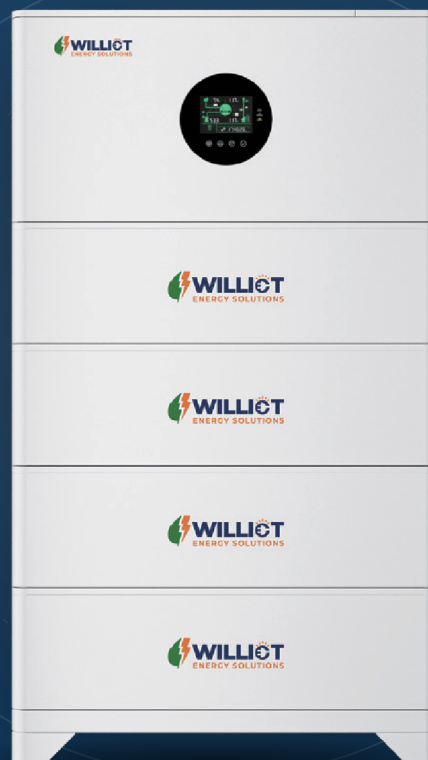


Driving the Future of Energy

Solar power and lithium battery storage for homes and businesses in Ghana. We design the system, supply the equipment, install it and stay with you long after it is switched on.

WHAT WE DO

- Home energy storage
- Commercial & industrial storage
- Solar power systems
- Project development & EPC
- After-sales & monitoring



HEAD OFFICE

Royal Ave, ECOWAS Road
Madina, Accra, Ghana

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info@williotenergy.com

PHONE

+233 20 702 0002

WEB

williotenergy.com

Inside This Profile



Ref. WES-CP-2026

01



About Williot Energy Solutions

Who we are, the group behind us and the people we serve

03

02



Vision, Mission & Values

Where we are heading and what we hold ourselves to

06

03



Why Choose Us

Seven reasons to work with us, and our equipment by the numbers

08

04



Our Products

How a system works, home storage, C&I storage, solar and inverters

11

05



Our Services

Five service lines and how we deliver a project

16

06



Quality, Safety & Compliance

Standards, battery safety, licensing and end-of-life care

19

07



Leadership & Contact

Our founder, the Williot Group and how to reach us

22

In the Williot Group, of which we are one

CHAPTER 01 OF 07 

About Williot Energy Solutions

Who we are, the group of companies behind us and the homes and businesses we work for.

IN THIS CHAPTER

Who we are	04
Part of the Williot Group	04
Built for Ghana's grid and weather	05
Who we work with	05

A Ghanaian energy company, and one of six in the Williot Group.

Solar, storage and service from one team based in Madina, Accra.

CHAPTER PAGES

04 to 05

01 · WHO WE ARE

Clean, Dependable Power for Ghanaian Homes and Businesses

Williot Energy Solutions (WES) is a Ghanaian energy company with its head office in Madina, Accra. We supply and install solar power systems and lithium iron phosphate (LiFePO₄) battery storage for homes, businesses and industrial sites.

We were founded on a simple principle: sustainable energy should be accessible, reliable and simple. Our systems store solar power during the day and keep lights, fridges, machines and networks running when the grid goes down. You can charge them from solar, from the grid, from a generator or from a mix of all three.

We handle the whole job. We assess your site, size and design the system, supply the equipment, install and commission it, and then monitor and maintain it. Our range runs from wall-mounted and stackable home batteries to all-in-one hybrid systems, commercial and industrial storage cabinets, solar panels, hybrid inverters and EV chargers.

We know Ghana's weather, its unstable grid supply and the sites that are hard to reach, and we design around them with equipment built and tested to international standards.



WILLIOT ENERGY STACKABLE BATTERY MODULES

6,500

Cycles at 80% depth of discharge (HESS range)



10 yrs

Warranty of up to 10 years on most models



46 kWh

Largest HESS home stack, with nine modules



5

Service lines, from design to after-sales



PART OF THE WILLIOT GROUP

We are one of six companies in the Williot Group. Through the group, clients can bring in sister companies for building works, specialist engineering, property and logistics.



01 · WHERE WE FIT

Built for Ghana's Grid, Weather and Workplaces

Every power cut costs something: spoiled stock, idle staff, damaged equipment, another trip to buy fuel. Many homes and businesses already own a generator and are tired of feeding it. A solar and battery system lets you make and store your own power and use it when you need it.



Grid and Generator Only

- Fuel to buy every week, at whatever the price is that week
- Noise, fumes and a machine that needs regular servicing
- A gap between the grid going off and the generator starting
- Power stops when the fuel runs out



Solar Plus Williot Storage

- Solar charges the battery during the day at no fuel cost
- Quiet, clean power with no fumes on site
- With a hybrid inverter that supports off-grid mode, the battery takes over automatically in an outage
- Live data and alerts on the Williot Energy app



HOMES

Homeowners and Families

Backup for the whole house or just the essentials: lights, fridges, fans, TV, Wi-Fi and water pumps. It also suits Ghanaians abroad who are building a home here.



