



# COMPANY PROFILE

2020

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**Your Power-Systems and Data-Center Partner**  
Since 1999

# Background

Electrilabs was established some 20 years ago in South Africa with our initial focus being UPS service and maintenance. Our company gradually evolved into a fully-fledged Turn-Key Solutions Provider focused on the design, integration, installation, commissioning and maintenance of solutions that is right-sized for our customers' needs.

These solutions usually include UPSs, electrical reticulation by our own certified electrician/s, Data centre infrastructure such as precision cooling, environmental -and system monitoring, generators, access control, fire suppression and all associated civil work such as dry- or brick walling and raised floors.

Electrilabs have serviced more than 6,000 customers since we started our operations in 1999.

Electrilabs' success for the past 20 years has been based on a clear understanding of the necessity of providing unequalled after-sales support. We are committed to keeping our customers satisfied with the solutions they've invested in. We know that ongoing **customer satisfaction** sustains **long-term partnership** with our clients, which is of value to all parties and ultimately contributed towards the existence of Electrilabs for decades.



## MISSION STATEMENT

Our mission is to provide first-class customer experience by delivering quality products and services, as well as building a company culture of empowerment, collaboration and continuous personal development.

## VISION STATEMENT

Our vision is to become an industry leader in power back-up and IT infrastructure by setting industry standards for excellence in the services we provide. Our innovative team works constantly at perfecting, changing and fine-tuning our products, always adapting to clients' changing requirements.

## VALUES - “Our reputation is our biggest asset”

We anticipate, listen and respond to customer requirements, providing quick, honest and reliable service. We work internally and externally in a collaborative environment based on trust, integrity, joint commitment and respect. We create profit and employee goodwill through growth, effective execution, continuous improvement, and innovation. We question the status quo, proactively seek improvement and take ownership to overcome obstacles.



# Black Economic Transformation

Electrilabs is currently a **level 2** rated BEE organisation.

We offer compelling positions to our employees which includes:

- ✓ Experienced management and leadership
- ✓ Continuous development
- ✓ Competitive remuneration and reward
- ✓ Growth opportunities



## Significant Company Achievements

- 🏆 Electrilabs has been reappointed by American Power Conversion by Schneider as Elite Partner for the 5th year in a row.
- 🏆 Appointed as official authorised ABB 3 phase UPS high power partner for Southern Africa.
- 🏆 Appointed as official authorised APC single phase UPS service centre for Southern Africa.
- 🏆 Appointed as an authorised partner of Huawei.
- 🏆 Electrilabs has supplied a number of power solutions in Angola, Zambia, Botswana & Mozambique.
- 🏆 In-house development of a fully integrated, intelligent hybrid solar system.
- 🏆 Expansion of product and service portfolio with IoT, integrated DC systems and the Huawei product range.



# Our Products



## POWER SOLUTIONS

The following technologies are those on which we are primarily focused:

- Backup Power Systems (UPS's)
- Telecoms Power Systems
- Solar Power Solutions (Turn-Key projects)



## DATA CENTRE SOLUTIONS

Electrilabs has build a number of turn-key data-centres solutions in the past which include, but is not limited to:

- Modular Data Centres
- Hot/Cold Isle Containment Systems
- Precision Cooling
- Integrated UPS & Power Distribution
- Surveillance & Access Control



## INTERNET OF THINGS (IoT)

The following are some of the Internet of Things solutions we offer our clients:

- Environmental Monitoring
- Equipment Monitoring
- Smart Metering
- Smart building & Home Automation



# Our Services

Electrilabs' support infrastructure is well established. This is mainly due to the fact that Electrilabs started off as a service orientated company, hence a high quality of after-sales support will always be an integral part of our offering to our clients.

Services we offer together with the supply of hardware are:

- ✓ Electricians on Call for all electrical repairs, maintenance and installations.
- ✓ Installation and commissioning services On-site services
- ✓ Workshop repairs UPS and Electrical aintenance contracts
- ✓ Consultancy on power-system sizing, power-usage, data-centre infrastructure optimization and solar power needs.

