

donsun.

Donsun Technology

Company Profile

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Shenzhen Donsun Technology Co., Ltd.

» **Devoted to providing innovating but reliable metering solutions to customers to improve their revenue and consumers' satisfactory level.**



Introduction

Donsun Technology Co., Ltd is a professional team in smart metering industry. With R&D team from different countries, we are devoted to provide innovational but reliable metering solutions to customers to improve their revenue collection and end user satisfaction.

We work with clients big and small across the world from Indonesia, Singapore, Germany, Ghana, Columbia and many others. We believe that analysis of your company and your customers is key in responding effectively to your electrification needs and we will work with you to fully understand your business needs.

We have different teams that specialize in different areas of technology of metering and communication, so you can be sure that you won't receive a generic service and although we can't boast years and years of service, we can ensure you that is the best in this industry.

Our teams are up to date with the latest technologies, metrological and communication trends and are keen to prove themselves in this industry and that's what you want from a solution provider, not someone who is relying on the same way of doing things that worked 10 years, 5 years of even a year ago.

Whatever the level of support you require, we are sure that we will have a package that meets your needs. All our virtual professionals are highly experienced in the areas in which they work and have been through a thorough development process to ensure they deliver to the high standard that you would want for your business.

FOUNDED

Shenzhen, China

INDUSTRY

Metering Solution
Energy Management

www.donsuntech.com



- Serving a little better everyday.

— We will work with you to fully understand your business and your target customer to deliver the best solution. Using the outcome from the Project Analysis, we will put together a plan for the most effective solution to get the best results for your project and investment.

Our Strength

 – Up-to-date

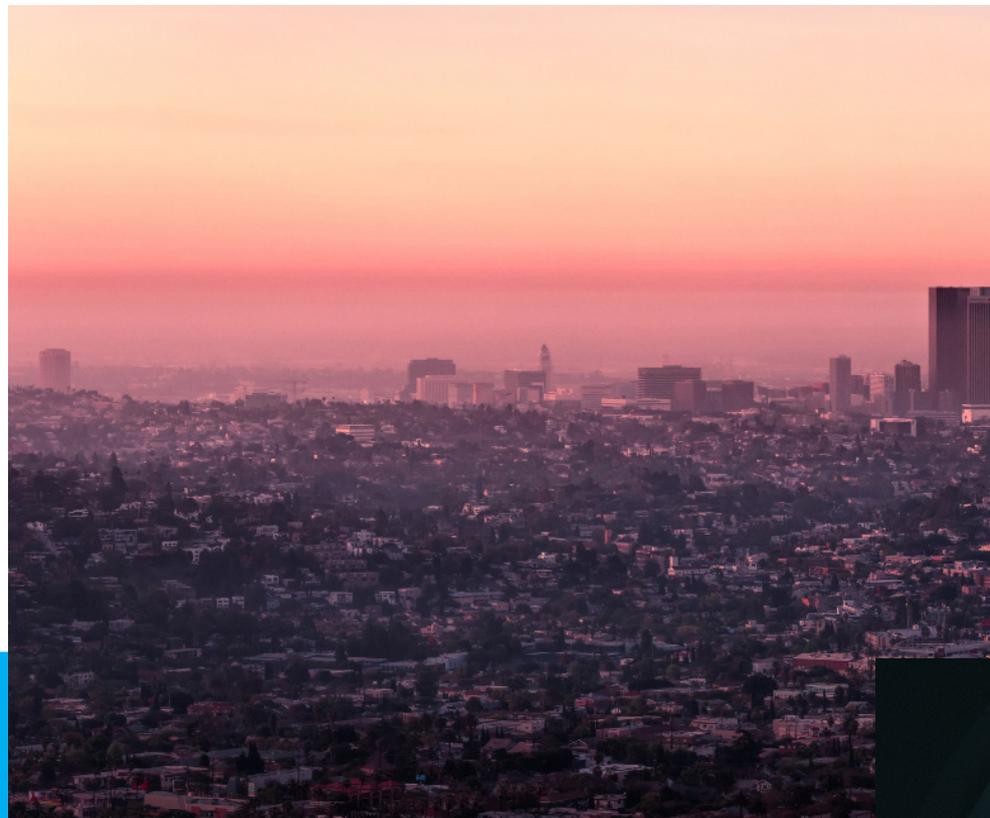
Our offer are always up-to-date.

 – Secured

We highly value the security of our customer today and tomorrow.

