



# DATACENTERS SOLUTIONS



**Power Generators  
Soundproofing Solutions  
Power Transfer Switches  
Paralleling Systems  
Switchgears  
Controls**

**Generator Maintenance  
Services Agreements  
Control System Upgrade  
Battery Chargers  
Spareparts  
Consumables**





# POWER IS WINNING

## WHY **ELECTRONIL** !

We are a group of fearless thinkers, driven to empower people all over the nation – with reliable, revolutionary generators, power systems and power solutions.

We are nearly 30 years in the Egyptian markets, and only getting better. For the last two decades, we have engineered and shaped the future, redefining what power means to people's lives, careers and lifestyles.

**We exist for one reason: to move you forward.**



# WE WHAT WE DO

# 995

## لم تختار منتجات إلكتروني! !

نحن مجموعة من المفكرين لا يخافون الإبتكار، مدفوعون بشغف تمكين عملائنا في جميع أنحاء البلاد - بمحطات توليد طاقة إعتمادية وموثوقة، بالإضافة إلى أنظمة وحلول متكاملة للطاقة.

لدينا ما يقرب من ٣٠ عاماً من الخبرة في الأسواق المصرية، ونعمل في تقدم دائم. على مدار العقدين الزميين الماضيين، قمنا بتصميم وصياغة المستقبل، وإعادة صياغة المعنى الحقيقي للطاقة الكهربائية لحياة عملائنا وأعمالهم وأنماط حياتهم.

نعمل بجهد لسبب واحد: **للحفاظ على تقدمكم.**

# WE ARE ELECTRONIL.

## Our Capabilities



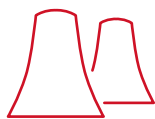
Power Generation Systems  
Design and Supply



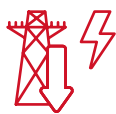
Complex Standby Systems,  
Synchronization and Load  
Sharing Including Multiple  
Utility Grid



Parallel with Utility Grid  
Operation



Power Stations



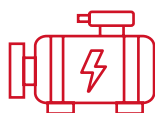
Mains, Feeder and Load  
Shedding Control Systems



BMS, SCADA and Remote  
Monitoring Systems



Low-Voltage Panel Building



Engine Driven  
Compressors and Pumps



Marine Certified Systems



Water Pump and Dredging  
Control Systems



Design, Supply, Install,  
Commissioning, Startup  
and Service



Standard, Sophisticated  
and Bespoke Control  
Systems



Design



Engineering



Training and Technical  
Support







# OUR STORY

A Magnificent force in power solutions since 1995, **ELECTRONIL POWER SOLUTIONS** is committed to reliable, intelligent products, advanced engineering and responsive after-sale support.

Over the years, we have amplified our well-known reputation to be a leader known for its premium range of generator-sets and control systems. Together, with building on the legacy of a leading brand, to create one of the largest generator-set and control systems providers in Egypt - and continued an unwavering focus on reliable power systems and innovation.

We deliver integrated industrial power systems for emergency, prime and continuous applications throughout whole Egypt—from data centers and hospitals to water treatment and hospitality facilities. With a deep understanding of your industry, we excel in designing customized power systems that simplify your most complex challenges.





## من نحن

تُعد شركة إلكترونيك لحلول الطاقة قوة رائدة في مجالات حلول الطاقة الكهربائية منذ عام ١٩٩٥، ومنذ ذلك الحين ونحن نلتزم بإمداد عملائنا بمنتجات موثوقة وذكية ومتطورة هندسياً بالإضافة إلى دعم سريع الاستجابة لخدمة ما بعد البيع والصيانة.

على مر الأعوام، ضاعفنا من سمعتنا المعروفة لكوننا من أكبر الكيانات الرائدة والمعروفة بمنتجاتها المتميزة من وحدات توليد الطاقة الكهربائية وأنظمة التحكم والحماية والتشغيل. بالإضافة إلى، واستناداً إلى إرث علامة تجارية رائدة، قمنا بإنشاء واحد من أكبر مزودي الأسواق المصرية بأنظمة الطاقة المتكاملة وأنظمة تحكم وتشغيل وحماية إعتماضية وموثوقة على مستوى جمهورية مصر العربية - واستمر التركيز المستمر على إبتكار أنظمة طاقة متكاملة وموثوقة ومتطورة.

