

# Aero-Derivative Gas Turbines for Data Centers

In today's fast-paced digital landscape, data centers are integral to countless industries, powering everything from cloud computing to e-commerce platforms. With the critical nature of data center operations, ensuring a reliable and resilient power supply is paramount. Aero-derivative gas turbine units emerge as a dynamic solution, uniquely tailored to meet the demanding power requirements of modern data centers. Characterized by their efficiency, flexibility, and rapid response capabilities, these turbines provide an indispensable foundation for maintaining uninterrupted operations, offering both primary and backup power support. From mitigating the risks of grid outages to adapting swiftly to fluctuating loads, aero-derivative units stand as a dependable cornerstone in fortifying data center infrastructure against disruptions, enabling seamless and uninterrupted digital services.



## OVERVIEW:

- The FT8® MOBILEPAC® and FT4000® SWIFTPAC® Gas Turbine Packages are high-performance aero-derivative gas turbines specifically designed to meet the demanding power requirements of data centers.
- Combining efficiency, reliability, power density, and flexibility, the FT8® MOBILEPAC® and FT4000® SWIFTPAC® Gas Turbine Packages offer an ideal solution for primary or backup power generation in data center applications.

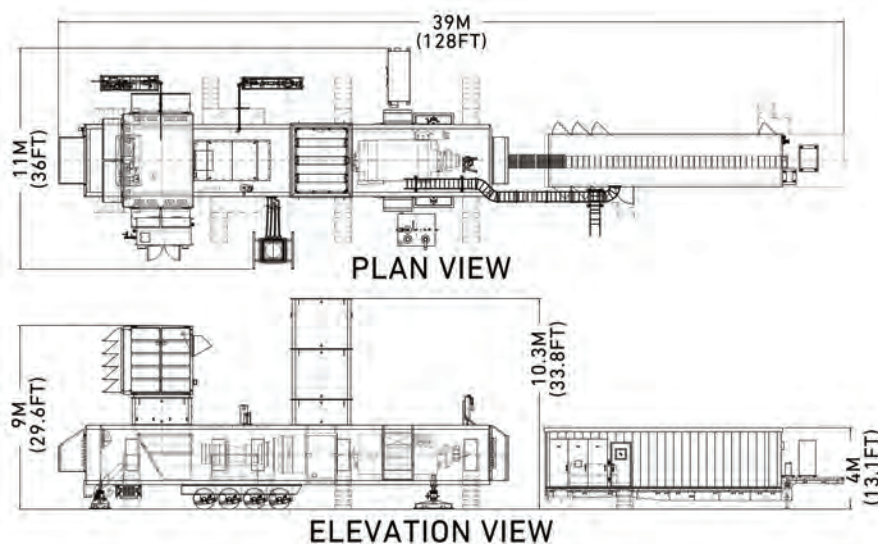
## TECHNICAL SPECIFICATIONS:

- Power Output: FT8® MOBILEPAC® = 31 MW (megawatts) | FT4000® SWIFTPAC® = 70 TO 140 MW (megawatts)
- Efficiency: FT8® MOBILEPAC® = Up to 36.7% at full load | FT4000® SWIFTPAC® = Up to 41.6% at full load
- Fuel Type: Natural gas or dual fuel (other fuels available upon request)
- Emissions: Can be compliant with stringent environmental regulations
- Noise Level: <85 dB at 1 meter, suitable for urban environments
- Ambient Temperature Range: -10°C (14F) to 50°C (122F)
- Turbine Control System: Advanced digital control system for precise operation and optimization
- Maintenance Interval: Gas fuel hot section inspection hours 25,000 | Major shop inspection hours 50,000

## FEATURES AND BENEFITS:

- **High Efficiency:** The FT8® MOBILEPAC® and FT4000® SWIFTPAC® gas turbines utilize advanced turbine technology to achieve high efficiency, reducing operational costs and environmental impact.
- **Fast Start-up:** With rapid start-up times of less than 5 minutes, the FT8® MOBILEPAC® and FT4000® SWIFTPAC® gas turbines ensure quick response to changing power demands, enhancing data center resilience.
- **Reliability:** Engineered for long service life and minimal maintenance requirements, the FT8® MOBILEPAC® and FT4000® SWIFTPAC® units offer reliable operation to ensure uninterrupted power supply to critical data center infrastructure.
- **Bring Your Own Power (BYOP):** The FT8® MOBILEPAC® and FT4000® SWIFTPAC® units can operate in parallel with grid power or as a standalone power sources, in island mode, providing flexibility to meet varying data center load profiles.
- **Environmental Compliance:** With low emissions and compliance with stringent environmental standards, through the use of SCRs, the FT8® MOBILEPAC® and FT4000® SWIFTPAC® units minimize environmental impact while meeting regulatory requirements.
- **Compact Design:** The compact footprint of the FT8® MOBILEPAC® and FT4000® SWIFTPAC® units allow for easy integration into data center facilities with limited space, optimizing site utilization.

## FT8® MOBILEPAC® UNIT DIMENSIONS:



## APPLICATIONS:

- Primary power generation for data centers
- Backup power generation for data center facilities requiring high reliability and resilience
- Combined heat and power (CHP) applications for efficient utilization of waste heat in data center cooling systems

## OPTIONAL ACCESSORIES:

- Sound attenuating enclosure for noise reduction in noise-sensitive environments
- Exhaust gas heat recovery systems for utilization of waste heat in heating or cooling applications
- Remote monitoring and control systems for real-time performance tracking and diagnostics
- Grid integration, high voltage transformers, and interconnect capabilities through our Energy Services EPC company

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