Technical Outreach

  
Interoperable Eco-friendly Responsible



Excutive Summary

We are a professional and flexible design company and manufacturer for metering, communication and manufacture.

We work flexibly with clients to fulfil their project and business needs. Whether you need to create a project from scratch, including solution provision and project delivery to a manufacturer we are confident you will be pleased with the results.

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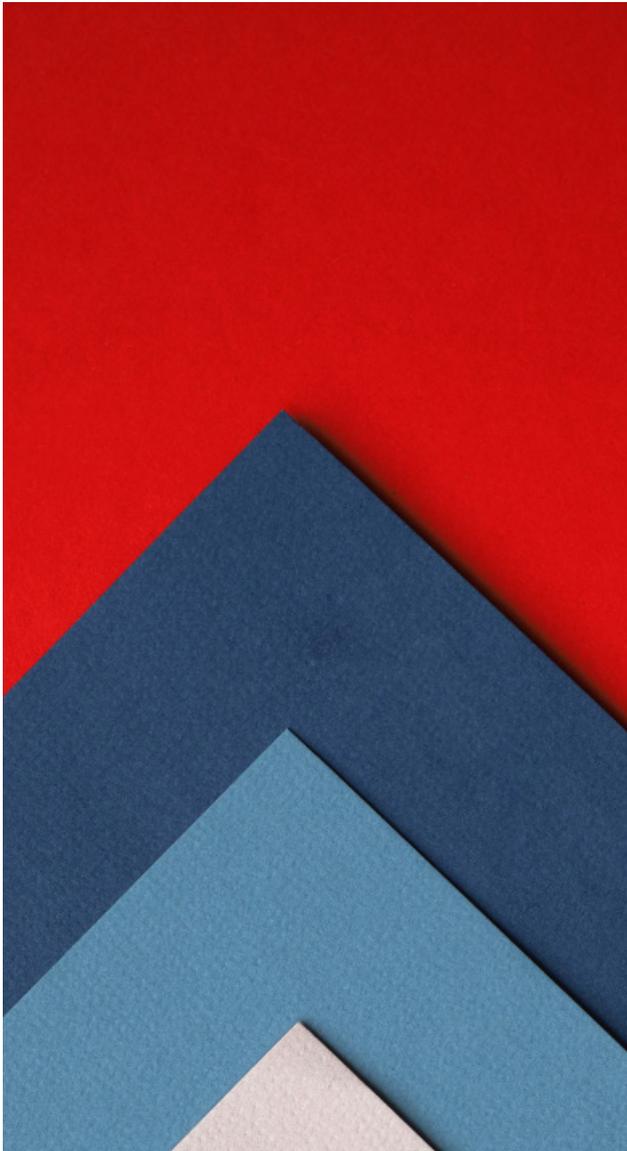
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03 // OPENING MESSAGE

—
Innovation is our key discipline and principle for the success of our partner and customer.

Chair's Speech

—
The core of our success is to provide innovating solution to customers and partners for their own success.

— Our industry and our customers continue to face unprecedented change as their traditional business model is challenged by digital transformation, regulatory scrutiny and higher customer expectations. With the proliferation of connected meters and sensors creating enormous amounts of data, we are empowering our customers' ability to harness the power of intelligent, connected devices through advanced networks and data analytics to improve the efficiency of cities and utilities for decades to come.

From managing aging infrastructure to enhancing the consumer experience, DONSUN brings solutions that increase the resiliency and reliability of our customers' services.

We made tremendous progress driving improved operational efficiency to many areas of our business while managing through both external and internal challenges, mainly with our supply chain. We have made several internal adjustments and believe we have the right structure in place to execute on our strategy, serve our customers and be a leader in the industries we serve. We remain focused on delivering value to our customers and partners as a leader in the energy, water and smart city space.

As we look ahead to the next chapter for Donsun, I'm excited about what the future holds as we continue to reaffirm our strategy to be the leading IoT company in the energy, water and smart city space. Together with our customers, we will work to address the challenges they face and join forces to create a more resourceful world.


William Wang
General Manager

Roadmap 2020

—
Supporting Continued Growth

1. Innovating for Utilities
2. Being a trustworthy partner
3. Delivering continued growth



There are no secrets to success. It is the result of preparation, hard work, and learning from failure.



Product Committed

DONSUN are committed to providing the most optimal smart metering product and solution to our customers and partners, technically and commercially.