نقوم بتقديم أنظمة توليد طاقة صناعية متكاملة لتطبيقات الطوارئ والمحطات الرئيسية والطاقة المستمرة في جميع أنحاء جمهورية مصر العربية - من مراكز المعلومات والمستشفيات إلى محطات معالجة مياه الشرب والصرف الصحي والفنادق. بدراسة وفهم عميق لمجال عملك، نتميز في تصميم أنظمة طاقة متكاملة ومتخصصة والتي تعمل على تبسيط التحديات الأكثر تعقيداً التي يمكن أن تقابلك.

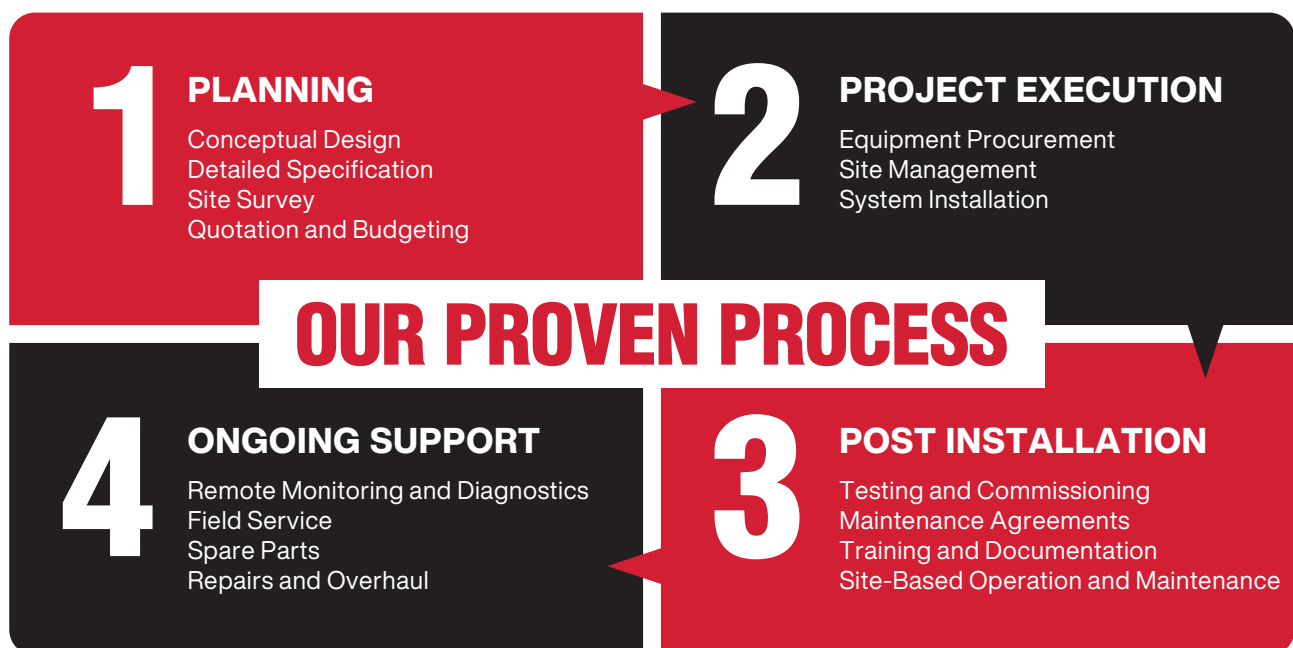
# TOTAL SYSTEM INTEGRATION

**Everything works together,  
Just as it should.**

A Power System is only as good as the parts that define it. That's why we engineer every detail down to the last bolt. From generators and power transfer switches to paralleling systems and switchgear and controllers, everything works together seamlessly. Because we design, engineer and test it that way.

