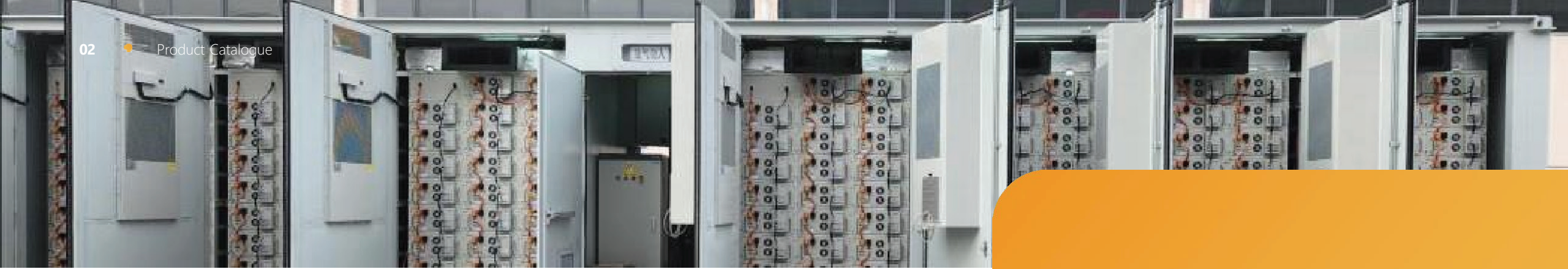


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PRODUCT CATALOGUE



<https://tnlafrica.com/littech/>



ABOUT US

TNL is at the forefront of the renewable energy sector, specializing in tailoring solutions that address the unique energy needs of our clients. With a robust commitment to sustainability and cutting-edge technology, we have successfully partnered with LithTech Energy, a leading Research, Development and global energy application system integration solution provider to help businesses across various industries to reduce operational costs by up to 50% and enhance energy efficiency.

1

We specialize in the design and implementation of solar energy systems, utilizing state-of-the-art photovoltaic technology to harness clean and abundant solar power.

2

Our LithTech Battery Energy Storage Systems (BESS) are designed to optimize energy consumption, mitigate the impact of unstable power grids, and reduce reliance on traditional energy sources.



ABOUT LITHTECH

LithTech Energy is a collaborative effort between China and Germany. LithTech GmbH is located in Munich Germany and acts as the R&D centre for LithTech Energy in both BMS and Systems Integration design while the production plant headquarters are located in Dongguan City, Guangdong Province, China for obvious reasons of the upstream supply chain advantage and production capability in China. The strength of LithTech lies in the combined uniqueness of the cutting-edge German technology with the irreplaceable Chinese supply chain and production advantages.

OUR CATEGORIES



RESIDENTIAL SOLUTIONS

These are residential packages including solar panels, inverters and batteries for homes and small businesses



COMMERCIAL SOLUTIONS

Our Battery Energy Storage Solution (BESS) system are designed for commercial and industrial clients to optimize energy consumption, mitigate the impact of unstable power grids, and reduce reliance on traditional energy sources.



TELCO SOLUTIONS

Our LiFePO4 battery has high performance of long cycle life, fast-charging and discharging, and thermostability, which reduce the operation costs and improve the efficiency of 5G Telecom Base Stations



RESIDENTIAL
SOLUTIONS

LITHTECH SOLAR MINI

2.2KVA

2 units of 500W PVs,
2.2KVA Hybrid Inverter &
1 Unit of 12.8V 200Ah

% of Inverter
Capacity Utilised
40.63%

Backup Time for
90% of the Load(H)
5.28

Backup Time for
50% of Load(H)
9.50



Continuous load



5 - LED
Lights
(125W)



1 - Standing
fan (50W)



1 - Refrigerator
(140W)

Intermittent load

Total Load 0.72 KW



LITHTECH SOLAR MINI

The LithTech Solar Mini Package is suitable for students, young adults and small families.