BUSINESSES

Businesses and Institutions

Shops, hotels, clinics, offices, restaurants, cold rooms and factories that lose money every time the power goes off.



LARGE SITES

Developers and Industry

Estates, commercial buildings, telecom sites and microgrids that need storage at scale, planned in from the design stage.



Tailored for African Conditions

We plan every system around local weather, grid instability and access to the site, so it keeps working in the conditions it will actually face.



CHAPTER 02 OF 07

Vision, Mission & Values

Where we are heading, why we do this work and the values we hold ourselves to on every job.

IN THIS CHAPTER

Our vision	07
Our mission	07
Our core values	07

Energy independence for every customer.

The goal behind our vision and mission.

CHAPTER PAGES

07

02 · WHAT WE STAND FOR

Energy Independence for Every Customer



OUR VISION

To be the trusted global leader in integrated energy storage systems, setting the standard for performance, safety and energy independence for every customer.



OUR MISSION

To give homes, businesses and communities across Africa reliable, sustainable energy systems that let them achieve energy independence and drive the green transition.

Our Core Values

Four values, one battery: each cell carries part of the charge.

CELL 01



Integrity & Trust

We are honest about what a system can and cannot do, and we stand behind every installation we put our name to.

CELL 02



Innovation

We keep looking for smarter, more efficient ways to generate, store and manage power for our clients.

CELL 03



Excellence

Careful design, clean installation and equipment tested to recognised standards, on small jobs and large ones alike.

CELL 04



Sustainability

Solar and storage cut fuel use and emissions, and we plan for the day a system reaches the end of its life.



OUR FOUNDING PRINCIPLE

| Accessible

| Reliable

| Simple

Note: Vision and mission adapted from williotenergy.com. Value descriptions drafted for this profile from the values named on the website.

CHAPTER 03 OF 07

Why Choose Us

What you get when you work with us, and the numbers behind the equipment we install.

IN THIS CHAPTER

Seven reasons to work with us	09
How we work with you	09
Our equipment by the numbers	10
Standards our equipment meets	10

Proven energy solutions you can rely on.

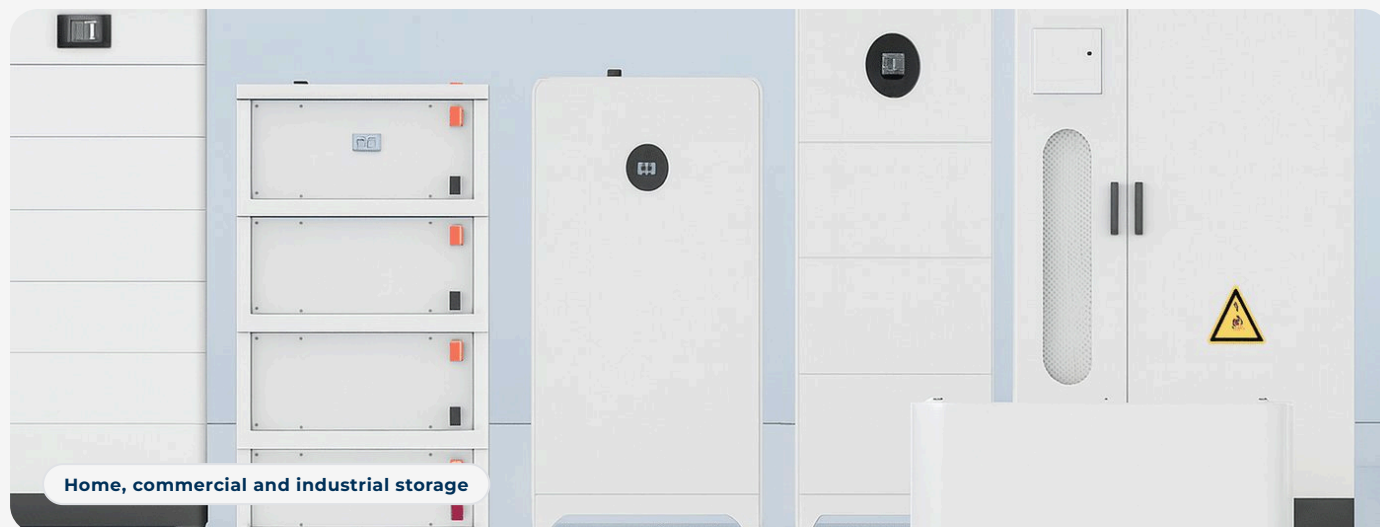
Tested equipment, local know-how and one team from start to finish.

CHAPTER PAGES

09 to 10

03 · WHY CHOOSE US

Proven Energy Systems You Can Rely On



01

Save Energy

Store surplus solar power instead of wasting it, and use it in the evening or during an outage.