Customer Oriented

DONSUN are enthusiastic about the success of our customer.



Future Embracing

DONSUN are transformed to embrace the future smart grid for a future IoT smart grid.



Prosperity Pledged

DONSUN continue to find ways to work better together with our partners – including our customers, suppliers, and communities.



Hello,
Let us Introduce you an
Innovating smart metering solution provider

Business so far

Since its establishment, DONSUN have been striving to be the first smart metering solution provider. Innovation is in our DNA to offer the most advanced, robust, flexible for all customers and partners.

Till today, we have been providing solutions for customers and partners from all over the world, including Korea, Japan, Singapore, Indonesia, Germany, Brazil, Chile, Ghana, Tunisia and many other countries.

We provide not only products, but the full package of solution from manufacturing facility establishment, quality management over production, with a plus service of metering safety, data analytics, parts recycling, data record management, report generation and maintenance, business navigation and financial management for this industry.

Our team is made up by professionals of the metering and communication industry with more than 15 years experience. For all products we made, they are designed and produced according to the latest IEC standards, including STS Edition 2.0 and DLMS Suite 3.1. Our production have been upgraded to automatic calibration and testing for zero tolerance on quality defect.

We are determined to improve our customers' business resilience to be future smart grid ready, while empowering our customers to lower the cost of smart metering pioneering and exploration.

DONSUN is helping the customers not just with the adoption of new technology like Smart Meter and AMI, but also the transformation of business logic and the new way of working to meet the challenge of future energy distribution.

We are prepared for any challenges to bring the best outcome for our customers and partners without reservation.

Every project has its challenges, and every project has its rewards.

Production Announcement

We have two manufacture centers based in Shenzhen, China to meet the growth of orders.

2016 - Commencement with 20,000 meters delivered.

2017 - More than one million meters were produced and shipped.

2018 - More than three million meters were produced, shipped and delivered.

260%

OUR ANNUAL AVERAGE
TURNOVER GROWTH SINCE
ESTABLISHMENT

200%

Production capacity were increased annually with scalability production technics.

185%

Production efficiency grows annually at a 85% pace, with the implementation of automatic production.

350%

Production space increases since establishment. The full automation of production is under making.

45%

The dependence on human workers has been reduced by 45% with the automation calibration and testing.



Production Capacity

With two factories based in Shenzhen, now we are producing more than 3 million units of meters, but the production capacity is 5 million annually and can be scaled up easily with our automation production system.

Expertise skills of us

Experience skill setup

Meters

Communication

Factory

DONSUN's expertise covers not just the metering products, but also communication application in metering industry, including low consumption communication deployed in IoT, such as RF, LoRa, PLC or the latest NB-IoT.

Besides, our experiences in establishing factories for smart meter production is unrivalled. We are offering the most optimal and effective establishment package to partners all over the world.



SMT

Automated placement and soldering of electronic components on printed circuit board.



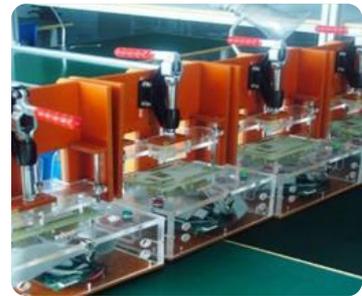
DIP

Manual insertion of through-hole components onto SMA and Automatic wave solder process.



IPQC

X-Ray and Optical Inspection equipment ensure accuracy and consistency.



Calibration

Fully automated calibration and testing to eliminate all possible errors.



Assembly

Through-put capabilities of producing in excess of 300 000 meters per month.



Packing

Semi-automated packing process with full shipment record in MES.

Technical Strength

“

Only to the latest international standards shall we follow and comply to. We shall offer the future ready solutions only.



Certification Obtained

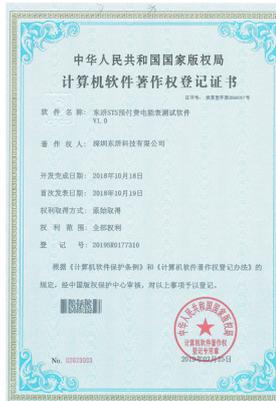
Till today, we have obtained ISO 9001, STS, DLMS Certificates, and more than 100 patents in hardware and software design.

All certificates obtained are according to the latest international standards, such as STS Edition 2.0 and DLMS Suite 3.1.

We always provide the most up-to-date solution to customers and partners to ensure their easy embracing the future smart grid and adaption for the IoT era.