LITHTECH SOLAR PLUS

4.2KVA

2 Units of 12.8V 200Ah,
4 units of 500W PVs

% of Inverter
Capacity Utilised
51.79%

Backup Time for
90% of the Load(H)
7.10

Backup Time for
50% of Load(H)
12.78



Continuous load

10 - LED
Lights
(125W)

3 - Standing
fan (50W)

1 - Refrigerator
(140W)

Intermittent load

1 HP AC 2 (750W) - 1.5 HP

1 TV (150W)

Total Load 1.74 KW



LITHTECH SOLAR PLUS

The LithTech Solar Plus Package is suitable for young adults and families.

LITHTECH SOLAR MAX

5KVA

1 Unit 51.2V 100Ah
6 units of 500W PV

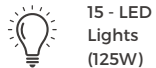
% of Inverter Capacity Utilised
64.13%

Backup Time for 90% of the Load(H)
6.12

Backup Time for 50% of Load(H)
11.01



Continuous load



15 - LED Lights (125W)



3- Standing fan (50W)



1 - Refrigerator (140W)

Intermittent load



1 HP AC 2 (750W) - 1.5 HP



1 TV (150W)

Total Load 2.57 KW



LITHTECH SOLAR MAX

The LithTech Solar Max Package is suitable for a larger families living in duplexes or bungalows. It can also be used by small businesses

LITHTECH SOLAR MAX+

5KVA

2 Units 51.2V 100Ah
8 units of 500W PV

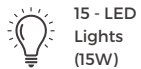
% of Inverter Capacity Utilised
79.13%

Backup Time for 90% of the Load(H)
7.81

Backup Time for 50% of Load(H)
14.05



Continuous load



15 - LED Lights (15W)



3 - Standing fan (50W)



1 - Refrigerator (140W)

Intermittent load



1 HP AC 2 (750W) - 1.5 HP



1 TV (150W)

Total Load 2.57 KW



LITHTECH SOLAR MAX+

The LithTech Solar Max+ Package is a step up to the LithTech Solar Max. The difference is the Max+ is composed of 2 batteries making it load more devices and last longer

LITHTECH Solar Luxury All-in-one

12.5KVA/20KWH

4 Units 51.2V 100Ah

% of Inverter
Capacity Utilised
78.79%

Backup time for 90%
of the load 7.07 (hours)

Backup time for
50% of the load
12.73 (hours)



Continuous load

30 - LED
Lights
(125W)

6 - Standing
fan (50W)

2 - Refrigerator
(140W)

Intermittent load

1 HP AC 2 (750W) - 1.5 HP
AC 2 (1125W)

2 TV (150W)

Total Load 7.93 KW



LITHTECH SOLAR LUXURY ALL-IN-ONE (12.5KVA/20KWH)

The LithTech Solar Luxury All-in-one system is suitable for large families and businesses

LITHTECH Solar Luxury All-in-one

15KVA/20KWH

% of Inverter
Capacity Utilised
79.30%

Backup time for
90% of the load
6.64 (hours)

Backup time for
50% of the load
11.95 (hours)



Continuous load



30 - LED
Lights
(125W)



6 - Standing
fan (50W)



2 - Refrigerator
(140W)



2 - Deep Freezer
(300W)

Intermittent load



(150W)
4 - TV



750W 1HP AC 3 1125W 1.5 HP AC 3

Total Load (KW) 9.46



LITHTECH SOLAR LUXURY ALL-IN-ONE (15KVA/20KWH)

The LithTech Solar Luxury All-in-one system is suitable for large families and businesses. This version will load more devices and last for longer hours

LITHTECH Solar Luxury All-in-one

7.5KVA/20KWH

2 units of 51.2V 100 AH

% of Inverter Capacity Utilised
79.42%

Backup Time for 90% of the Load(H)
6.59

Backup Time for 50% of Load(H)
11.85



Continuous load



20 - LED Lights (125W)



4 - Standing fan (50W)



1 - Refrigerator (140W)

Intermittent load



1 HP AC 2 (750W) - 1.5 HP AC 1 (1125W)



1 TV (150W)

Total Load 4.77 KW



LITHTECH SOLAR LUXURY ALL-IN-ONE (7.5KVA/20KWH)