02

Power on Demand

Your supply stays on whatever the time of day and whatever the state of the grid.



03

Lower Energy Costs

Store power when it is cheap or free from the sun, and cut what you spend at peak hours and on generator fuel.



04

Tailored for Africa

We design for local conditions: heat, grid instability and sites that are hard to reach.



05

Safety and Quality Assured

LiFePO₄ chemistry, a built-in battery management system and batteries certified to IEC 62619 and UL 1973.



06

Sustainable Impact

Less diesel burned, lower greenhouse gas emissions and better energy security for you and your community.



07 · A Collaborative Approach

We work with you from the first assessment to handover, and we stay involved after it with monitoring, maintenance and technical support.



03 · BY THE NUMBERS

Our Equipment, by the Numbers



6,500

CHARGE CYCLES

Rated cycle life of the battery modules in our HESS all-in-one range, tested at 80% depth of discharge, 0.5C and 25°C. Used once a day, that is well over a decade of daily cycling.



Up to 10 years

Warranty available on most battery models.



46.08 kWh

Largest HESS stack: nine 5.12 kWh battery modules connected in parallel.



20,000 VA

Peak output of the 10 kW HESS inverter module, for motor and pump start-up loads.



29

Inverter brands on our battery compatibility list, connected over CAN or RS485.



-20 to 55°C

Operating temperature range of our commercial and industrial battery systems.



24/7

System monitoring, alerts and performance tracking through the Williot Energy app and cloud platform.



STANDARDS LISTED ON OUR HESS DATASHEETS

IEC 62619

UL 1973

UN38.3

IEC 61000-6

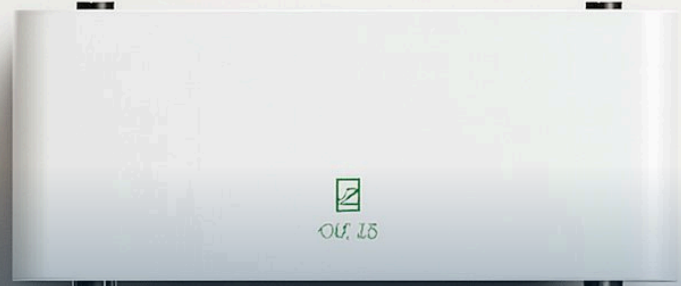
RoHS

CE (EN 62109-1)

Sources: Williot Energy HESS5K10/5K20-EU and HESS10K10/10K20-EU datasheets (cycle life, capacity, peak power, standards); williotenergy.com product pages and FAQs (warranty, compatibility list, operating range, monitoring), read on 29 September 2026. Figures apply to the models named; ask us for the datasheet of any product you are considering.



Epothermal Noogoox



00, 15



CHAPTER 04 OF 07

Our Products

Batteries, all-in-one systems, inverters, solar panels and chargers for homes, businesses and industry.

IN THIS CHAPTER

How a Williot system works	12
Home energy storage: the HESS range	13
Commercial and industrial storage	14
Solar panels, inverters and EV charging	15

From a 10 kWh home stack to containerised storage.

One range of LiFePO₄ storage for every scale of site.