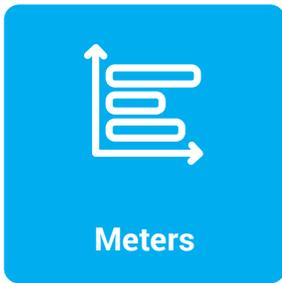
Besides the product, our solution is also taking consideration of easy integration into smart city, smart homes as well smart grid.

For production design for partners and customers, we make the future ready solution for automatic production principle for the next Industry 4.0 era readiness.



Product Portfolio

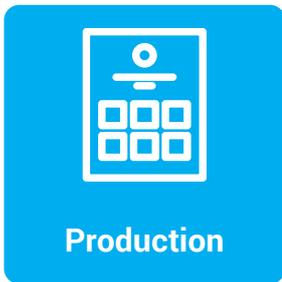
We offer the full range of smart metering package from Smart Grid Solution, Smart Metering MDM, HES, DCU and smart meters, in addition to Smart Prepayment Metering. Our technical expertise covers also the full scale of automation production establishment for partners.



Meters

Meters

1. Smart Meters
2. Prepayment Meters
3. Communication modules
4. Data Concentrator



Production

Production

1. Full production design and establishment
2. Establishment in other countries for partners

Smart System

1. Integrating multiple collection systems, billing calculation, distribution management data and do sophisticated validation, estimation and editing of meter data.



MDM & HES



i-Metering

i-Metering

1. Site deployment and maintenance activities for metering device and customer payment online



E-Submetering

E-Submetering

1. Solution for smart submetering for IoT integration

Smart Grid Solutions

1. Smart distribution network and solution
2. Safety protection for distribution network



Smart Grid



Market Coverage



Generate Competitiveness

Elevate to Excellence

No market can be covered without the right competitive products, but elevating to excellence is another story. Luckily, we are making it ready for you.

Valued Customers

It's the value of service

We understand the importance of valued customers, which is why we always consider from the perspectives of our customers. We see the business from the eyes of the customers. Consider what's important to customer's market and how our product and service will benefit them. What problem does it solve, how will it help the customers overcome obstacles or do their jobs better? We work with customers to succeed not just by focusing on features but also benefits. Consistently work to improve customer satisfaction is another important principle in our daily work through out R&D and sales.

We uphold the model of customer being always right rigidly and work to boost the satisfaction of customers and consumers. Through our relentless efforts, we have served customers big and small sizes from different countries around the world with annual growth of more than 500%.

While we are proud of the achievement we made so far, we are determined to give the best we can to our customer to help them with sustainable success and business in different aspects.

A well-intended annual sales growth.

The good record through the years of our establishment is just a natural outcome of our good-faith business with partners and customers.

215%

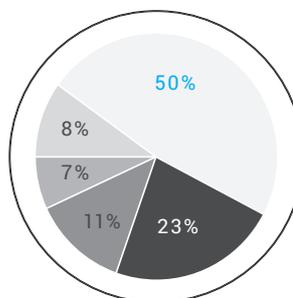
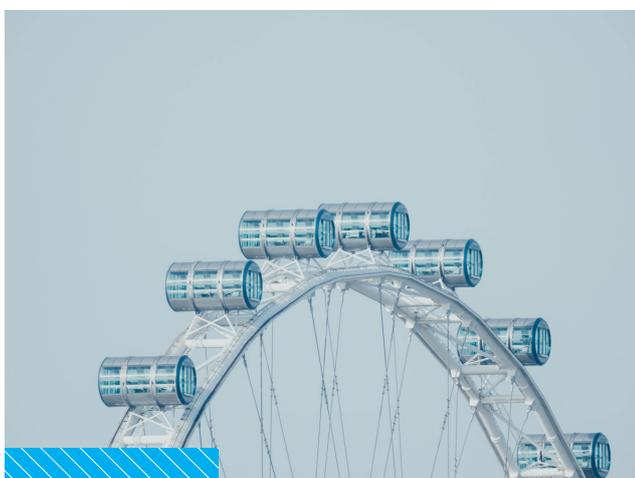
2018 - We made big progress this year with orders from customers from East Asia.

160%

2017 - Revenue increased at good pace to around 3M US\$ at the second year.

US\$ 2M

2016 - Revenue generated from scratch and made a good start.



