# DIESEL GENERATOR SETS FOR PRIME AND STANDBY POWER APPLICATIONS.





## COMBINING OUR RESOURCES TO SUPPLY YOU WITH DEPENDABLE ENERGY: ANYTIME. ANYWHERE.

MTU Onsite Energy is one of the core brands of Rolls-Royce Power Systems AG, which is a world-leading provider of high- and medium-speed diesel and gas engines, complete drive systems, distributed energy systems and fuel injection systems for the most demanding requirements.

MTU Onsite Energy offers complete power system solutions: from mission critical to standby power to continuous power, heating and cooling. We also provide a full line of service products to help you get the most from your equipment.

Customers around the world trust us to provide reliable power for a wide range of applications, such as healthcare, data centers, airports, farms and independent power







stations. Our product portfolio covers diesel generator sets up to 3,250 kW, gas-powered cogeneration systems up to 2,500 kW and gas turbines up to 50,000 kW. This product offering is complemented by medium-speed engines for land-based energy solutions up to 9,300 kWe as part of the Rolls-Royce Power Systems AG product portfolio.

More than 60 years of power generation systems expertise and over a century of diesel engine engineering experience have enabled us to provide complete solutions all over the globe. And we continue to develop sustainable alternatives, with systems that produce greener energy from climateneutral, regenerative fuels, such as combined heat and power (CHP) plants fueled by biogas, landfill gas or sewage gas.



# ALL KINDS OF SOLUTIONS FOR ALL KINDS OF JOBS.

MTU Onsite Energy provides reliable power generation solutions wherever–and whenever–reliability is needed.

Whether it is backup power for refrigeration and HVAC or uninterruptible power for applications like data centers and hospitals, MTU Onsite Energy is trusted all over the world. Engineered for exceptional load acceptance and transient response, MTU Onsite Energy generator sets are ideal for use in sensitive environments, as well as under extreme conditions.

### MTU Onsite Energy customers:

- // Airports
- // Communications companies
- // Construction and mining job sites
- // Data centers
- ${\it H}$  Government buildings, municipalities, utilities and
- educational institutions
- // Healthcare facilities
- ${\it H}$  Manufacturing, commercial and industrial facilities
- // Retail buildings, hotels and casinos
- // Water treatment plants





Hospital Charité, Berlin, Germany // 1.700 kVA

// Emergency Standby Power



Data Center, Loft Power, USA // 20MW // Emergency Standby Power



Power Station, Caribbean // 1,747MW // Continuous Power



Türk Telecom, Istanbul, Turkey // 5,190 kVA // Emergency Standby Power

### Mining, Teck Coal, Canada // 2,575 kW // Mobile Prime Power

Airport, Tulsa, USA // 4MW // Emergency Standby Power

# TAKING RELIABILITY TO NEW LEVELS.

You can count on MTU Onsite Energy to meet your high standards. We continue to push the boundaries, bringing our vast engineering expertise from large-scale projects to the new range of MTU Onsite Energy diesel generator sets.

Our diesel generator sets offer several advantages:

### Reliablility

- // Designed, assembled and tested completely in-house
- // Advanced monitoring and communications
- // Trusted by customers around the world

#### Economical

- // Outstanding fuel economy
- // Optimized maintenance intervals
- // Cutting-edge emissions control
- // Optimum power-to-weight ratio

#### Flexibility

- *II* Proven for a wide range of applications
- *II* Compliant with industry codes and standards
- // Wide range of options and accessories (generator set controls, enclosures, diesel fuel tanks, remote
- annunciators, silencers and circuit breakers)
- // Sales and service locations worldwide

#### **Tested Quality**

- // More than 100 years of engine engineering expertise
- // Tested under extreme conditions
- // Tested and optimized to run smoothly with a minimal amount of vibration, for use in sensitive environments

WE'VE GOT YOU COVERED.

Our full lineup of generator sets enables us to cover a variety of power nodes and applications. Offered across a wide power range for standby and prime power applications, they cover common industry rating points.









Optional equipment and finishing shown. Standard may vary.



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# 1550-3400 KVA / 1225-3250 KW DIESEL GENERATOR SETS.