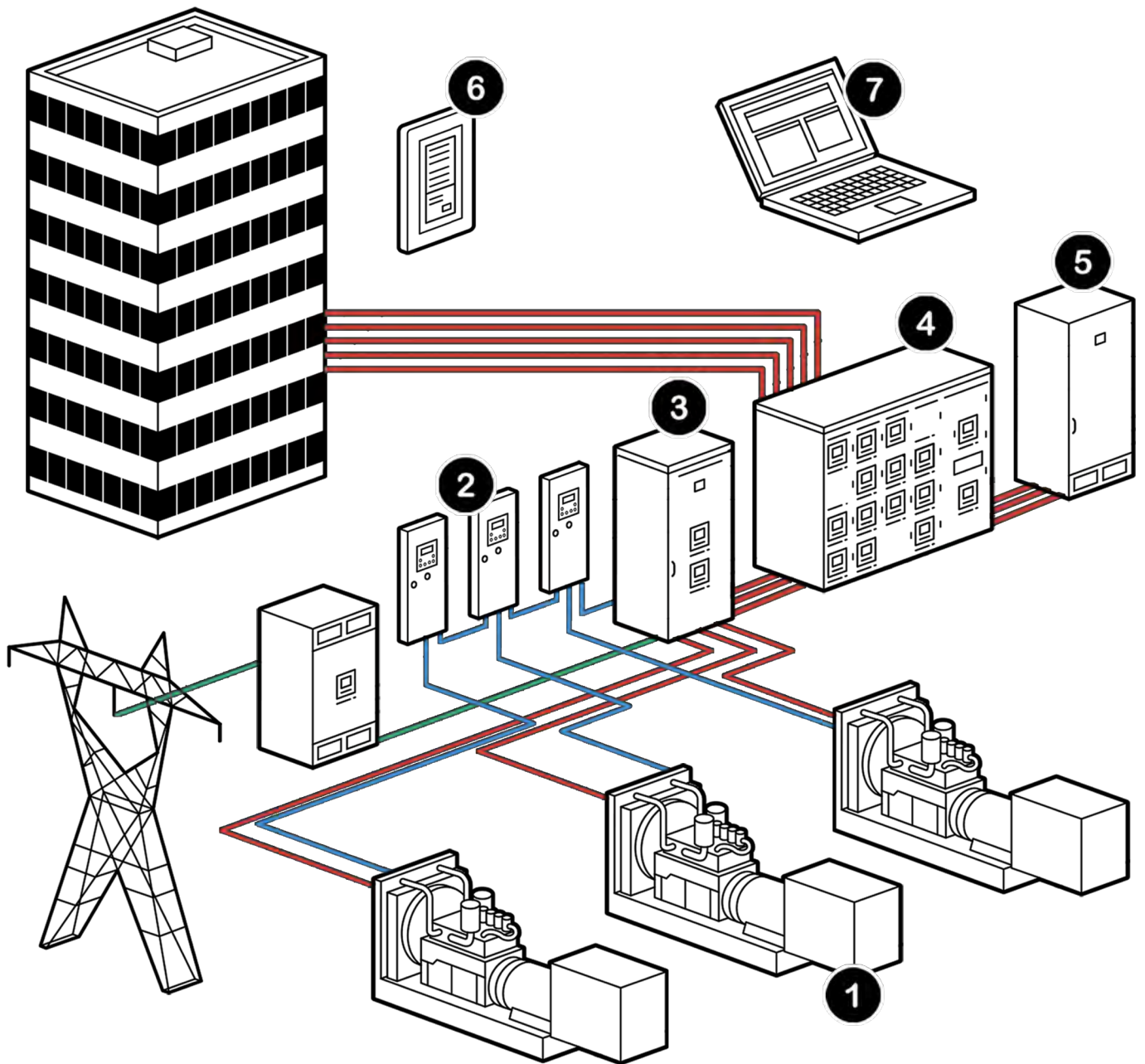
And that's the **ELECTRONIL** Difference.

**Good news:** There is more, behind that power system, there is a team of dedicated engineers that focuses on every element-generators, power transfer switches, switchgears and control systems — to be sure that the system you get is the system you need. You will know that your project is supported by an expert team, customized to your exact needs, brought in on budget and on time.



*From spec to start-up to service, **WE DO IT ALL.***





## TOTAL SYSTEM INTEGRATION

- 1 ED SERIES DIESEL GENERATORS**  
 Powered by Perkins, Volvo-Penta, or Cummins Diesel Engines, 9 - 3000 kVA
- 2 ENCP 9.1 GENSETS PARALLELING SYSTEM**  
 2-32 Generator set paralleling system with automatic power management and automatic engine run-hour balancing.
- 3 ENCP 9.3/ENCP 6.x TRANSFER SWITCH**  
 40-4000 A Power transfer switches, available in standard, bypass-isolation and service entrance switch configurations.
- 4 ELECTRONIL POWER DISTRIBUTION PANEL**  
 MCB, MCCB and ACB, Up to 6000 Amps.
- 5 ELECTRONIL POWER FACTOR CORRECTION SYSTEMS**  
 Up to 15 steps.
- 6 REMOTE ANNUNCIATOR**  
 Optional remote system monitoring.
- 7 THE SUPERVISOR MONITORING SOFTWARE**  
 Monitors generators and control systems from a PC and Smart Phones (Optional) Modbus or Ethernet.







