SANYO DENKI

Company Profile 2021

We at SANYO DENKI Group Companies, aim to help all people achieve happiness, and work with people to make their dreams come true.

To carry out the corporate philosophy, we do the following:

For Environment...
For society and the natural environment we will help preserve the global environment and contribute to the prosperity of mankind through our corporate activities.

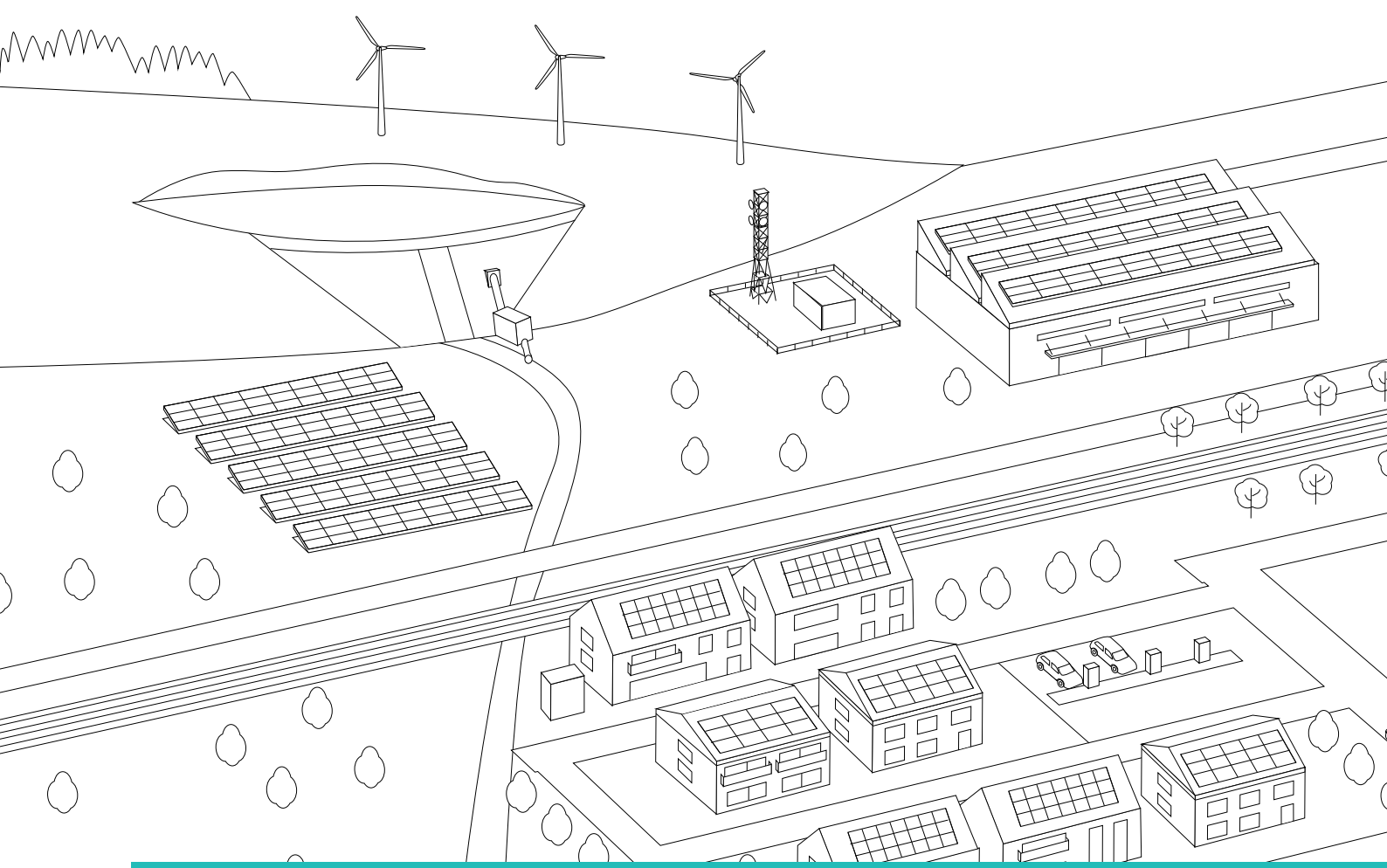
For Customers...
For customers and users we will create new values through technology, products and services.