#### **Standard Features & Benefits**

- // Designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004
- // Verified product design, quality and performance integrity
- // Industry leading load factor
- 85% load factor for standby applications and 75% load factor for prime power applications
- // Cutting-edge emissions control
- // Superior on-site specific de-rating behavior due to state-of-theart engine controller with engine site condition management system
- // Outstanding fuel economy Best in class fuel economy due to highly efficient common rail fuel injection system
- // Advanced monitoring & communicationsWide range of applications available from island operation to mains parallel operation
- Compliant with industry codes & standards
  The generator set fulfills performance per ISO 8528 and offers
  100% load acceptance according to NFPA 110
  Permanent magnet excitation system for generator as
  standard for improved transient response
- // Best-in-class reliability and availability
- // Optimized maintenance intervals

### Options

- // Emissions: EPA Tier 2; TA-Luft optimized; NEA; fuel consumption optimized
- // Generator: multiple generator models and voltages available; oversized generators; anti-condensation heaters; winding temperature sensors; bearing temperature sensors; differential protection current transformers; digital voltage regulator
- // Cooling System: integral set-mounted mechanical radiators for up to 40°C and 50°C ambient temperatures; electrically driven remote radiators for up to 40°C and 50°C ambient temperatures; coolant preheating
- // Control Panel: wide variety of control panel configurations; full range of applications from island operation to mains parallel operation of multiple gensets; various expansion modules (analog and digital in- and outputs) for controller
- // Fuel System: fuel pre-filters with water separators
- // Exhaust system: silencers from varying sound attenuation levels

### DIESEL GENERATOR SET 50 Hz

Standby Power kVA	Prime Power kVA
1700-2000	1550-1850
2300-2400	2100-2250
2700-3400	2600-3100

### DIESEL GENERATOR SET 60 Hz

Standby Power kW	Prime Power kW
1250-1750	1125-1600
2000-2500	1800-2045
2500-3250	2250-2800



Optional equipment and finishing shown. Standard may vary.



Engine Type MTU 12V 4000 MTU 16V 4000 MTU 20V 4000

Engine Type MTU 12V 4000 MTU 16V 4000 MTU 20V 4000

# 770-1290 KVA / 615-800 KW DIESEL GENERATOR SETS.

#### **Standard Features & Benefits**

- // Designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004
- ${\it H}$  Verified product design, quality and performance integrity
- // Industry leading load factor
- 85% load factor for standby applications and 75% load factor for prime power applications
- // Cutting-edge emissions control
- // Superior on-site specific de-rating behavior due to state-of-theart engine controller with engine site condition management system
- // Robust fuel injection technology for maximum reliability
- // Advanced monitoring & communicationsWide range of applications available from island operation to mains parallel operation
- Compliant with industry codes & standards
  The generator set fulfills performance per ISO 8528 and offers
  100% load acceptance according to NFPA 110
  Permanent magnet excitation system for generator as
  standard for improved transient response
- // Best-in-class reliability and availability
- // Optimized maintenance intervals

### Options

- // Emissions: EPA Tier 2; TA-Luft optimized; fuel consumption optimized
- // Generator: multiple generator models and voltages available; anti-condensation heaters; winding temperature sensors; bearing temperature sensors; differential protection current transformers; digital voltage regulator
- // Cooling System: integral set-mounted mechanical radiators for up to 50°C ambient temperatures
- // Control Panel: wide variety of control panel configuration; full range of applications from island operation to mains parallel operation of multiple gensets; various expansion modules (analog and digital in- and outputs) for controller
- // Fuel System: fuel pre-filters with water separators
- // Exhaust system: silencers from varying sound attenuation levels

### DIESEL GENERATOR SET 50 Hz

Standby Power kVA	Prime Power kVA
850-890	770-820
1000-1140	900-1030
1250-1290	1120-1160

### DIESEL GENERATOR SET 60 Hz

Standby Power kW	Prime Power kW
650-800	615-725
900-1000	800-900
1180	_





Optional equipment and finishing shown. Standard may vary.