# THE WORLD IS POWERED BY DATA

Big data has changed the world. We generate 2.5 quintillion bytes of data daily—data that businesses, governments and people depend on. Further fueled by mobile devices and data-on-demand business, there are ever-growing demands on service levels in data centers around the world. Cloud computing and the Internet of Things are driving 12 percent growth per year in the data center market. The expectations for peak performance and uninterrupted power have never been higher.

The data center market itself is changing too. Data centers are moving closer to their customers, collocating and adopting multitenant architecture more than ever before. Many are becoming smaller and more scalable. Tax and energy incentives are common, aimed at attracting data center investment while improving the operational efficiency of these critical facilities.

## **MANAGING ENERGY USE AND COSTS**

Data centers consume vast amounts of energy to keep online businesses running at maximum capacity around-the-clock.

To avoid wasting much of the electricity pulled off the grid and to improve operational costs, data centers are being designed and built with higher levels of efficiency, measured in PUE (power usage effectiveness).

Today, data center owners want more sustainable ways to power their facilities and lessen their carbon footprints.

Assessing your center's needs and designing a power system that is modular and scalable will help you optimize uptime and availability, cut energy use and provide significant savings.





### **Assessing Facility Needs**

A data center's electrical power supply can be provided by several different circuits and supplemented by energy storage systems and generators.

To provide a «No-Break» power supply (uninterruptible power with zero service interruptions), two independent power sources provide redundancy and risk reduction, rather than depend on a single source of inbound power.

### **Power Supply**

Redundancy is an essential design feature built into a data center to provide a double layer of security. To prevent interruptions to the power supply, all components, including the emergency systems, are installed in duplicate with multiple generator sets.

### **Security**

There is an essential need for protecting both the data center's physical security and its cyber security. Redundant backup power is a critical component of a secure datacenter and a requirement for recognition as a Tier IV data center.

### **Physical Environment**

Maintaining precise, stable air conditioning and optimal control of environmental dust are two more factors creating larger loads and more dependence on backup generators.

### **Fire Prevention**

Fires must be prevented, extinguished or controlled. An ultra-sophisticated detection system that ensures maximum containment must be maintained on an uninterruptible power supply.

# SECURE, ROBUST DATA STORAGE REQUIRES A DEPENDABLE AND SCALABLE POWER SYSTEM

## POWER CONSIDERATIONS

### Scalability

A larger-than-necessary power system that caters to possible unknowns will increase costs and diminish efficiency. The industry is seeing a shift to scalable data centers that start small and scale up to meet increased demands. This trend is even more evident in collocated and multitenant facilities that make up the majority of new data center construction.

Collocating (sharing data center space but not servers) or multi-tenanting (sharing servers) helps businesses achieve cost savings and efficiency. Secure, robust data storage requires a dependable and scalable power system—one that is capable of delivering uninterrupted power and meeting demanding service requirements.

### Uptime and Reliability

Designing power systems that meet the requirement for the highest levels of uptime, such as the Uptime Institute's Tier IV standard, requires expert attention to system architecture and equipment redundancy.

Getting the right combination of uninterrupted power supply and generator sets is crucial to meet tier classifications.

Achieving 99.999 percent reliability—where downtime is less than 5.26 minutes per year—is the ultimate goal.

A data center is classified based on its annual outage rate or availability:

- Tier I specifying annual outage up to 28.8 hours
- Tier II specifying 22 hours
- Tier III specifying 1.6 hours
- Tier IV specifying 0.4 hours of annual outage, or 99.995 percent availability

Understanding the uptime tier your business wishes to meet helps shape our recommendations for your power system requirements. The market is moving toward emergency prime generator power in order to meet tier standards.

Paralleling two or more generators delivers greater reliability and flexibility than a single generator can provide.



## **ELECTRONIL POWER SOLUTIONS**

**ENGINEERING THE FUTURE Since 1995.**

Tel/Fax: +20 (2) 2516 3930 | +20 (2) 2540 0286

info@electronil.com | Post Box Office 11742, Zahraa El Maadi.

### **SALES AND SPAREPARTS**

Phone: +20 (100) 1407 173

sales@electronil.com

www.electronil.com

### **SERVICE AND SUPPORT**

Phone: +20 (122) 4990 163


support@electronil.com


service@electronil.com



All data provided in this document is non-binding. This data serves informational purposes only and is especially not guaranteed in any way. Depending upon the subsequent specific individual projects, the relevant data may be subject to changes and will be assessed and determined individually for each project. This will depend on the particular characteristics of each individual project, especially specific site and operational conditions.

 @electronilPowerSolutions

 @electronil-power-solutions

 @electronil

 @electronilpowersolutions

 @Electronil\_PS