For Suppliers...
For suppliers and vendors we will strive for integrated technical development and harmonious mutual prosperity through parts purchase, production contracting and joint development.

For Investors...
For investors and financial institutions we will increase our investment worth and credit through sound management policy and good access to information.

For Competitors...
For competitors and the industry we will strive to build industrial and technical development through technical alliances and competition.

For Employees...
For all of our employees we will help individuals to achieve self-fulfillment through their work and the company.



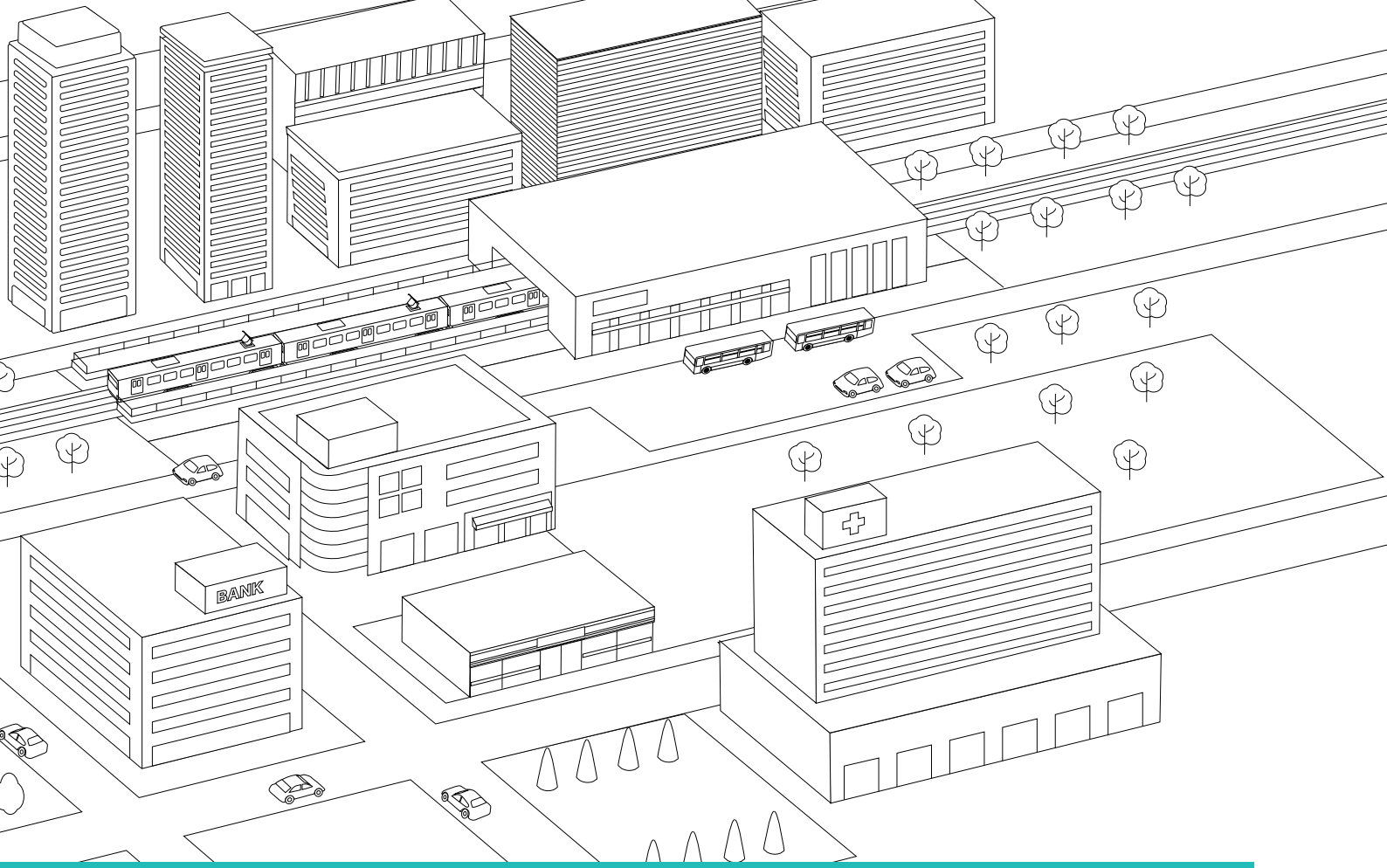
Three Core Technologies and Six Sectors

Under the corporate philosophy to "Aim to help all people achieve happiness", SANYO DENKI is committed to develop new technologies and products in six sectors on the basis of three technological concepts.

Three Core Technologies

- **Technology for protecting the global environment**
- **Technology for protecting people's health and safety**
- **Technology for using new energy sources and saving energy**

Six Sectors



Medical

Business sector that manufactures medical and nursing equipment for contributing to human health.

Information and communications

Business sector that manufactures ICT equipment such as computers, communications equipment, and their peripheral devices.

Industrial

Business sector that manufactures industrial automation equipment such as machine tools and robots.

Environmental protection

Business sector that manufactures equipment for promoting the protection of the global environment.

Home automation

Business sector that manufactures equipment for improving lifestyle.

Energy utilization

Business sector that manufactures equipment for electric power generation and conversion, energy saving, and new energy utilization.

San Ace
COOLING SYSTEMS

SANUPS
POWER SYSTEMS

SANMOTION
SERVO SYSTEMS

San Ace