# Customers

We are fortunate to have successfully maintained long-term relationships with Sasol, Eskom, Reutech, Sentech, Impala Platinum- and Anglo American Mining. However. we have more than two thousand ICT service providers, numerous SA government departments, as well as Telecoms, Industrial and Corporate clients based in Mozambique, Zambia, Kenya, Botswana and various other African countries. Several of these customer relations have lasted over a decade.



# Our OEM Partnerships

To ensure that our solutions are of the highest quality, yet affordable, Electrilabs has established direct relationships with a number of international OEMs. With that said, Electrilabs is certified as a Preferred Partner of Huawei, APC by Schneider Electric, Landis-Gyr Smart Metering, SAGEMCOM, ABB, CSB, Kraus & Naimer, Studer-Innotec, IoT by Huawei, Canadian Solar, FZ-Sonic and others.

Our workshop also delivers in-warranty services on behalf of some OEMs as their Appointed Service Centre.



# Power Products

## UPSs

Sustaining any operation, not only requires electricity, but electricity that is reliable. Our UPS range covers the full spectrum of UPSs that is required to protect any sensitive or critical load.



Desktop and rack-mount UPS



Modular UPS 16KVA –  
1MVA+



N +1 UPS 40 – 1MVA+



UPS 10KVA – 1MVA

## Solar Power

In 2012 ElectrILabs established itself on the solar-power front. After doing a number of turn-key projects, we turned our focus to distributing selected solar products of a few reliable OEMs. PV equipment is primarily supplied to qualified solar-system installers and resellers within South Africa and some neighboring countries with larger systems still being done in-house.

ElectrILabs has developed a fully integrated solar system which includes all power components, as well as IoT and AI functionality that continuously manage power wastage and identifies possible areas of optimization to the user.



Solar Inverters



PV Panels



Sodium & Lithium Batteries



NetEco 1000S Solar  
Monitoring



Below are some pictures of solar systems that ElectrILabs have designed, build, tested, installed and maintain at a number of its high profile customers since 2012. Sizes range from 5KVA – 30KVA of various brands of batteries and inverters.