- Asia Pacific
- East Asia
- Africa
- South America

Market Wheel

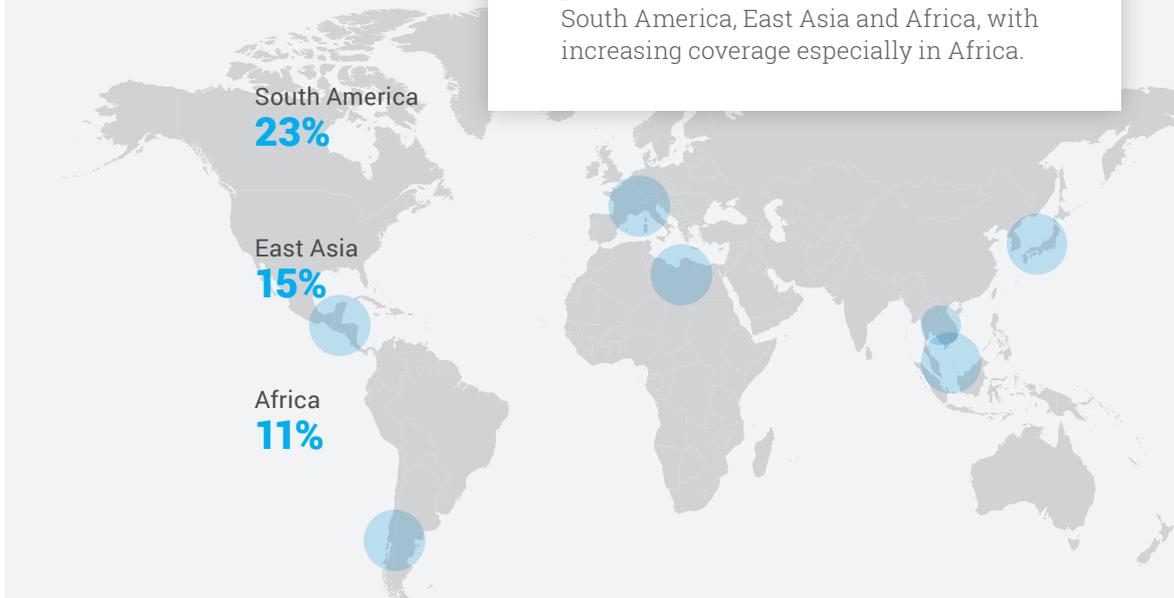
We are targetting to provide our best product and services to Asia Pacific, South America, East Asia and Africa, with increasing coverage especially in Africa.

Asia Pacific
50%

South America
23%

East Asia
15%

Africa
11%

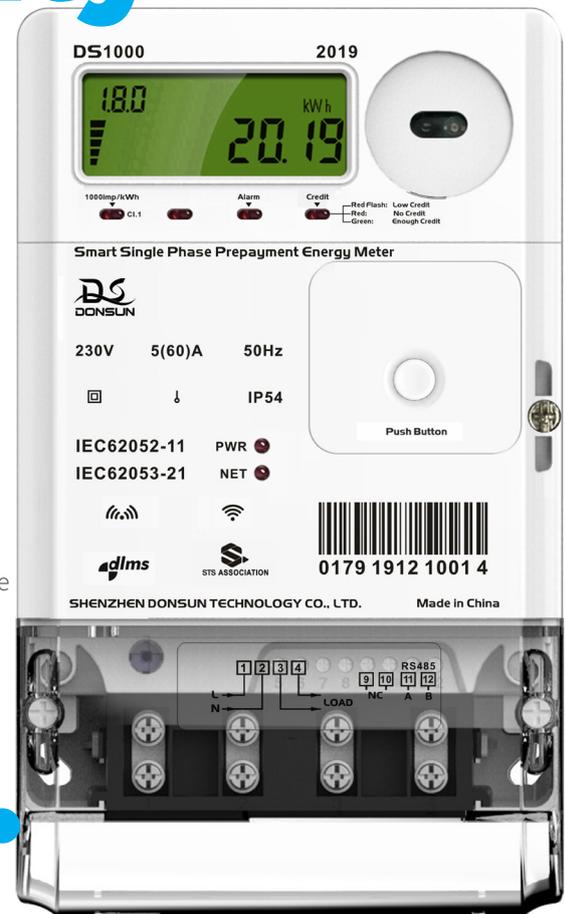


Elevate the industry experience through quality



Prepaid Metering Portfolio

DONSUN specialises in prepayment solutions and therefore our metering product range is one of the most comprehensive in the industry. Customers are able to select from single phase devices for the residential sector, through to three phase devices for light industrial applications. We also offer a variety of metering footprints, to enable cost effective solutions for the deployment of prepayment with different communication.