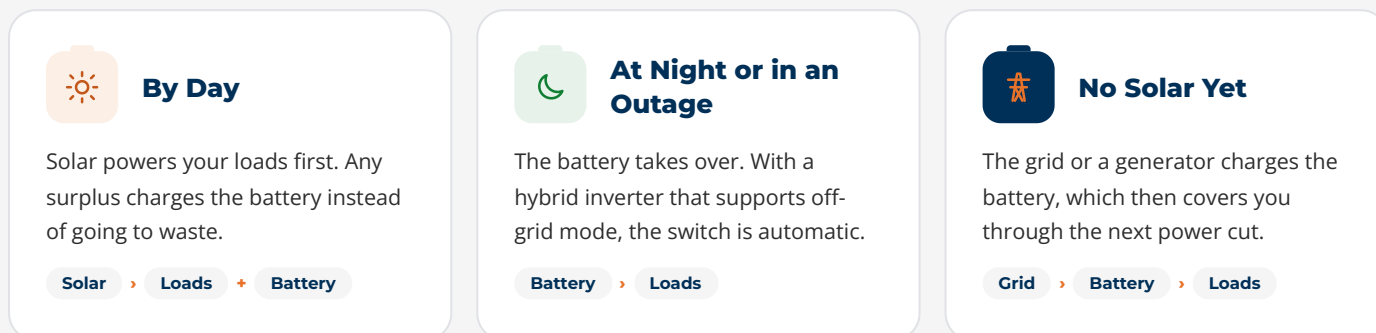
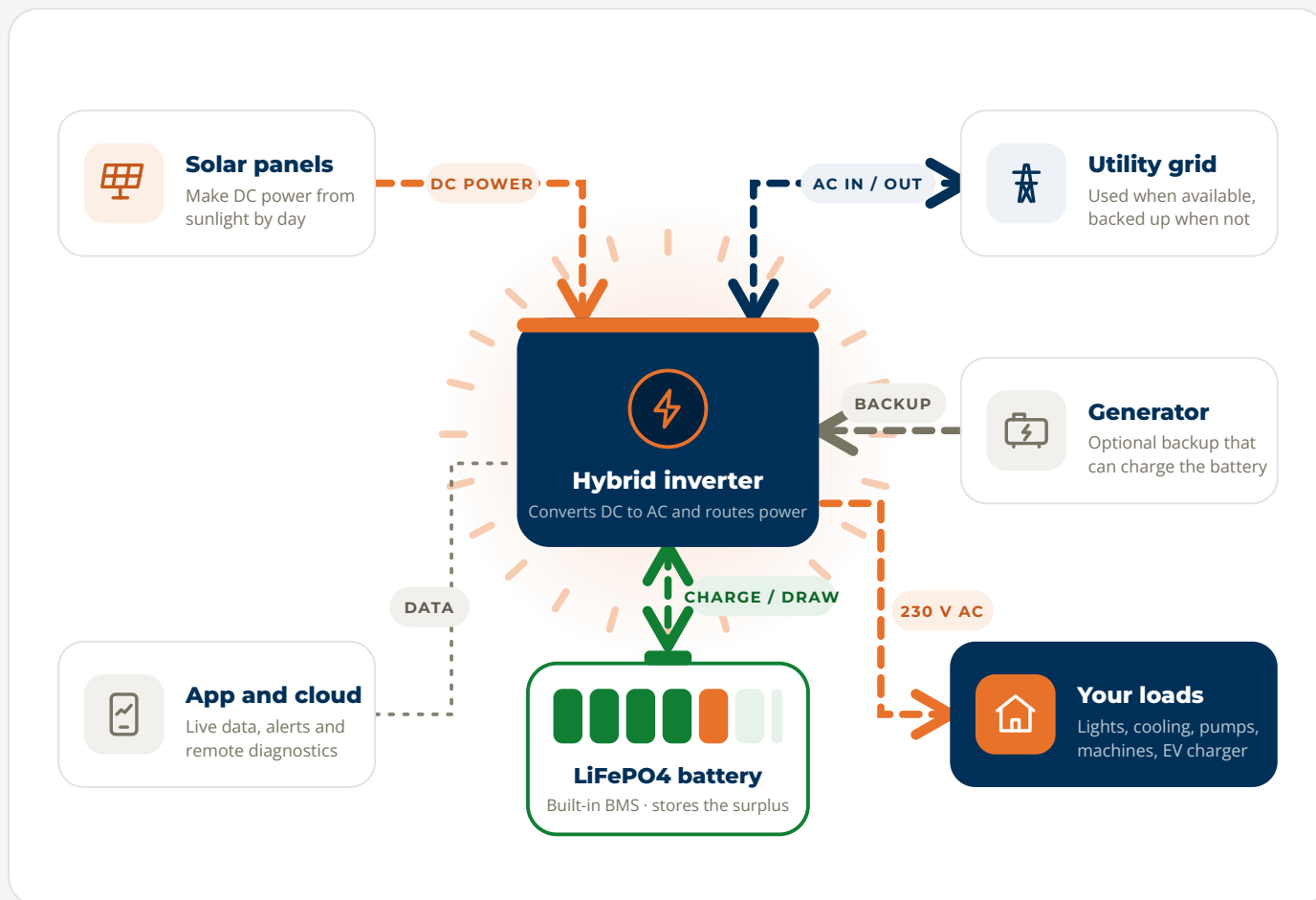
CHAPTER PAGES

12 to 15

04 · HOW IT WORKS

How a Williot System Keeps the Power On

At the centre of every system is a hybrid inverter. It takes power from the solar panels, the grid or a generator, charges the battery and decides, moment by moment, where your electricity comes from.



Systems can be set up on-grid, off-grid or hybrid. Diagram is illustrative: we size every component to your site and your loads.

04 · HOME ENERGY STORAGE

All-in-One Home Storage: The HESS Range



Each HESS unit stacks a hybrid inverter module on top of 51.2 V LiFePO₄ battery modules. It goes in as one piece, charges from solar, the grid or a combination of both, and grows as your needs grow.