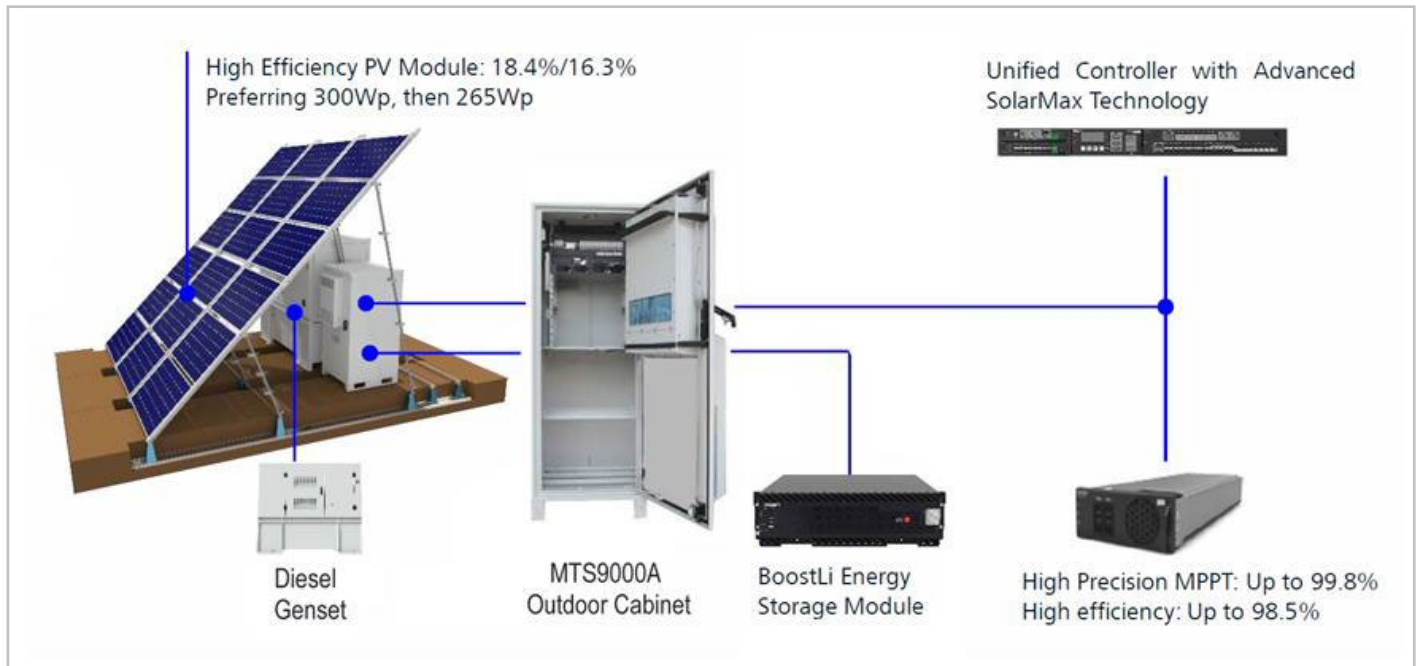




# Telecoms & DC Power Solutions

The ever growing demand for faster and more reliable connectivity brings about a continuous demand for more powerful and more densely populated base stations throughout the world.

Electrilabs has been providing backup power systems to customers who offer signal distribution services for GSM, Data, Radio communication, Television and radio Broadcasters.



Some of these power systems differ from traditional UPS systems since it is specifically designed to provide either normal backup power, or hybrid systems with cabinets with small cooling units, solar power, diesel or LP-gas generators, as well as specialized battery systems such as lithium ion or sodium batteries.

These Telecoms & DC Power solutions are usually custom-built for our clients' specific needs. Electrilabs is also constantly investing in the local development of systems which incorporates newer or alternative technologies. We are currently looking at high-speed turbine engines as a substitute for traditional diesel generators. Such turbine engines are physically small and extremely fuel efficient.





# Data Centre Solutions

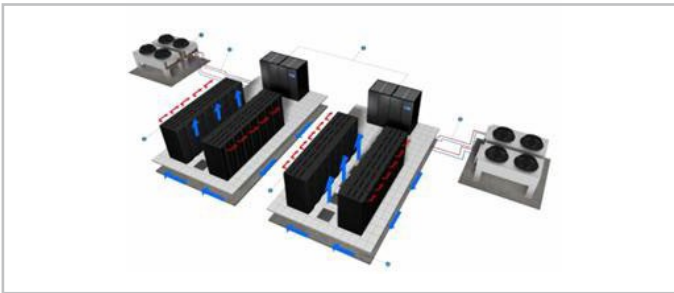
Any economy needs access to reliable infrastructure where data can be generated, processed and stored. This is mostly computer-based which are all pointing towards data-centers where all of these services are centralized.

Since ElectrILabs already sustains the "fuel" (electricity) of many such critical data-centres, it was a natural progression for us to start building data-centres as well. Over the years we have build a number of turn-key data-centres for customers such as Eskom, Tshwane, Sentech, T-Systems and SITA.