COOLING SYSTEMS

Devices using electronic components do not operate properly without heat control solutions.
Our San Ace Cooling Systems products can ensure the stable operation of these devices.
By developing products that feature industry-leading performance, quality, and reliability, we will contribute to improving the performance and reliability of our customers' equipment.

Product Lineup



DC Cooling Fan

All of our DC fans feature high reliability and high cooling performance. In addition to standard DC cooling fans, the product lineup includes fans with various features, such as Counter Rotating Fans, Centrifugal Fans, Blowers, and Low Power Consumption Fans. These are suitable for cooling servers, storage, ICT equipment, and the like.

- DC Cooling Fan
- High Static Pressure Fan
- Low Power Consumption Fan
- Silent Fan
- Counter Rotating Fan
- Centrifugal Fan
- Blower
- Reversible Flow Fan



Endurance Fan

Endurance fans are DC fans with excellent environmental durability. The series lineup consists of the Wide Temperature Range Fans for use in a temperature range of -40°C to +85°C, Splash Proof Fans for use in water-exposed environments, Long Life Fans with continuous operability of up to 20 years, Oil Proof Fans for use in oil mist environments, and other fans that can maintain stable operation in severe environments.

- Wide Temperature Range Fan
- Splash Proof Fan
- Splash Proof Centrifugal Fan
- Splash Proof Blower
- Oil Proof Fan
- Long Life Fan
- Long Life Counter Rotating Fan
- G Proof Fan

AC Cooling Fan

These are high reliability AC cooling fans. In addition to standard AC cooling fans, the lineup includes high efficiency, long life ACDC fans that convert AC power to DC power internally. They are suitable for the cooling of ICT equipment, control panels, and FA related devices.

- ACDC Fan
- AC Fan

Cooling Fan Unit

Cooling fan units have multiple fans embedded in steel sheets or trays. Customized units can be built to satisfy customer requests.