Inverter and battery in one
 Plug-and-play modules, no loose wiring between them



5 kW or 10 kW output
 Pure sine wave, 230 V single phase



Grows to 46.08 kWh
 Up to nine battery modules in parallel



6,500 cycles
 At 80% depth of discharge, 0.5C, 25°C

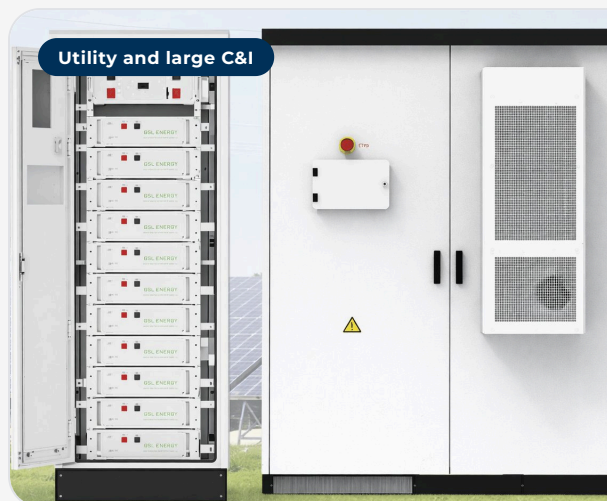
Specification	HESS5K10-EU 1 inverter · 2 batteries	HESS5K20-EU 1 inverter · 4 batteries	HESS10K10-EU 1 inverter · 2 batteries	HESS10K20-EU 1 inverter · 4 batteries
BATTERY				
Chemistry and voltage	LiFePO ₄ (LFP), 51.2 V			
Energy	10.24 kWh	20.48 kWh	10.24 kWh	20.48 kWh
Rated capacity	200 Ah	400 Ah	200 Ah	400 Ah
Cycle life	6,500 cycles (80% DoD, 0.5C, 25°C)			
Maximum expansion	9 battery modules in parallel (up to 46.08 kWh)			
INVERTER OUTPUT				
Rated output power	5,000 W	5,000 W	10,000 W	10,000 W
Peak power	10,000 VA	10,000 VA	20,000 VA	20,000 VA
Output	230 Vac single phase, pure sine wave, 50/60 Hz			
CHARGING INPUTS				
Solar input (MPPT)	5,500 W	5,500 W	5,500 W + 5,500 W	5,500 W + 5,500 W
Max. solar open-circuit voltage	500 Vdc	500 Vdc	500 + 500 Vdc	500 + 500 Vdc
Max. solar / grid charging current	100 A / 60 A	100 A / 60 A	200 A / 120 A	200 A / 120 A
Grid or generator input range	90 to 280 Vac			
BUILD AND STANDARDS				
Battery module (W × D × H, weight)	655 × 353 × 205 mm, 46 kg			
Inverter module (W × D × H, weight)	655 × 353 × 210 mm, 19.6 kg		655 × 353 × 328 mm, 33.1 kg	
Protection and cooling	IP20, natural cooling			
Battery standards	IEC 62619, UL 1973, IEC 61000-6:2019, RoHS · Transport: UN38.3, MSDS			
Inverter standards	EN 61000, C2, CE (EN 62109-1)			

Source: Williot Energy HESS5K10/5K20-EU and HESS10K10/10K20-EU datasheets. Also in our home range: wall-mounted Power Storage Wall units, stackable 51.2 V modules, Power Brick batteries from 5.12 to 20.48 kWh, floor-standing units and high-voltage stacks. Ask us for their datasheets.

04 · COMMERCIAL AND INDUSTRIAL STORAGE

Storage at Scale for Business, Industry and Microgrids

For larger sites we supply pre-assembled cabinets and containers that arrive ready to connect, with batteries, power electronics, cooling, fire protection and energy management in one outdoor enclosure.



372 kWh Liquid-Cooled Battery Energy Storage System

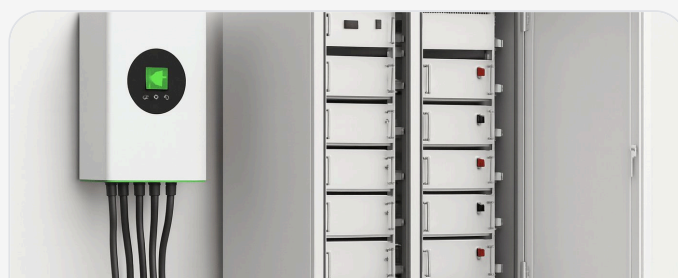
Battery energy storage system (BESS) for large sites

- Even temperatures.** A central liquid cooling system with co-current airflow keeps cell temperatures within 3°C of each other across the container.
- Built for outdoors.** Water cooling, fire protection and DC control sit in one enclosure, which makes transport and installation simpler.
- Room to grow.** Built with 280 Ah cells and designed to take 314 Ah cells later, for more storage in the same footprint.



215 kWh, 768 V C&I Cabinet

- Power modules, batteries, cooling, fire protection, monitoring and energy management in one outdoor unit
- For microgrids, solar-diesel hybrid sites and solar-storage-charging hubs
- Local control screen, strategy settings and remote upgrades



Mini C&I System, Up to 130 kWh

- Inverter, batteries, controls, cooling and safety systems pre-configured in a rugged outdoor enclosure
- Tier 1 LiFePO₄ cells with a multi-level battery management system
- Modular: expands to 130 kWh, with rack-mounted options

30 kWh to 5 MWh

Range of our C&I systems, from single cabinets to containerised installations.