## Modular Data Centres



20-ft integrated data-centre solution 8kW/16kW  
2m x 4m white space



High density 40-ft data-centre solution topology



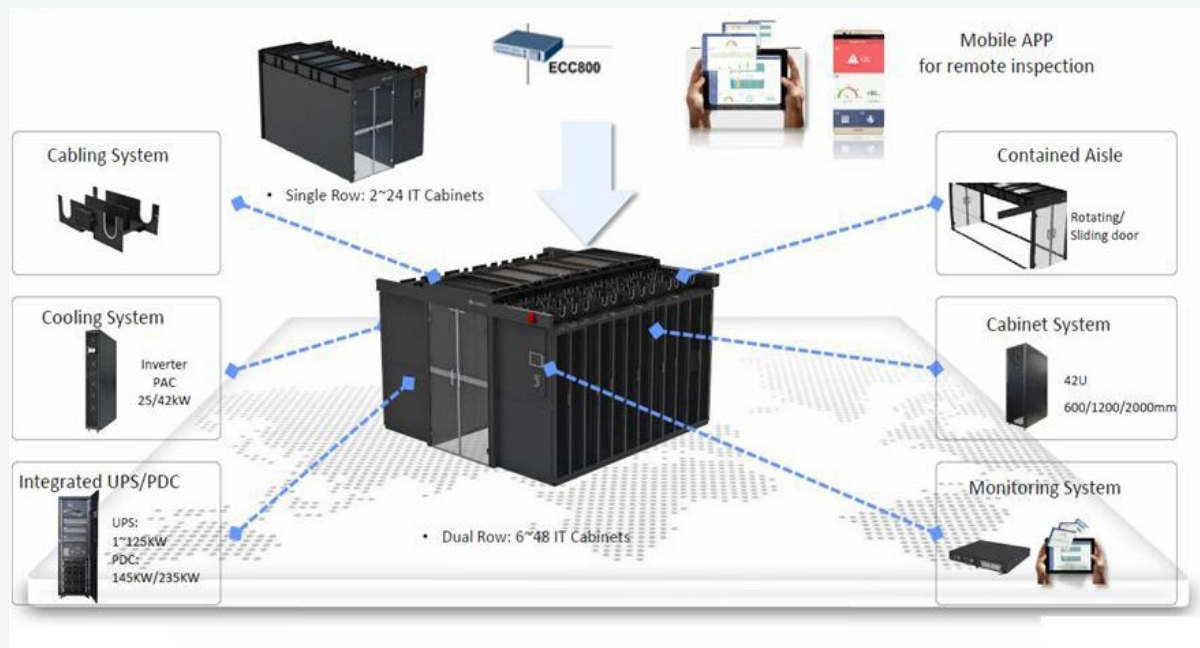
Airflow via in-row cooling units



Large Stacked Modular Data Centres



# Hot/Cold Isle Containment Systems



# Precision Cooling Units



In-Row Direct Expansion cooling units closely couples the cooling with the IT heat load. It prevents hot air recirculation, while improving cooling predictability and allowing for a pay as you grow environment. IT operators looking to improve efficiency or deploy higher density equipment will benefit from the modular design of In-Row Direct Expansion products.

The intelligent controls of In-Row Direct Expansion cooling units actively adjust fan speed and refrigerant flow to match the IT heat load to maximize efficiency and address the dynamic demands of IT environments. ElectrILabs have been deploying these In-Row DX cooling units with most of the data-centres built over the years.

# Internet Of Things (IoT)

Electrilabs has been connecting "things" to LANs, WANs and the Internet for as long as it has been in existence. This includes the monitoring and controlling of all critical equipment such as UPSs, generators, precision-cooling, rectifiers, CCTV and alarm panels, and numerous other components that are essential for the operations of any kind of enterprise.

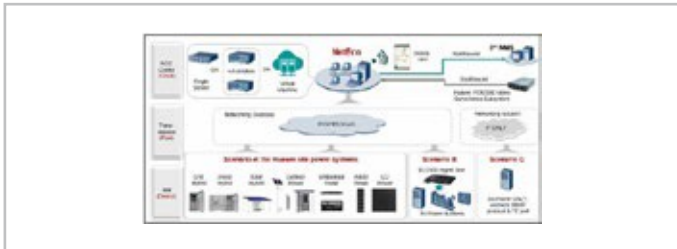
## Environmental & Equipment Monitoring Hardware



Environmental & Equipment monitoring hardware



Integrated software platform displaying data received from sensors



Hardware platforms monitored

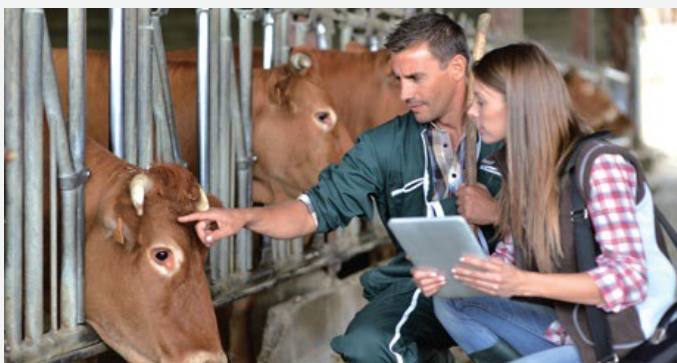


iManager NetEco (Site)

## IoT Cattle Solution

The IoT-Cattle solution uses NB-IoT technology to solve core issues, such as low efficiency of manual detection of cow estrus periods, high cost of installing and deploying traditional small base stations, and unreliable transmission.