The LithTech Solar Luxury All-in-one system is suitable for large families and businesses. This version will load more devices and last for longer hours





COMMERCIAL
SOLUTIONS

OUR **PROCESS** for INDUSTRIAL & COMMERCIAL



comprehensive energy audit
consumption and needs

- ✓ Our seasoned engineers visit your establishment to conduct a
- ✓ This exercise gives us a clear idea of your energy
- ✓ The audit report allows us tailor-make a solution that will effectively
- ✓ A comprehensive report showing Product Pricing & ROI is presented after solution is designed. Most Audits done to date have guaranteed average of 50% operating cost reduction in generator and on-grid expenses!

reduce your cost

SCHEDULE
AUDIT REPORT

visit your establishment

VISIT
ESTABLISHMENT

OUR **INSTALLATION** PROCESS

COMMERCIAL SOLUTIONS



A

C&I BESS SOLUTION

Suitable for hotels, hospitals, factories etc.



B

INDOOR BESS

In-door BESS Solutions for Hotels, Hospitals, Factories etc.



C

CONTAINER BESS

20ft & 40ft Container BESS Solutions



D

OUTDOOR BESS

100kW/215kWh Outdoor BESS



50kW (PWG2-50K-xx2) / 100kW (PWG2-100K-xx2) 480V(423V~528V) or 400V (340-460V)



LITHTECH 10Ft. Container

FEATURES

- Outdoor rated
- Built-in bi-directional PV + storage power
- Conversion System (with optional built-in smart transfer switch)
- Grid support & grid-forming & auto switch
- Flexible energy
- Pre-engineered system
- Perfect for SME's like supermarkets, clinics, dental offices, small-to-medium sized hotels etc.

LTC-400K series 50KW – 750KW (250V~840V)

LITHTECH 20Ft. Container



FEATURES

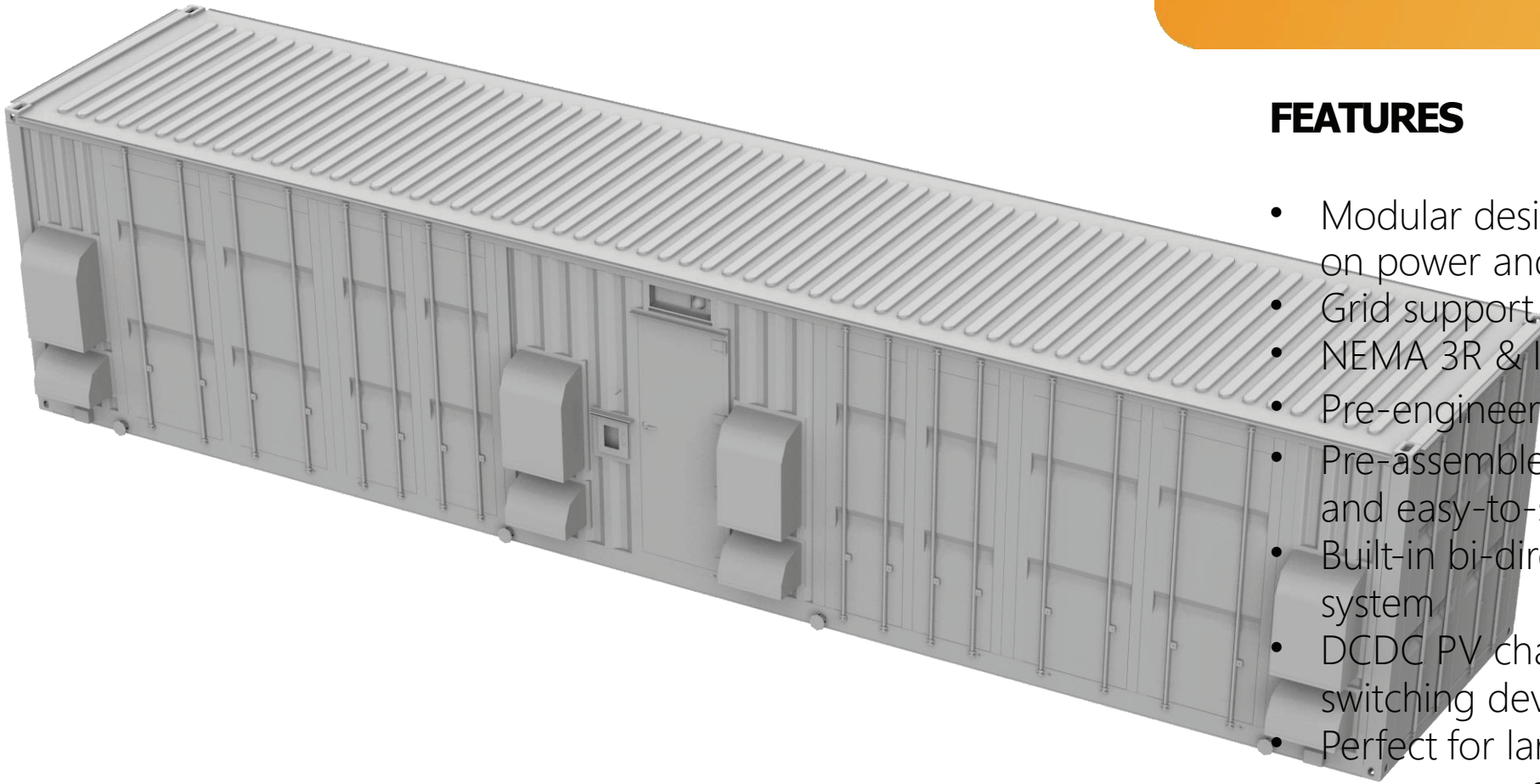
- Modular design and flexible configuration on power and energy
- Grid support and grid-forming
- NEMA 3R & IP54 rated
- Pre-engineered system
- Pre-assembled. Pre-tested, easy-to-expand and easy-to-service
- Built-in bi-directional power conversion system
- DCDC PV charging system and auto-switching device
- Perfect for Hospitals, Big hotels, Schools, Malls & plaza's etc

