

# FT4000<sup>®</sup> SWIFTPAC<sup>®</sup> Gas Turbine Package

## AERO-DERIVATIVE ADVANTAGE:

- ✓ Flexible solutions customized to meet demanding customer requirements
- ✓ Reliable peaking and base load power within a compact footprint
- ✓ Superior fault-ride-through and grid stability characteristics
- ✓ Fast-track deployment/installation
- ✓ Multiple gas and liquid fuel options
- ✓ Fast-start; fast ramp
- ✓ Low-cost O&M

## POWER

**70 TO 140  
MW**

## EFFICIENCY

**41%**

## PERFORM:

- <5-minute fast start; fast ramp
- Wet compression for improved performance
- High part load efficiency
- Highest power output of any aero-derivative package
- Synchronous condensing
- Low turn down ratio



## PACKAGE, INSTALL, COMMISSION:

- Single- or dual-engine configuration
- Modular design
- Maximum factory assembly
- Optimized shipping sizes
- Prefabricated field piping
- Interconnecting quick-disconnect cables
- Reduced transportation time and cost
- Minimal installation time
- Efficient commissioning

## OPERATE AND MAINTAIN:

- Proven industrial components
- Integrated ancillary systems
- Limited on-site inventory
- Ease of operation and maintenance
- Quick engine changeout

<b>SIMPLE-CYCLE (50Hz)</b>	<b>FT4000 SWIFTPAC70</b>	<b>FT4000 SWIFTPAC140</b>
Gross output (kW)	70,154	140,500
Gross heat rate (Btu/kWh, LHV)	8,443	8,431
Gross heat rate (kj/kWh, LHV)	8,908	8,896
Gross efficiency (%)	40.4	40.5
Exhaust flow (lbs/sec)	404	808
Exhaust flow (kg/sec)	183	367
Exhaust temp (°F / °C)	808/431	808/431
Ramp rate (MW/minute)	30 to 50	60 to 120
Minimum start-up time (cold iron; minutes)	<5	<5
GT minimum turn down load with emissions (%)	50	50

<b>COMBINED-CYCLE (1x1)</b>	<b>FT4000 SWIFTPAC70</b>	<b>FT4000 SWIFTPAC140</b>
Net output (kW)	87,709	176,896
Net heat rate (Btu/kWh, LHV)	6,734	6,682
Net heat rate (kj/kWh, LHV)	7,106	7,051
Net efficiency (%)	50.7	51.1

NOTE: ISO conditions; natural gas fuel; zero installation losses



FT4K-FS-0321

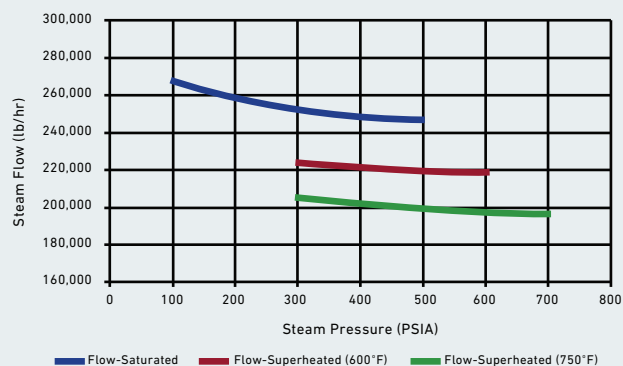
© 2021 Mitsubishi Power Aero LLC

<b>SIMPLE-CYCLE (60Hz)</b>	<b>FT4000 SWIFTPAC70</b>	<b>FT4000 SWIFTPAC140</b>
Gross output (kW)	71,928	144,243
Gross heat rate (Btu/kWh, LHV)	8,232	8,209
Gross heat rate (kj/kWh, LHV)	8,686	8,661
Gross efficiency (%)	41.5	41.6
Exhaust flow (lbs/sec)	404	808
Exhaust flow (kg/sec)	183	367
Exhaust temp (°F / °C)	791/422	791/422
Ramp rate (MW/minute)	30 to 50	60 to 120
Minimum start-up time (cold iron; minutes)	<5	<5
GT minimum turn down load with emissions (%)	50	50

## COGENERATION

### FT4000® Steam Production Estimates

(duct-fired to 1000°F)



<b>ADDITIONAL SPECS</b>	<b>FT4000 SWIFTPAC70</b>	<b>FT4000 SWIFTPAC140</b>
Gas fuel hot section hours	25,000	25,000
Overhaul hours	50,000	50,000
Sound level, near field (dBA average)	85	85
Footprint (approx. LxWxH; ft)	95 x 74 x 44	170 x 91 x 44
Footprint (approx. LxWxH; m)	29 x 23 x 10	52 x 28 x 10

FT4000® and SWIFTPAC® are trademarks of Mitsubishi Power Aero LLC