Low manual detection efficiency: The manual detection of cow estrus periods features high labour intensity, high cost, and low accuracy (only 75%). If one period is not detected, the nomadic loss will be extensive. High cost and low reliability: A small base station (with small coverage) costs up to R15 000. It is difficult to popularize such base stations in small- and medium-sized pastures as well as large-sized pastures due to high cost. In addition, poor environment and poor power supply conditions lead to low system reliability.



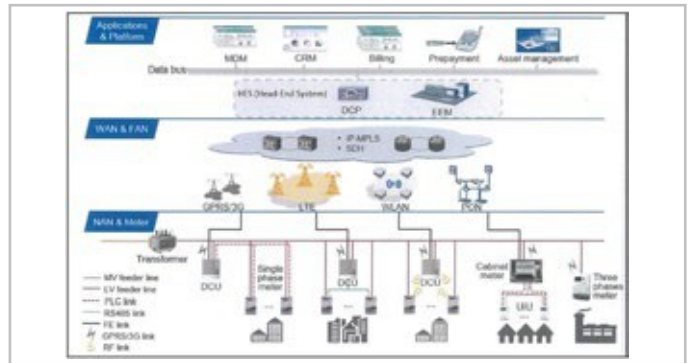


## Smart Metering

Electrilabs have been using Smart-Metering during a number of projects to establish power quality and usage trends. Such information is extremely valuable during the design and deployment of UPS and solar systems.



Generic Smart Meter



Interconnection of various kinds of communication layers to the WAN and then to the software/billing layer.

## Smart Home Automation

Electrilabs have a number of very useful power monitoring and automation products which are used as stand-alone devices, or even more readily, for the automated management of electrical loads in conjunction with intelligent integrated solar system developed by Electrilabs.



Google Home automation support with voice recognition



WiFi DIY Smart Switches



WiFi Smart Wall Switches



WiFi Smart Lighting

# Our Services

## Installation & Commissioning Services



## Electricians on Call

Electrilabs also has qualified electricians that provide electrical fault-finding, maintenance and installations and electrical wiring associated with UPS and generator installations. We are also registered with the ECB and ECA as an electrical contractor and are authorized to issue Certificates of Compliance (CoC) for the electrical installations done by our electricians.





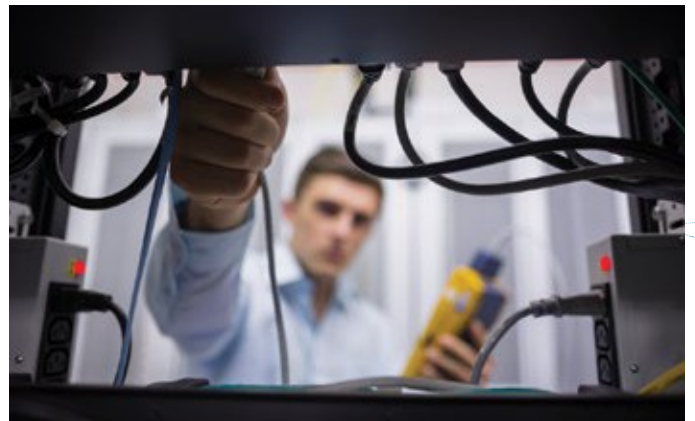
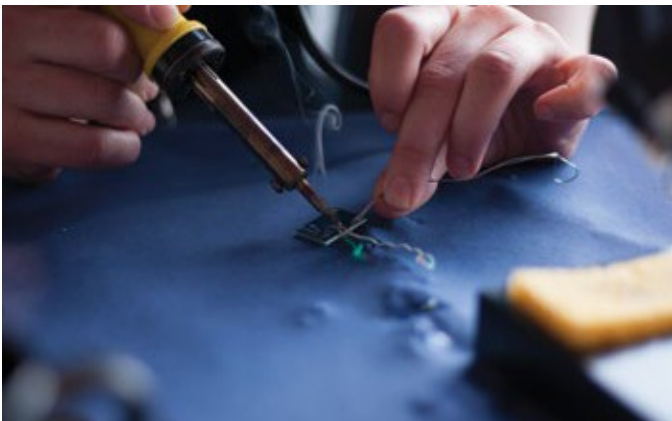
## On-site Services

Electrilabs also do on-site installation, repairs and service where customers prefer to minimize the impact on their business operations. Such on-site services are normally done after-hours to limit downtime. On-site services include maintenance, installation and repairs.



