

ITW GSE

7400 JetEx 28 VDC eGPU

Battery-powered Ground Power Unit
Ideal for hangars and remote use



Zero Emission



Large battery capacity
allowing numerous engine starts

It's all about connections



EXTREME FLEXIBILITY

Single
or 3-phase
input voltage

Ideal for
hangar use.
No emissions
and low noise
level

Mobile
GPU and
line-powered
converter
in one unit

On-Board
Charging
System

BC

Can supply
power and
recharge at the
same time

Recharge
from any
50/60Hz
standard
socket



INDEPENDENT AND POWERFUL

The 28 VDC JetEx eGPU is independent due to the onboard battery. Powerful enough to perform at least 100 engine starts on a full charge, the 7400 JetEx is the ultimate in battery driven units. It can even be charged while delivering power to an aircraft.

This innovative eGPU can be used for engine starts, ramp operations and test of avionics.

BUILT TO LAST

Modular design is the basis of ITW GSE design and the 7400 eGPU is no exception. Components are well organized thus ensuring fast service and repair. The eGPU has no rotating parts, subject to wear and tear and is therefore practically maintenance free. The overall result is a very reliable and dependable GPU that is built to last. The eGPU is furnished with a weatherproof steel cabinet, mounted on a pneumatic tire trailer that can easily be towed.

EQUALLY IDEAL FOR HANGAR AND REMOTE USE

Quiet and emission free operation is what you get with the 28 VDC JetEx eGPU. The unit is autonomous and can be in use for long periods of time before it needs recharging. These qualities make this eGPU ideal for hangars and remote use.

ADJUSTABLE VOLTAGE

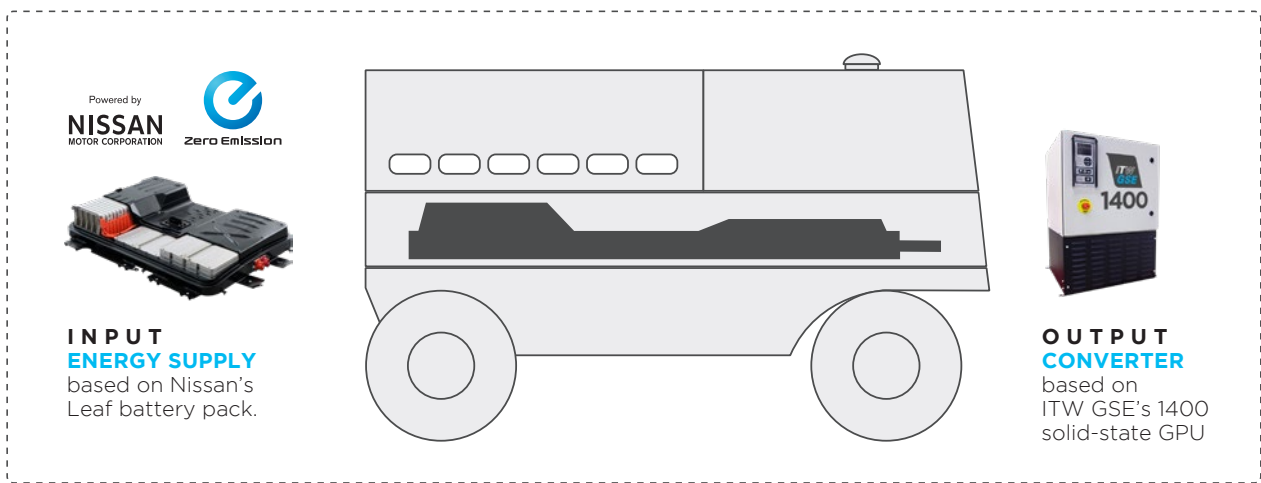
To ensure the best voltage quality at the aircraft plug, the operator can adjust the voltage compensation via the set-up menu in the user interface. The compensation can be done automatically via feed-back from the F-signal or it can be manually set. Also, the 7400 JetEx offers Line Drop Compensation, Current Limit (300 to 2000 Amps). Those features can easily be configured and provide the operator unprecedented flexibility for ramp and hangar operation.

A WELL-PROVEN SOLUTION

THE ITW GSE 7400 JetEx 28 VDC eGPU COMBINES TWO KNOWN TECHNOLOGIES INTO ONE INNOVATIVE GPU

The JetEx eGPU is powered by a 4 fourth-generation Nissan Leaf battery pack with a capacity of 40 kWh. The same type of battery as in all Nissan-branded electric vehicles. Since 2010, over 400,000 of these vehicles have been sold, with close to 90,000 in 2018 alone.