Airflow Tester

This is a compact and portable measuring instrument for measuring airflow and system impedance within a device. By using measurement results during thermal design simulation, you can easily and accurately select the optimum fan for a given device.

PWM Controller

This device can remotely control the speed of a PWM fan. With this product, PWM fans can be fully utilized without the need for preparing new circuits. The lineup has two types: a Box type that only requires wiring, and a PCB type that must be integrated into equipment.

San Ace Controller

This IoT-enabled product can perform automatic control and remote monitoring of PWM fans. It can control the individual speeds of up to four fans. It can monitor and control fans in remote locations via a cloud server, contributing to equipment failure detection and preventive maintenance.

Base Station

Long Life Fan

Centrifugal Fan

Counter Rotating Fan

Splash Proof Fan

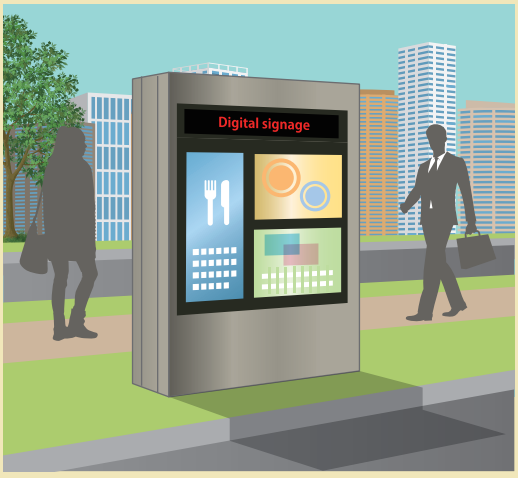
Base stations of cellular phones have a high component density and generate a large amount of heat, requiring fans with high cooling and ventilation performance. Therefore, for the cooling and ventilation of inside base stations, it is best to use Counter Rotating Fans or Centrifugal Fans featuring high airflow and static pressure, and Long Life Fans with continuous operability of up to 20 years. Also, Splash Proof Fans are suitable for use in devices installed outdoors.

Air Purifier for COVID-19 Protection

Blower

This air purifier filtrates air using the internal filter, and discharges clean air via the exhaust. Therefore, the capability to draw air into the device through the filter and to discharge an appropriate amount of airflow is required. A blower is ideal for such a device that can discharge the necessary amount of air while still being compact.

Digital Signage



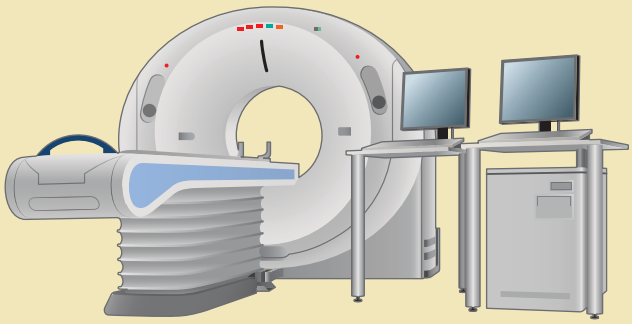
Splash Proof Fan

Splash Proof Centrifugal Fan

Low Power Consumption Fan

Digital signage today uses brighter displays and emits a lot of heat, requiring high-performance cooling fans. In addition, its long operating time requires fans with low power consumption ratings. It also requires waterproof and dustproof performance as it may be installed not only indoors but also outdoors. Therefore, our Low Power Consumption Fans, Splash Proof Fans, and Splash Proof Centrifugal Fans are suitable for this use.

Medical Equipment



G Proof Fan

Low Power Consumption Fan

Silent Fan

Blower

CT scanners used in the medical field are required to operate quietly and with less vibration to give patients peace of mind. Our products suitable for those devices include: low noise Silent Fans, highly efficient Low Power Consumption Fans, and G Proof Fans that can withstand the high G-force inside the scanner.