Engine Type MTU 12V 2000 MTU 16V 2000 MTU 18V 2000

Engine Type MTU 12V 2000 MTU 16V 2000 MTU 18V 2000

# 275-715 KVA / 230-600 KW DIESEL GENERATOR SETS.

#### **Standard Features & Benefits**

- // Designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004
- ${\it H}$  Verified product design, quality and performance integrity
- // Industry leading load factor
- 85% load factor for standby applications and 75% load factor for prime power applications
- ${\it I\!I}$  Cutting-edge emissions control
- // Superior on-site specific de-rating behavior due to state-of-theart engine controller with engine site condition management system

Best in class fuel economy due to highly efficient common rail fuel injection system

- // Advanced monitoring & communicationsWide range of applications available from island operation to mains parallel operation
- // Compliant with industry codes & standards The generator set fulfills performance per ISO 8528 and offers 100% load acceptance according to NFPA 110
- // Best-in-class reliability and availability
- // Optimized maintenance intervals

### Options

- // Emissions: EPA Tier 2 or 3; TA-Luft optimized; NEA; fuel consumption optimized
- // Generator: multiple generator models and voltages available; anti-condensation heaters; bearing temperature sensors; differential protection current transformers
- // Cooling System: coolant preheating
- // Control Panel: wide variety of control panel configurations; full range of applications from island operation to mains parallel operation of multiple gensets; various expansion modules (analog and digital in- and outputs) for controller
- // Fuel System: fuel pre-filters with water separators; fuel return cooler
- // Exhaust system: silencers from varying sound attenuation levels

### DIESEL GENERATOR SET 50 Hz

Standby Power kVA	Prime Power kVA
300-330	275-300
400-440	365-400
500-550	450-500
650-715	590-650

### DIESEL GENERATOR SET 60 Hz

Standby Power kW	Prime Power kW
230-300	210-275
350-400	325-365
450-500	400-450
550-600	500-550



Optional equipment and finishing shown. Standard may vary.



Engine Type MTU 6R 1600 MTU 8V 1600 MTU 10V 2000 MTU 12V 2000

Engine Type MTU 6R 1600 MTU 8V 1600 MTU 10V 2000 MTU 12V 2000

# RELIABILITY FOR EVERY NEED.

MTU Onsite Energy offers a complete range of products, no matter how small or large the need. Our 30-200 kW generator sets are built with the same engineering and systems expertise as our larger gensets. Reliability is still top priority. Through simple, high-quality design, we make exceptional engineering available at a low cost. A full range of options is at your command, with complete factory support. In addition, these generator sets feature low emissions, and all are compliant with NFPA 110 and ISO:8528-5 for one-step load acceptance and fast response to transient loads.



### Typical applications

#### // Airports

- // Communications companies
- // Construction and mining job sites
- // Data centers
- *II* Government buildings, municipalities, utilities and educational institutions
- // Healthcare facilities
- // Manufacturing, commercial and industrial facilities
- // Retail buildings, hotels and casinos
- // Water treatment plants





# READY FOR ANYTHING, ANYWHERE. POWER MODULES.

Mobile and Stationary Power Modules provide unique flexibility wherever power is needed. From a construction site, a single factory or an entire community, power modules are an ideal solution. Perfectly suited for rental fleets, continuous, prime, and emergency standby use, we have a range of products to fit your needs.

#### Reliable

MTU Onsite Energy generator sets are engineered for confidence and built to last, powered by the most advanced diesel engines in the world today.

Like the award-winning 550 kW generator set, the mobile 550 kW is equipped with the MTU 12V Series 1600 engine. The 1000 kW mobile generator set features the highly dependable MTU 18V Series 2000 engine. Both offer the exceptional reliability, high power and fuel efficiency you expect from MTU Onsite Energy. Take mobile power modules wherever you need power.

Stationary power modules are specifically designed to meet the requirements of mid- and long-term power supply projects. Delivered with the proven performance of the 16V MTU Series 4000 engine, stationary power modules deliver on-site power when you need it the most.

#### Flexible

Power modules are flexible, featuring easy set up and maintenance. The sound-attenuated package is fully self-contained for convenient transport, setup and use. Its robust design facilitates operation and service, with easy to read digital controls and convenient enclosure access points. Centrally located connection points make it easy to integrate the unit with other generator sets when serving larger loads and digital controls simplify synchronization.

#### Wherever work takes you

The power module's high-strength steel containers are CSC certified and built to ISO standards. Each generator set is designed for extreme temperatures and they are stackable for easy transport and storage.

In the wake of natural disasters, there is a pressing need to restore electricity as soon as possible. A quick recovery is also needed when local power consumption has unexpectedly overtaken supply and created high peak demands. All over the world, including remote locations such as mines, oil and gas sites and rural areas, MTU Onsite Energy can quickly deliver solutions for your site.