At the output of the eGPU is ITW GSE's well-proven 28 VDC solid-state converter. This combination of two tried and true technologies has created the rock-solid eGPU.



SAME EASY-TO-USE PLATFORM AS ALL OTHER ITW GSE PRODUCTS

Like all ITW GSE products, the 7400 JetEx eGPU has a common icon-based user interface that is as easy to use as a smartphone or a tablet. This means airport employees already familiar with one ITW GSE product can easily operate another, reducing human error during operation and making product training easier.



SPECIFICATIONS

ITW GSE 7400 JetEx mobile 28 VDC eGPU



Zero Emission

Input

- Charger Power: 15 kW @ 3-phase
5 kW @ 1-phase
- Charger input voltage range:
3 phase @ 260-530 V / 45-65 Hz
1 phase @ 170-300 V / 45-65 Hz
- Maximum pre-fuse: 50 A

Output

- Current: 600 A continuously
- Engine Start Capability: 2400 A
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 interlocks

Weight (Without cables)

- Mobile unit approx.
740 kg (1630 lbs.)

Environmental

- Optimal operating temperature:
-40°C to 50°C (-40°F to 122°F)
- Optimal performance:
-10°C to 45°C (14°F to 113°F) -
Heating or cooling may be required
to maintain optimal performance.
Relative humidity 10-100%
- Noise level: <65 dB(A)@1m
- typically 60 dB(A)

Overload ratings

- 600 A continuous use
- 1200 A for 30 seconds
- 1800 A for 10 seconds
- 2100 A for 5 seconds
- 2400 A for 2 seconds

The ITW GSE 7400 JetEx eGPU is well suited to cover the power need for aircraft like the following:

- Cessna Citation
- Beechcraft
- Gulfstream G250
- Dassault FalconJet
- ATR 42 & 72
- Bombardier Q Series / Dash 8

Standards

- ISO 6858:2017(E) Aircraft ground support electrical supplies - General requirements
- MIL-704F Aircraft electric power characteristics (Machinery - Specific safety requirements)
- EN 12312-20 (Machinery - Electrical safety)
- 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
- AHM 907 Guidelines for electric powered GSE (e-GSE)

Miscellaneous

- 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

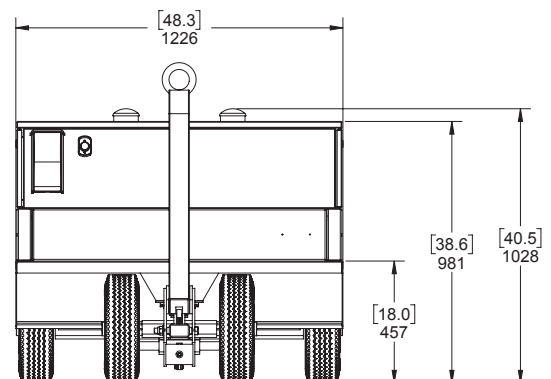
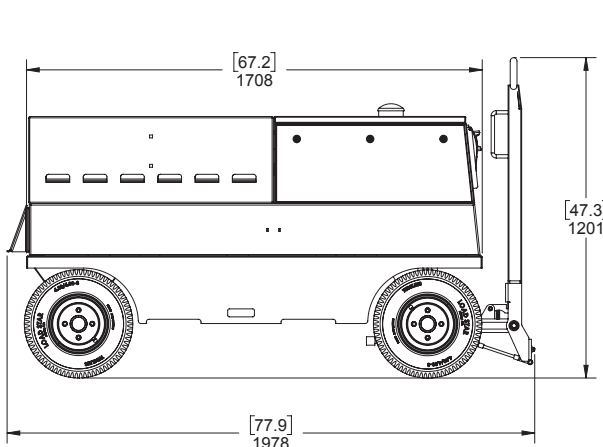
Output cables upon request

Standard Features/Equipment

- Beacon* for operation/charging
- Beacon* for warning/ low battery incl. siren
*Color: specify yellow,blue,red or green
- Simultaneous charging while supplying 28 VDC power

Standard Options Available

- Input cable and plug according to clients specifications
- Towbar with DIN40 towing eye
- Monitoring over GSM/GPS



Dimensions are shown in mm and [inches]