SANUPS

POWER SYSTEMS

The electronic devices and communication networks indispensable for our daily lives cannot be maintained without a stable power supply.
Our SANUPS Power Systems products, including uninterruptible power supplies (UPS) and renewable energy inverters, supply high-quality and stable power to customers' equipment in the event of unexpected power outages as well as in normal situations.
They can be used for disaster management and business continuity planning purposes as well.

Product Lineup

UPS (Uninterruptible Power Supply)

This device continually supplies power so that a system can function safely without abnormal stoppages or damage in the event of a power outage. We have added UPSs with lithium-ion batteries to our product lineup. UPSs are used as backup power for critical applications such as information systems and financial systems which are required to operate without interruption.

- Online UPS
- Hybrid UPS
- Parallel Processing UPS
- Standby UPS

Renewable Energy Inverter

This device supplies power by converting DC power generated by photovoltaic generation systems into AC power. For use in public facilities and industrial installations. Also, with internet access and the SANUPS NET cloud service, PV system status can be monitored from devices such as computers or smartphones. A new power conditioner for wind power and hydroelectric power generation systems had been added to the product lineup.

Grid Management System

This unit enables efficient electricity use within a microgrid small-scale energy network. One of its main features is storing excess power generated from distributed energy sources, such as photovoltaic and wind power, in lithium-ion or other types of batteries to use power economically.

Voltage Dip Compensator

This device supplies power without interruption in the event of instantaneous power outages or voltage dips, preventing factory facilities from failing or malfunctioning. It is suitable for factory facilities and power equipment.

Inverter

This inverter converts DC to stable AC power. The inverter provides the highest possible stability by maintaining a one unit reserve capacity. It prevents equipment malfunction due to waveform disturbance by outputting complete sine waves, making it essential for use in ICT equipment.

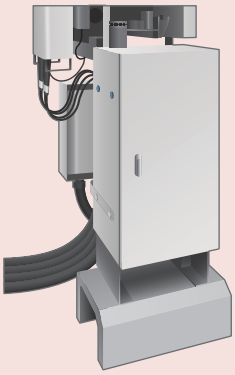
Static Transfer Switch

This device constantly monitors two power sources, a regular and a spare, and when a voltage dip or power failure occurs it switches the power supply from the regular source to the spare source to continue the power supply without interruption. It is suitable for ICT equipment and other critical load equipment requiring reliability.

Emergency Diesel Generator
Power Generation Vehicle

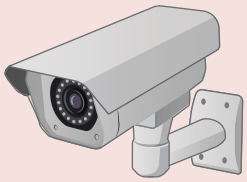
These are a diesel generator and power generation vehicle that supply power to public, telecommunication, and infrastructure facilities during emergencies. Combined with a SANYO DENKI uninterruptible power supply (UPS), they ensure continuous supply of stable power over long periods without interruption.

Emergency Management Infrastructures



Cellular Base Station

Digital Road Sign



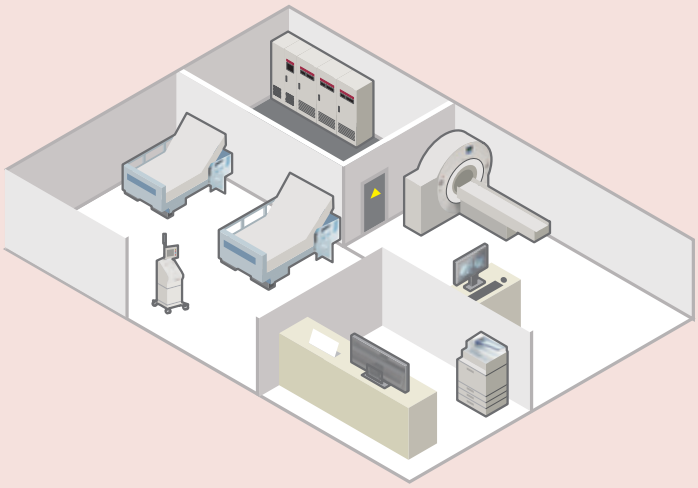
River Security Camera

For outdoors

UPS (Uninterruptible Power Supply)