WHERE THEY WORK

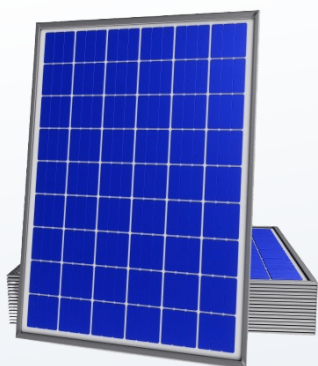
- Factories
- Warehouses
- Data centres
- Commercial buildings
- EV charging stations
- Telecom base stations
- Microgrids

Peak shaving, load shifting, emergency backup and solar-plus-storage with EV charging. Systems run grid-connected, off-grid or hybrid, connect in parallel for larger projects and report to an energy management system (EMS) and cloud platform for remote monitoring.

04 · SOLAR, INVERTERS AND CHARGING

Everything Else a Solar System Needs

We supply complete solar kits as well as individual components, so a new system arrives with every part it needs. We also supply installers and resellers on wholesale terms.



Solar Panels

High-efficiency monocrystalline PERC modules for rooftops and ground mounts.

- 550 W mono PERC
- 620 W mono PERC



Inverters

Hybrid and off-grid inverters that manage solar, battery, grid and generator together.

- Three-phase hybrid, 8, 10 and 12 kW
- On/off-grid solar inverter, 16 kVA



EV Charging

Chargers for homes and businesses, and charging built into solar-plus-storage systems.

- Home and workplace chargers
- Solar + storage + charging hubs

Balance of System

The smaller parts that make an installation safe and tidy.



MC4 connectors, 20 pairs



Solar PV cable, 100 m



DC combiner box, 8 in / 6 out



Trays for Power Brick batteries

29

Inverter brands

Our batteries talk to the inverter over CAN or RS485 and work on low-voltage (40 to 60 V) and high-voltage platforms.

ON OUR COMPATIBILITY LIST

- Deye

Growatt

GoodWe

Solis

SMA

Victron Energy
- Schneider Electric

Sunsynk

SolaX Power

SRNE

Sofar
- Luxpower

Voltronic Power

OutBack Power

Hoymiles

INVT
- SAJ

and 12 more

Brand not listed? We test it, adjust firmware and communication settings where needed, and supply wiring guidance and BMS configuration files.



05

CHAPTER 05 OF 07



Our Services

From the first site visit to monitoring your system years later, one team looks after it.

IN THIS CHAPTER

Five service lines	17
Free consultation and wholesale supply	17
How we deliver a project	18
After-sales support	18

One team, from first call to years of reliable power.

Design, supply, installation and after-sales under one roof.

CHAPTER PAGES

17 to 18

Five Service Lines, One Team



Tell us what you need to keep running
and we will tell you what it takes.



Design and supply of on-grid, hybrid and off-grid solar arrays, sized to your roof, your loads and your budget.



Large-scale and modular battery systems that store power and manage how and when it is used.



Intelligent monitoring, integration of inverters with the energy management system (EMS), and thermal and maintenance design.

5/5



Turnkey delivery of industrial, commercial and community-scale installations. Under EPC (engineering, procurement and construction) we take responsibility for the whole project under one contract.

● ● ● ● ●



Maintenance, monitoring dashboards, remote diagnostics and tuning to keep your system performing.



A no-cost first conversation about your power needs, your site and your options.