LTC-500KTL series 750KW – 1MW (600V~900V)

LITHTECH 40Ft. Container

FEATURES

- Modular design and flexible configuration on power and energy
- Grid support and grid-forming
- NEMA 3R & IP54 rated
- Pre-engineered system
- Pre-assembled. Pre-tested, easy-to-expand and easy-to-service
- Built-in bi-directional power conversion system
- DCDC PV charging system and auto-switching device
- Perfect for larges real estates, university campuses, office campuses and other large establishments



LT51495PC 250KW (560V~828.8V)



LITHTECH Indoor Container

FEATURES

- Outdoor rated
- Built-in bi-directional PV + storage power
- Conversion System (with optional built-in smart transfer switch)
- Grid support & grid-forming & auto switch
- Flexible energy
- Pre-engineered system
- Perfect for SME's like supermarkets, clinics, dental offices, small-to-medium sized hotels etc.



Telecom Power



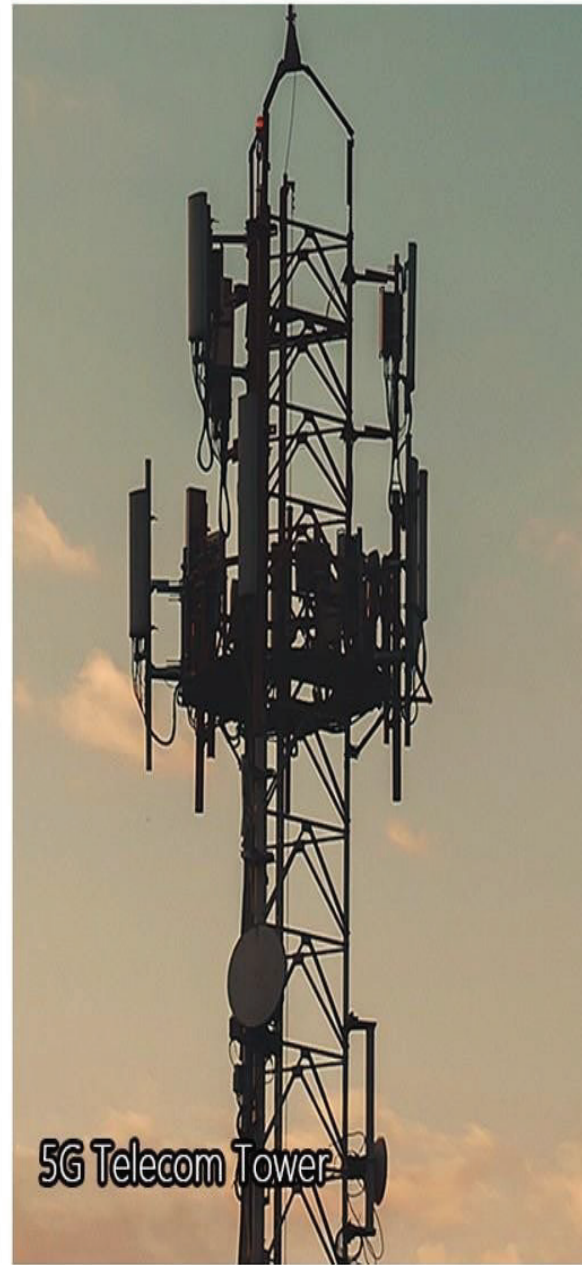
FTTH

BBU

TELCO CELL SITES
SOLUTIONS

RRU

Mobile Telecom



5G Telecom Tower



LITHTECH Battery Energy Storage System (BESS)

FEATURES

- Hybrid system
- Energy source from National Grid
- Primary backup from generator
- BESS
- Other renewable energy sources e.g., solar panels, wind turbines etc. (although optional)



LITHTECH BATTERY ENERGY STORAGE SYSTEM (BESS)

HOW IT WORKS

- 1 In the event of an outage from the national grid, the BESS automatically takes over supply for at least 8hrs continuously (on FULL load).