Road signs, monitoring cameras, and base stations of cellular phones are subject to harsh environments indoors and outdoors, requiring backup power UPSs with high environmental durability. Our lithium-ion battery UPSs are perfect for such needs; their long service life reduces maintenance work and wide operating temperature range ensures stable operation even in extreme temperatures, both indoors and outdoors. Furthermore, our outdoor UPS features superior waterproof and dustproof performance with an IP65 protection rating.

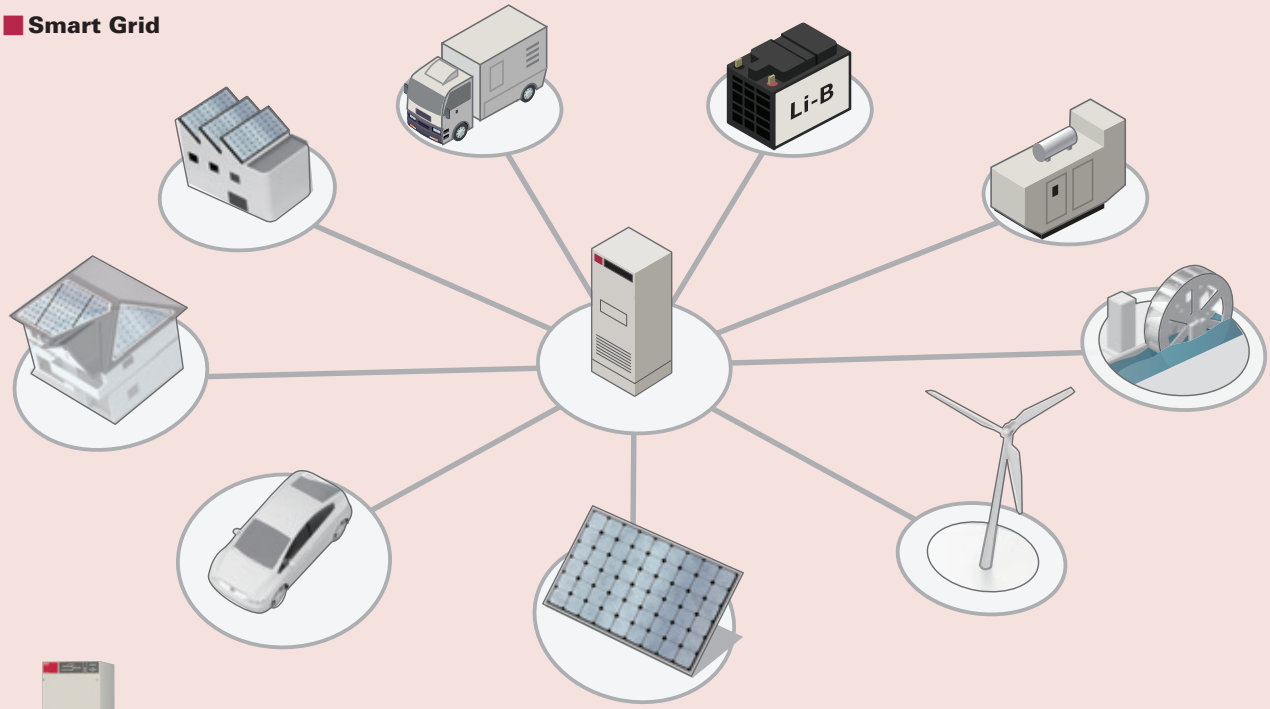
Medical Institution



UPS (Uninterruptible Power Supply)

Devices used in medical locations are required to operate with no interruption. Device damage and malfunction caused by power outages or voltage sags could interrupt an analysis or force its restart. To prevent such risks, UPSs are ideal because they can supply power without interruption.