Generation I

Traditional prepayment meter, without demand for communication.



Generation II

Smart prepayment meters with online communication features.



- » **Robust**
- » **Reliable**
- » **Smart**

DONSUN Axima prepayment system improves customer convenience - no more paper tokens as instant credit is updated via the internet and tariff changes can be updated remotely.



Advanced Features

- ☑ High accuracy class throughout service life of the meter.
- ☑ Exchangeable communication modules with various output.
- ☑ Extensive data record and high security level protection against illegal tampering.



Smart Metering Infrastructure Prepayment Axima System

Architecture

DONSUN Axima prepayment solution provides the end customer a seamless energy prepayment experience by integrating DONSUN's meter, CIU and Head End system. With top notch meters coupled with different communication options (RF, PLC, Cellular, etc.) to meet different market requirements.

Solution

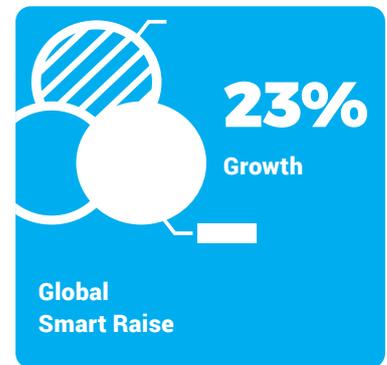
Axima provides real time communication in between the meters and head end software is assured. Various vending mediums such as POS, Web Mobile among others provide the end consumers the convenience for top-up and other transaction.

The superior solution.

Integrated with utility devices that meet international & regional standards: IEC 62056, DLMS, IDIS, ANSI, etc. Interchanges information with other systems that meet IEC 61968.

Smart Meter Solution

Smart metering paving smart grid. DONSUN provides whole portfolio metering products and solutions covering grid metering, C&I metering and residential metering with various communication technologies and systems.



Feature Summary

- Bi-directional & 4-quarants measurement
- Active/Reactive/Apparent energy with TOU
- Calendar management with DST
- MD (maximum demand) measurement
- Prepayment/post-payment mode switching
- Event log/Alarm/Event notification
- Tamper detection of cover open/magnetic field

Advantage Analysis

- Monthly/daily/hourly/15-min profile data
- Remote (dis)connection
- Remote firmware update
- DLMS/COSEM compliant
- HLS_5 supported & security suite 0
- Optical/RS485 for local communication
- Replaceable communication module

Rebuilding Value and Efficiency

We offer utilities, sophisticated system, world-leading technology and smart devices that can solve all today's and future's utilities problems in measuring sector. DONSUN provides flexible, intelligent innovative technology and applications that increase efficiency, improve stakeholder satisfaction, and turn huge flow of raw information into power.

- **01 // TARGET ONE**
Build a whole set of complete metering solution suitable to user's demand.
- **02 // TARGET TWO**
Provide the most suitable products and solution for different customers.
- **03 // TARGET THREE**
To reduce line loss, tamper and enhance the power grid reliability.

Smart Metering Communication Concentration Hub

Ethernet communications hub for all your smart metering devices

Automatic network installation, configuration, management
 Uplink communication can be via GPRS modem & Ethernet connection Downlink communication can be through PLC/RS485/RF
 The modem complies with the G3-PLC standard
 Standard meter reading protocols: DLMS, COSEM
 Flexible network protocols: TCP/IP, HTTP, FTP, IPsec, SSH, TLS
 Equipped with a super capacitor to support the final report
 Integrated network server for parameterized diagnostics
 Supports meter, modem remote & local firmware updates
 Support meter automatic registration



Getting to know our Advanced Metering Infrastructure (BiMAX).

A. METER MANAGEMENT

Meters discovered automatically and remotely read from the system. Various information can be read from the system

B. CONSUMPTION PROFILING

Equip Utilities with the knowledge to identify potential problems and manage the strain on the grid.

C. DEMAND SIDE MANAGEMENT

Controls this process in the form of scheduled load restriction (scheduled peak times) and critical load restriction.

D. DCU MANAGEMENT

Operator can view all the DCU that are listed on the system, together with the location and their status indication.