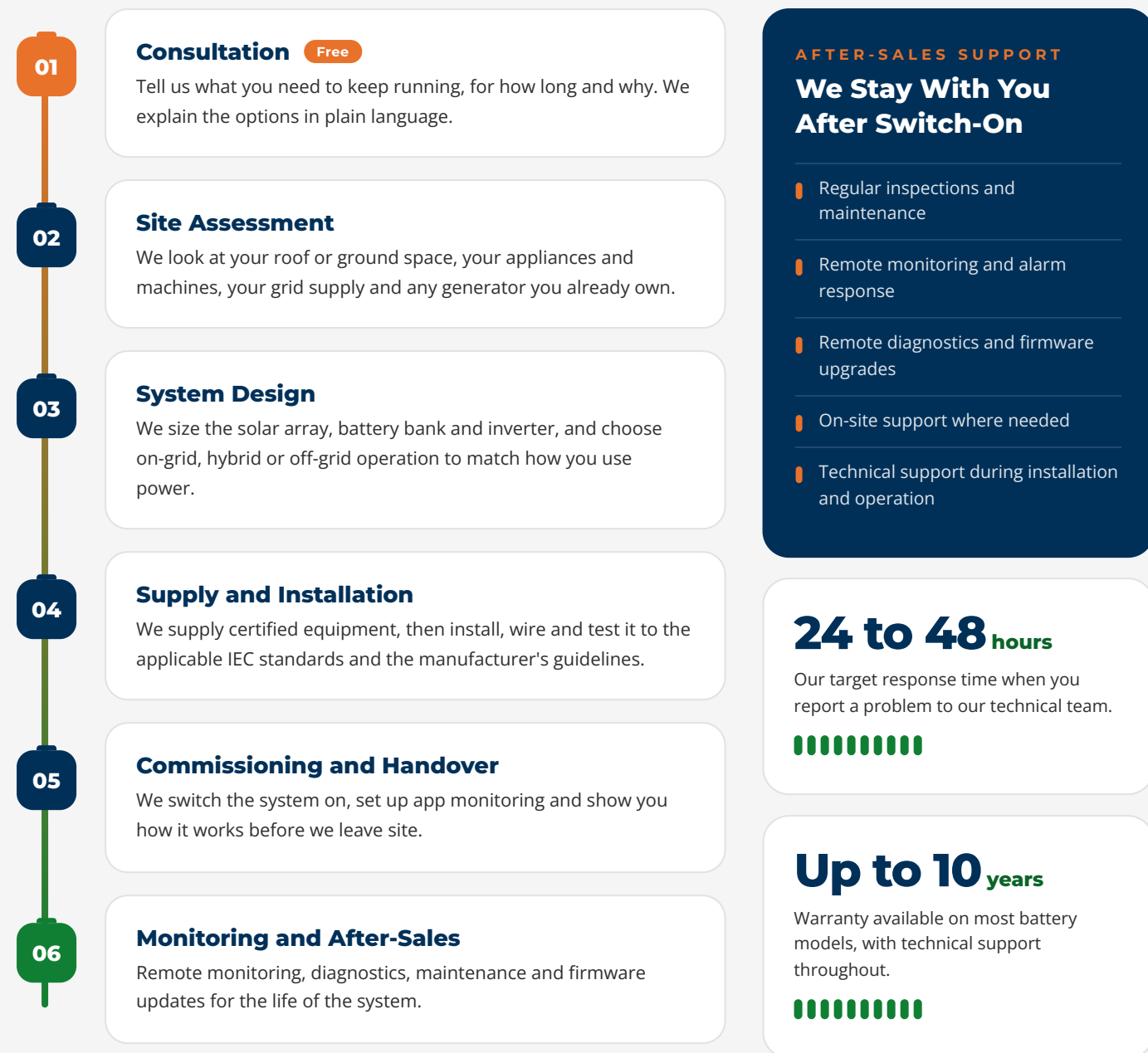


System supply, integration guidance and wholesale terms for battery and solar components.

05 · HOW WE DELIVER

From First Call to Years of Reliable Power

We take every project through the same six stages, whether it is a single home or a factory, and we stay involved once the system is running.





Start With Stage One

Book your free energy consultation on +233 20 702 0002 or at info@williotenergy.com.

[Get in touch →](#)

Note: The six stages describe how the services listed on williotenergy.com fit together and were drafted for this profile.

WILLIOT



06

CHAPTER 06 OF 07

Quality, Safety & Compliance

The standards our equipment meets, how our batteries protect themselves and what happens to a system at the end of its life.

IN THIS CHAPTER

Standards and certification	20
Battery safety by design	20
Licensing and regulation	20
Decommissioning and e-waste	21

Safe to install, safe to live with, safe to retire.

Our approach across the full life of a system.

CHAPTER PAGES

20 to 21

06 · QUALITY AND SAFETY

Safety Designed In, Standards Checked

A battery system sits in your home or on your premises for many years. We choose equipment tested to recognised international standards, and we install and maintain it following the manufacturer's guidelines.

STANDARD	WHAT IT COVERS	APPLIES TO
 IEC 62619	Safety requirements for lithium cells and batteries used in industrial and stationary applications.	HESS battery modules
 UL 1973	Safety of batteries for stationary energy storage and auxiliary power.	HESS battery modules
 UN38.3	United Nations tests that lithium batteries must pass before they can be shipped.	Battery transport (with MSDS)
 IEC 61000-6	Electromagnetic compatibility: the equipment neither disturbs nor is disturbed by other electronics.	HESS battery modules
 RoHS	Restriction of hazardous substances in electrical and electronic equipment.	HESS battery modules
 CE (EN 62109-1)	Safety of power converters used in solar photovoltaic systems.	HESS inverter modules



Stable Chemistry

Lithium iron phosphate (LiFePO₄) cells are chosen for thermal stability and long service life.



Built-In BMS

Every battery has an intelligent battery management system that keeps it within safe limits and talks to the inverter.



Layered Protection

Cell-level temperature control plus over-voltage and over-current protection in the battery pack.