## Workshop Repairs

Our Technicians are trained and qualified to repair various brands of UPS. Carry-in repairs are done at our workshop. Faulty units are diagnosed, repaired and then placed under strain to ensure that it will be working perfectly once having left our workshops.



## Maintenance Contracts

Electrilabs also offers a unique Proactive maintenance service. This includes:

- Annual preventative maintenance
- Proactive Load measurements to prevent overloads
- Proactive runtime test to ensure that back-up time is sufficient



# The ElectrILabs Difference

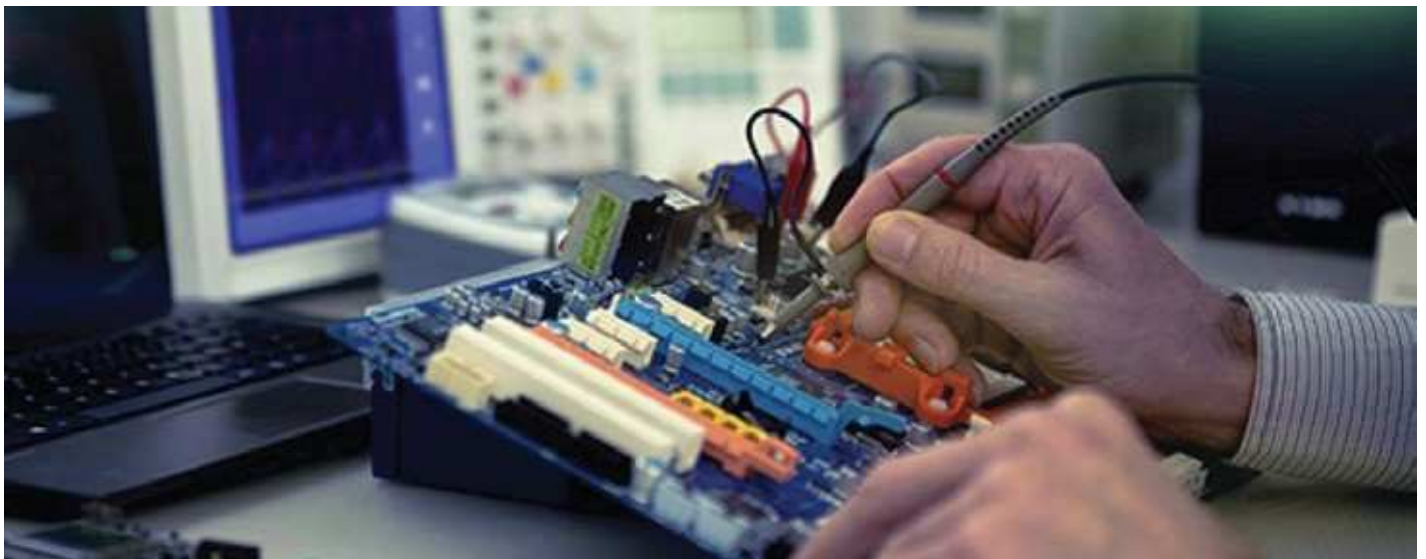
ElectrILabs also offers a unique Proactive maintenance service. This includes:

- ★ Proactive load measures to prevent overloads
- ★ Proactive runtime test to ensure that back-up time is sufficient
- ★ ElectrILabs still remains the only Southern African company capable of calibrating single-phase APC and a number of other brands of UPSs correctly.
- ★ ElectrILabs is the only local company that has a large supply of local spares for various kinds of UPSs, solar Inverters and other products. This enables our company to execute repairs and maintenance at a significantly lower cost.

## UPS Calibration

Our technicians develop programming algorithms and repair skills that are unequalled in the local UPS industry. This is mainly because of ElectrILabs' focus on the support and repair of UPSs.

This can be substantiated by the fact that ElectrILabs still remains the only Southern African Company capable of calibrating single-phase APC and a number of other brands of UPSs correctly.



## Local Spares

ElectrILabs is the only local company that has a large supply of local spares for various kinds of UPSs, solar Inverters and other products. This enables our company to execute repairs and maintenance at a significantly lower cost.



# **ELECTRILABS**

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**Your Power-Systems and Data-Center Partner Since 1999**

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