- 2 If the outage takes more than 8hrs, the BESS automatically starts the generator. BESS is fully charged in 2hrs. and ready to go for another 8hrs.
- 3 So, assuming a continuous power outage of 24hrs cycle or more, the generator will be operated for just 4 hours



06

Product Advantages

Telecom ESS 48V lithium battery system built in intelligent BMS , with functions of data storage, overcharge, overdischarge, temperature alarm and protection.

The system has outstanding advantages in the field of communication backup power supply, specific high rate discharge, indoor wall-mounted and other occasions, so it is widely used in data processing center, communication center, 5G Telecom micro base station and other important places.

Product Advantages

Thermostability

Natural cooling below 50 °C, saving cost

Long Span Life

Super long service life 4000 times at 0.5C 85% DOD at 25°C

Intelligent

Modularization
Lightweight
Easy operation and maintenance
Intelligent management

Safety

Customized IP65 protection , default software for anti-theft function

TS4850



Nominal Voltage	48V
Rated Capacity	50Ah
Working Voltage	42V-54V
Charge Voltage	52.5V-54V
Charge Current	50A
Discharge Current	50A
Discharge Voltage Cut-off	42V
Dimension	440*380*134mm
Weight	24KG

TS4000

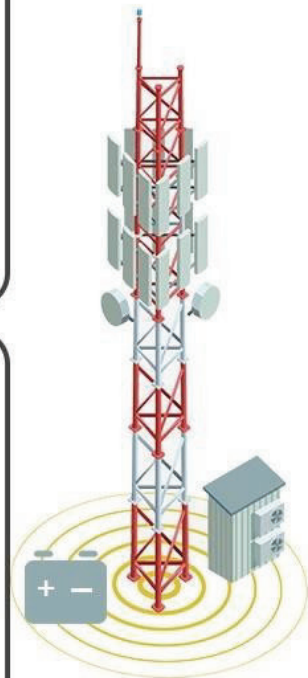


Nominal Voltage	48V
Rated Capacity	100Ah
Working Voltage	42V-54V
Charge Voltage	52.5V-54V
Charge Current	50A
Discharge Current	100A
Discharge Voltage Cut-off	42V
Dimension	482*300*225mm
Weight	48KG