#### Package highlights

- // Plug and play paralleling capabilities
- // Advanced digital controls
- *II* Easy installation and maintenance
- // Designed for harsh conditions
- // Easy to transport

# MTU VALUECARE: WE'RE WITH YOU ALL THE WAY.

MTU Onsite Energy offers a full range of support through MTU ValueCare to help you get the most from your equipment. MTU ValueCare is a portfolio of value enhancing products and services designed for maximum performance, uptime and value. Support is always nearby – anytime and anywhere. For your convenience, MTU ValueCare is available worldwide through our MTU Onsite Energy service network. MTU ValueCare product lines:

- // ValueService Extensive global service and support to help maximize performance and uptime
- // ValueSpares Genuine spare parts and top-quality consumables designed specifically for MTU engines and systems
- // ValueExchange Remanufactured engines and service parts, engineered with the same high-quality standards as new products











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# VALUESERVICE: COMPLETE MAINTENANCE AND SUPPORT.

### ValueService global service and support

Reliable, expert assistance is essential to achieving and maintaining high levels of performance throughout your engine's or system's lifecycle. **Value**Service is a full line of maintenance and repair solutions to help you protect your investment and get the most out of your equipment.

#### Maintenance, Repair and Overhaul

With a wide range of maintenance and repair plans, MTU is your true partner in protecting your investments and improving your operations. You can count on MTU's reliability and expertise to help maximize your engine and system's performance–around the world and around the clock. Our staff of trained professionals knows all about MTU engines and systems. Preventive maintenance from MTU service experts optimizes availability and helps to avoid unexpected problems in the future. And quick, efficient maintenance and repair help you get back to work as soon as possible.

To give your original engine or system a powerful new life, choose an individual MTU Overhaul. This alternative to a new engine or system provides proven MTU quality and performance—at a price that can fit your budget. Our overhaul process is designed to get your equipment up and running as quickly as possible. To ensure reliability and durability, overhauled engines and systems share the same MTU parts, publications, online tools and service products as new equipment. Your product will maintain its identity throughout the overhaul, making it easier for you to track



usage, calculate residual value and perform other financial functions. And a cost estimate will be available in advance, so you'll know your investment level before work starts. For added convenience, we can conduct the overhaul at a MTU Service Center near you. Extended warranties and options are also available to enhance peace of mind.

#### Annual Check

With Annual Check, MTU experts perform a yearly professional inspection of your MTU engines and systems, allowing you to identify and address problems early. It ensures effective preventive maintenance, helping you save on repairs or unexpected downtime, optimizing your engine's performance and longevity. The MTU service technicians inspect the maintenance condition and determine whether any additional maintenance or repairs are required. The process includes visual engine inspection; test run and leak check; on-site engine oil and coolant analysis; and diagnostic evaluation and reporting.

#### Training

Comprehensive training is a great way to get maximum efficiency from your equipment. From timely preventive maintenance to efficient diagnostics and repair, our training programs are designed to make your service personnel proficient with MTU engines and MTU Onsite Energy systems. Whatever the product or application, we offer a wide range of customized training programs to maximize your return on investment.



# **VALUESPARES AND VALUEEXCHANGE:** FOR THE LONG RUN.

### ValueSpares genuine parts and consumables

To ensure that your equipment is always up and running, you can choose from a full line of **Value**Spares replacement parts and top-quality consumables. They're designed, tested and approved specifically for MTU Onsite Energy systems. Only MTU Onsite Energy can guarantee products that are genuine quality and will work seamlessly with your MTU equipment.

ValueSpares products help you get maximum performance and value from your generator sets. And putting our parts and consumables to work is easy: ValueSpares products are available worldwide through our MTU Onsite Energy service network.



### ValueExchange remanufactured products

Whether replacing a single component or an entire MTU engine or system, quality is essential. **Value**Exchange provides a full range of genuine remanufactured MTU products, engineered to ensure robust, reliable performance. A rigorous reconditioning process ensures the same high standards of performance, service life and quality as new products—including design and model updates. As a result, genuine **Value**Exchange products feature technological advancements similar to new products. The **Value**Exchange process is designed to save you time and money, while benefitting the environment through the reuse of existing materials.





**MTU Onsite Energy** A Rolls-Royce Power Systems Brand

www.mtuonsiteenergy.com