E. EVENT NOTIFICATION

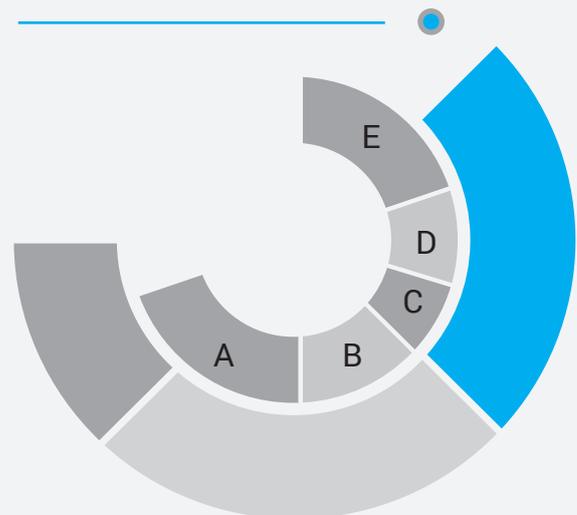
DCU immediately establishes a connection with the system when an event occurs and reports the type of event on demand.



REVENUE INCREASE

35%

– This is an average revenue increase of the customers by adoption of our AMI system.



BUSINESS LOSS REDUCTION

12%

– Loss reduction totally due to tamper prevention and alert.

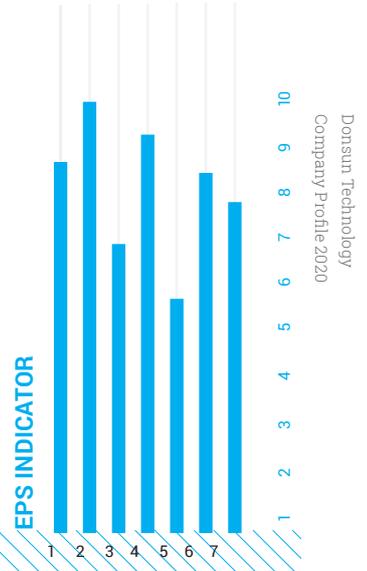
CUSTOMER SATISFACTION

39%

– Increase by 39% for prompt energy demand response and stability.

Proposed Business Intelligence Efficacy

4.1+%



Donsun Technology
Company Profile 2020

Solution Overview

We have formulated an industry leading solution, which was selected as the market leading Analytics and Business Discovery tool. Donsun is now able to migrate the existing static reports to be mapped into the solution, together with the new dynamic BI Business Discovery Solution. The new solution is presented in 'views' which can be accessed by users based on access controlled permissions. The information available can be viewed as:

- Dashboard (KPI management)
- Customer
- Audit
- Finance
- Meter
- Reports

As our products, customers and competitors become more connected and "Smarter", there is a drive for Donsun to implement technology that will allow us to facilitate these customer requirements and compete effectively in the market. DONSUN solution, an off the shelf product together with our value added reseller, can fast track the Business Intelligence and Analytics required by our customers.

Production Establishment

Factory Design -

The factory will be designed by us based on our years's experience working with customers from different country and the desired production capacity of the partners.

Supply of Material -

We supply all raw materials needed for local meter manufacture to our partners to fulfill the requirement of local manufacture. Besides, knowledge of material will also delivered to partners for quality control.

Machine Supply -

We provide the full range of production machine and tools for partners as well as the installation and training on operation and maintenance, as well as provide the calibration services. We provide life time service to machines we supply.

Production Training -

Full production know-how are to deliver to partners, including quality management system guidance.

Exerting Influence Markets with Local Power

Achieving productivity through local production is not easy, but has significant pay-off such as eliminating increased competition from imported goods and services; hence businesses achieve economies of scale thereby bolstering competitiveness.

We, at DONSUN, have the full solution to provide the partners all they need for local production.



We must create economic opportunity, build a culture of entrepreneurship, get people to take responsibility for improving their lives, rather than putting them in a position where they sit back in their poverty and blame others for it.

- H.E. Paul Kagame
President of Rwanda

Roll-out Plan 2020-2025

Year	Percentage	Value Digit
2020	12%	1,240,500
2021	14%	1,250,500
2022	15%	1,300,500
2023	18%	1,320,000
2024	30%	1,420,000
2025	35%	1,450,000
Total	100%	7,100,000

Investments with a real future.

30% Blue Program

PROFIT INCREASE

-

With the establishment of factories, the annual profit of partners has an average increase at 30%, which is considerably take their business in competition to the next level.