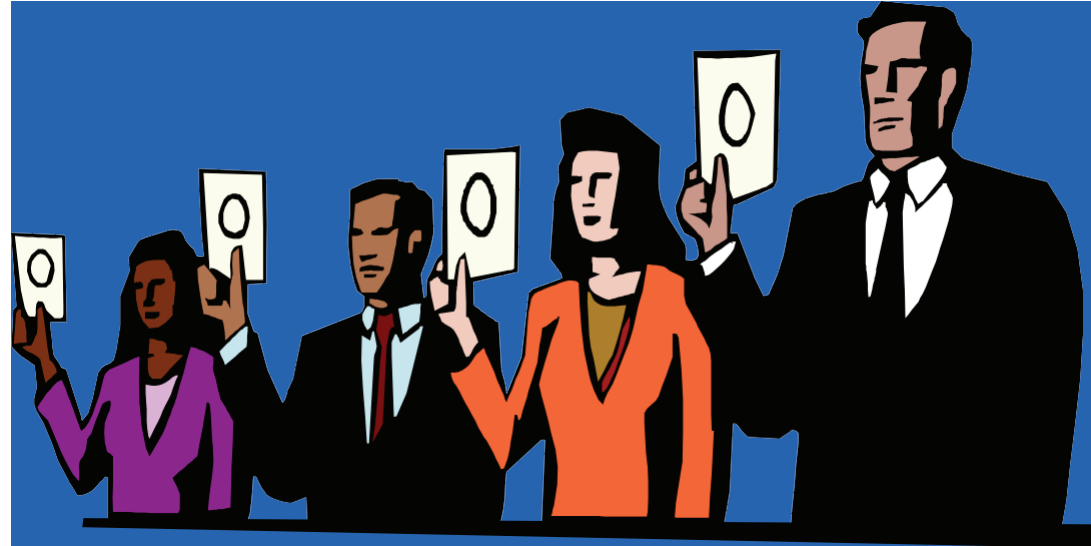
TS6000



Nominal Voltage	48V
Rated Capacity	200Ah
Working Voltage	42V-54V
Charge Voltage	52.5V-54V
Charge Current	100A
Discharge Current	100A
Discharge Voltage Cut-off	42V
Dimension	482*535*225mm
Weight	90KG



OUR TOP TEAM





Femi Numa
Co-founder/CEO

- *Over 35 years of professional experience spanning a diversity of business segments, including Government, Electronic Banking and Financial Services, Oil and Gas, Telecoms, Medical Technology, Manufacturing and Construction industries.*
- B.Sc. Computer Sciences, Advanced certification in ATM-PAS programming (NCR Training Institute, Sheldon. Birmingham. UK). Enrolled at the University College Cardiff, Wales for a master's degree program in Operations Research. Chartered IT professional member of the British Computer Society as well as the Computer Professional Registration Council of Nigeria (CPN).



Kenny Olaleye
Co-founder/Dep. CEO

- *Over 27 years of professional experience spanning a diversity of business segments, including Aviation, Manufacturing, Financial institutions, Oil and Gas and IT Services Providers (i.e., Dell, IBM and Fujitsu Computer Services*
- Pioneer Graduate of Lagos State University with BSc degree in Mathematics and BSc degree in Business information system from University of East London. An experienced Chartered IT Consultant, Certified Project Management Professional, an Agile Certified Practitioner, a Member of British Computer Society and a Member International Information System Security.



Bunmi Adebayo
Co-founder/COO

- *A transformational IT executive with over two decades leading change in business enterprise environments. His background spans Banking, Pharmaceuticals, Innovation, Governance and Leadership roles in Information Technology in many engagements in IBM business services, Sanofi Pharmaceuticals, XO communications, Executive Council; Ogun State Govt. of Nigeria, Citizen's bank N.A, Bank of America N.A and Infosys Technologies.*
- B.Sc. International Relations University of Ife, Nig. (now OAU), Grad.Cert, New Media, University of Missouri-Columbia, MO United States, Certs. in Project-Mgmt, Rutgers University New Brunswick NJ, Certificates in Technology Entrepreneurship: Lab to Market, and Entrepreneurship in Emerging Economies, HarvardX of Harvard Business School, Cambridge MA.