Fire and Fault Warning

Our commercial systems add smoke and fire detection, fire protection and a fault warning system.



Licensing and Regulation

Williot Energy Solutions is a registered company under the laws of the Republic of Ghana. In March 2026 we applied to the Energy Commission of Ghana for a licence to operate in the renewable energy sector, covering two activities:

Installation and maintenance of renewable energy systems

Import of renewable energy equipment and components

Our Decommissioning and E-Waste Management Plan, prepared in line with Energy Commission and EPA Ghana requirements, supports that application.

A Plan for the Day a System Retires

We work down the list and dispose of material only when it cannot be recovered.

Reduce

Reuse

Recycle

Dispose

Assess the site, list every component and material, set a method and schedule, and notify the regulators where required.

Shut down, isolate and prove the system dead before work starts.
Control site access and use proper PPE

Remove panels, inverters, batteries and structures in sequence and with care, then label, record and store each item.

Clear all equipment and waste,
and leave the site safe, stable and
environmentally compliant.

WHAT WE SEPARATE	WHERE IT GOES
Solar PV modules	Authorised recycling facilities, for recovery of glass, aluminium, silicon and other materials
Batteries (lithium-ion, lead-acid and others)	Licensed battery recyclers or EPA-approved hazardous waste facilities
Inverters and electronics	Processed to recover valuable metals and components, with the rest handled under e-waste regulations
Metals: mounting structures and cabling	Recovered and recycled, with priority on aluminium, steel and copper
General waste: plastics and insulation	Handled under EPA Ghana approved practices; hazardous items go to EPA-approved facilities

- Waste moved only by carriers licensed by EPA Ghana, in line with Act 917
- Waste manifests, tracking records and disposal certificates kept on file
- A completion report to the Energy Commission and EPA Ghana where required



Where a component still works and the law allows it, we reuse it before we recycle it.

We review the plan whenever Ghanaian law, Energy Commission or EPA guidance, or recycling technology changes. Plan dated 2 March 2026.

CHAPTER 07 OF 07

Leadership & Contact

The engineer who leads Williot Energy Solutions, the group of companies behind us and how to reach us.

IN THIS CHAPTER

Our founder	23
The Williot Group	23
Contact details	24
Book a free consultation	24

Ready when you are.

Madina, Accra · +233 20 702 0002 ·
info@williotenergy.com

CHAPTER PAGES

23 to 24

07 · LEADERSHIP

Led by an Engineer

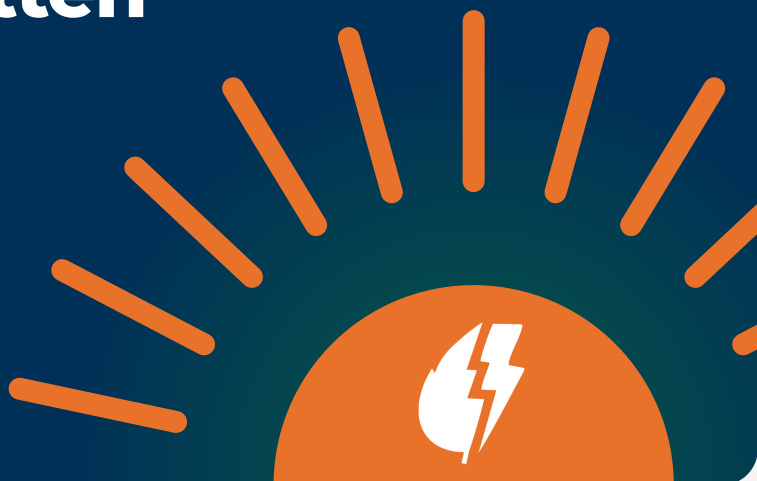


FOUNDER

Dr William Tetteh

Founder and Executive Engineer

Managing Director



One Group, Six Companies

Williot Energy Solutions belongs to the Williot Group. Our sister companies cover construction, engineering, property, trade and logistics, so a client can bring several of us into one project.



Williot Energy Solutions

Solar, storage and energy systems



Williot Construction & Engineering

Civil and structural construction



Hampshire Engineers

Mechanical, electrical and specialist engineering



Williot Properties and Estates

Property development and management



Casav Global Co. LTD

Trading, imports and exports



Williot Logistics

Freight and supply-chain services



Planning a New Building or Estate?

Bring us in at the design stage and we will plan the energy system alongside the construction and engineering teams.

[Talk to us →](#)

Let's Power Your Home or Business

Tell us what you need to keep running. Your first energy consultation is free, and our solutions team will design a system around your site, your loads and your budget.

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Book a free consultation →



WILLIOT ENERGY SOLUTIONS
PART OF THE WILLIOT GROUP

Company Profile 2026
Issued 29 September 2026
Ref. WES-CP-2026

WILLIOT ENERGY SOLUTIONS

Driving the Future of Energy