37% Market Coverage

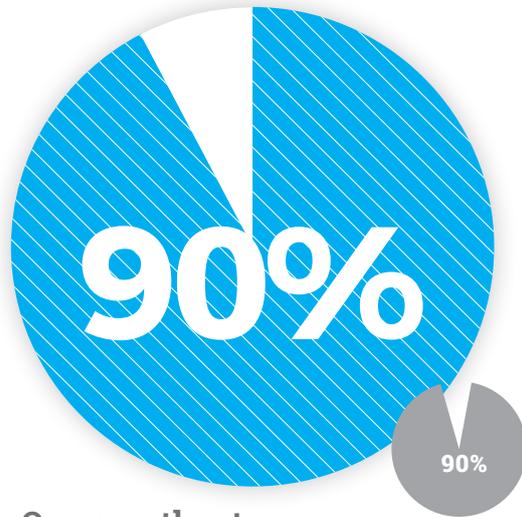
INCREASE YEAR

-

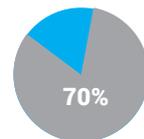
Depending on the market demand and other factors, there is an almost 40% market coverage increase by partners with us for factory establishment. Some of them even make an 50% coverage with the factory.

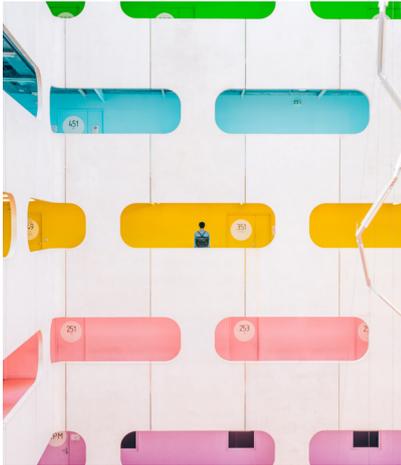
Focus Of Industries Sustainability Reporting

We are targeting at 90% annual production and revenue increase for the first 5 years with current strategy.



Our growth rate is exceeding our target every year and we are striving to keep it that way.





Utilities & clients we are working with currently ...



They are the result of hard work. Their expertise makes the pioneer of the industry.

- China Southern Power Grid



You can certainly keep up with the industry development with DONSUN.

- Sinepulse



PLN

PLN Indonesia



Chilectra
Chile



ECG Ghana



SONABEL
Burkina Faso



Sinepulse GmbH
Germany



China Southern
Power Grid

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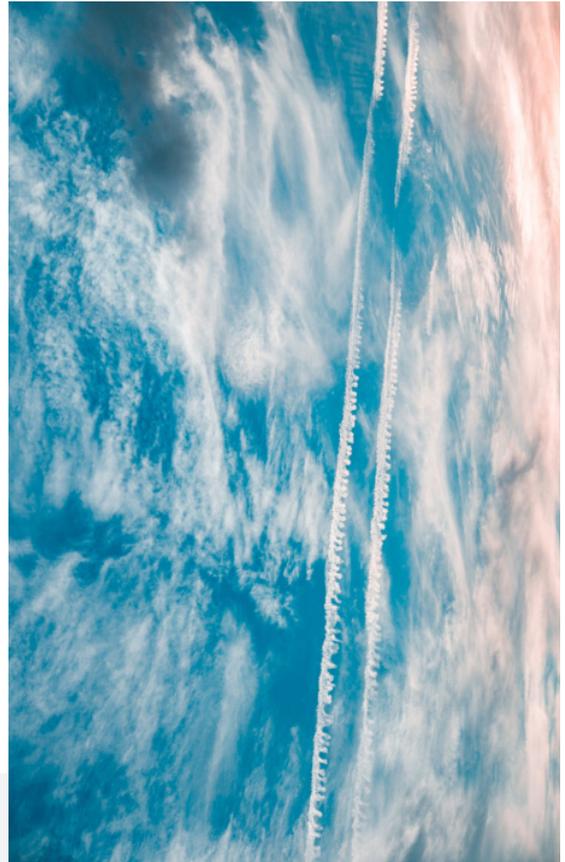
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Our Mission

01 - To enhance the revenue generation of the utility.

02 - To improve customer satisfaction.

03 - To help with the electrification of the world.



Our Vision

To enable our customers to manage their energy to be effective and efficient by providing holistic solutions, ultimately to improve the quality of life for All.

1. Enabling better energy management
2. Improve electrification efficiency
3. Improve life quality for all



Thank you for Business With us.



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