**Paul Kunle Ojeikere
(PKO)
Co-founder/CIO**

- *PKO is a seasoned CIO, Corporate Strategist, and multi-certified Project/ Program Manager with vast leadership experience spanning over three decades. Some of the organizations he played key roles in include Avery Group L.L.C, Trojan Technologies Inc. and The Searle company all in North America; also Central Bank of Nigeria, Globacom Telco and British American Tobacco all in Nigeria.*
- A pioneer Alumnus of Lagos State University where he graduated top of his class with a B.Sc. (Hon's.) degree in Political Science. He also has M.Sc in Information Systems Development at the London School of Economics. He was a Commissioned Officer with the Canadian Army Reserved Forces. His many certifications include PMP, PMI-ACP, TOGAF, SAFe 5.



Fabian Adeoye Lojede
Co-founder/CCSO

- *With Over 25 years' experience in the film and marketing communications industry telling both brand and creative stories that sell. A well-known face and voice Infront and behind the camera. A Serial Entrepreneur. He started out as a copywriter in the global ad agency Leo Burnett Lagos. Fabian was the Founder of, Deo Media Holdings SA, Partner Blue Flamingo Africa, Co-Founder,Go- Digital Africa, Co – Founder;1 Take Media SA, Founder, Blu Jeans Communications, and Manager creative, Rosabel Leo Burnett Lagos.*
- Qualifications: B.Sc Psychology University of Ibadan, member of ARCON (Advertising Regulatory Council of Nigeria).



Olatunde Adepoju
Co-founder/CFO

- *Olatunde is a chartered accountant and a fellow of Institute of Chartered Accountant of Nigeria. He has over 30 years professional cum entrepreneurship experience across industries and sectors. He is an experienced entrepreneur with background in banking and finance. His banking experience spans domestic and international operations, credit analysis, business development, risk management, corporate banking & special projects and turnaround management.*
- Olatunde has B.Sc Accounting (Hons) degree from University of Ilorin, 1990. He is a Fellow Institute of Chartered Accountant of Nigeria. He is an alumnus of Lagos Business School (in affiliation with IESE Business School, Spain) and Harvard Business School.



Alena Yang Xuanping
Director & Head of East
African Operations

- *Alena's speciality is in business facilitation, business development, market development, project development and acquisition, project financing and administration. A philanthropist and humanitarian participant in charitable activities and fundraising for improving the welfare and education of disadvantaged people, children and women in Africa.*
- Alena received her higher education in Asia and Europe, respectively in Laws for undergraduate study from China, and in Business Administration for postgraduate study from UK.

OUR
TECHNICAL
PARTNERS



OUR MISSION & VISION

Our Mission is to contribute to the general wellbeing of African people through a cleaner and more affordable living conditions



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Our vision is to be the leading energy technology provider and consultant of choice in Africa

THE TARANIS VALUES



- Characterized by **TRUST**. At the core of our professionalism is providing a sense of security, credibility and confidence in our stakeholders when dealing with us.
- Guided by **ACCOUNTABILITY**. We pride ourselves for taking full ownership of the outcome of projects we execute for customers. That is why we put all our resources into ensuring that all projects are delivered with utmost professionalism.
- Grounded in **RESPECT**. We are not just about achieving our vision; we place a high premium on the feelings, wishes, ideas and rights of every stakeholder we come into contact with during this process.
- Committed to **ACCESSIBILITY**. Due to the criticality of the services, we provide, we are committed to being available 24/7 to our customers.
- Belief in **NURTURING**. We want to provide physical and emotional care and nourishment to our environment, while contributing to the future sustainability of the human species.
- Driven by **INNOVATION**. We want to partner with the best value adding organizations in the world to provide cutting edge technologies in delivering services to our customers and stakeholders.
- Passionate for **SOCIAL RESPONSIBILITY**. We will have zero tolerance at environmental degradation or any consequences that will adversely affect the communities we operate in.



TARANIS
NOVUS

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