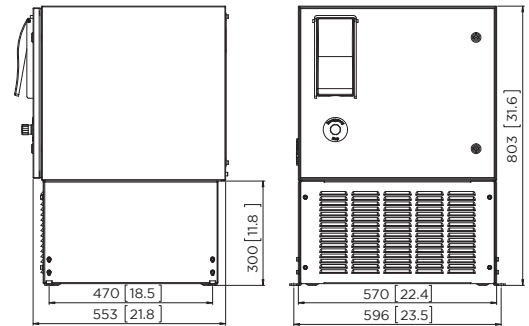
### Protection

- Protection class: IP55 (electronic section)
- Over/under voltage at in/output
- Over temperature
- Internal voltage error
- Short circuit at output
- Trip in case that:
  - U<20 VDC for more than 4 seconds
  - U>32 VDC for more than 4 seconds
  - U>40 VDC for more than 150 ms

### Options

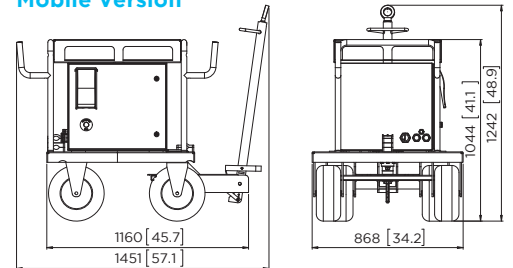
- Cables upon request

### Fixed Version



Dimensions are shown in mm and [inches]

### Mobile Version



Dimensions are shown in mm and [inches]



The ITW GSE 1400 is light and small; the fixed version is only 80 cm high!

Should you want cables with your ITW GSE 1400 unit, we can of course supply those as well.