Smart Grid



Grid Management System

Renewable Energy Inverter

Smart grids are energy networks aimed at the full utilization of electricity by managing the power supply side and demand side resources with ICT. The supply side resources include utility-scale power generation and distributed resources such as photovoltaic, hydroelectric, and wind power generation systems; the demand side resources include buildings, factories, and general households. Making full use of renewable energy for a smart grid will require not only to raise the amount of power generation, but also to store the generated electricity in storage batteries and to consume it on site for emergency management and business continuity planning (BCP) purposes. Our products suitable for such networks include: renewable energy inverters equipped with storage batteries, ones with high efficiency and environmental durability, and grid management devices that can manage the flow of electric power.

SANMOTION

SERVO SYSTEMS

Servo systems are used to drive a wide variety of machines including machine tools, industrial robots, and medical equipment.
Our SANMOTION Servo Systems products contribute to improving the productivity of customers' equipment with high-speed and high-precision positioning capability, as well as fine customization.

Product Lineup

AC Servo Systems

These are high-accuracy, high-performance servo systems. These achieve high-speed and accurate positioning with vibration suppression function, thereby shortening device cycle time. The lineup also includes high-speed spindle motors. These are suitable for high-speed, high-precision devices such as semiconductor manufacturing equipment, robots, and machine tools. With a wide variety of models available, you can build the optimum system for your device.

DC Servo Systems

These are DC servo systems with low vibration and low noise. These systems operate stably at low speeds and achieve highly accurate positioning by combining an encoder. These are ideal for measuring instruments.

Linear Servo Systems

These servo motors move in straight lines. A system can be built that provides higher speed and accuracy yet is simple compared to a straight-line motion system that uses a ball screw to create motion. Linear servo systems are ideal for semiconductor manufacturing equipment and chip mounters.

Stepping Systems

These stepping systems achieve high-accuracy positioning with simple control. In addition to 2-phase, 3-phase, and 5-phase stepping systems, our lineup includes closed-loop stepping systems that offer all the advantages of both AC servo systems and stepping systems. Our stepping systems are suitable for a wide range of applications, including semiconductor manufacturing equipment, chip mounters, analysis/inspection equipment in the medical and environmental fields, ATMs, and surveillance cameras.

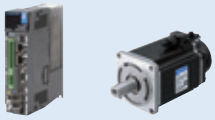
- 2-Phase Stepping Systems
- 3-Phase Stepping Systems
- 5-Phase Stepping Systems
- Closed Loop Stepping Systems

Motion Controller

This is a motion controller featuring high-speed EtherCAT fieldbus. It integrates three control functions: motion control, robot control, and sequence control. This controller helps build systems such as robots, conveying machines, and semiconductor manufacturing equipment.

Articulated Robots

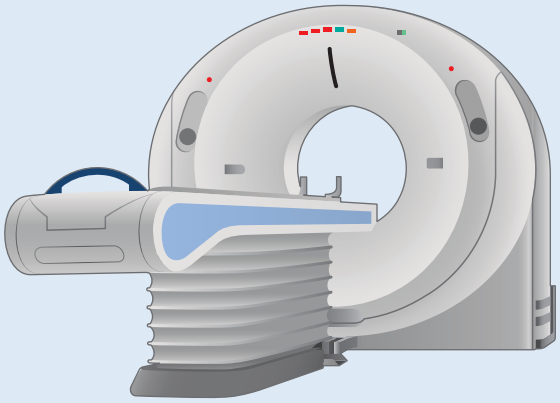
Motion Controller

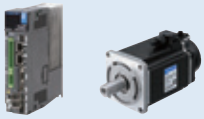


Servo Systems

Articulated robots used in factories require highly accurate driving. Our products that are suitable for these robots include our motion controllers capable of precise robot control, and a high-torque, high-speed servo system that enables fast and accurate positioning to guide the robot to a target location.

CT Scanner



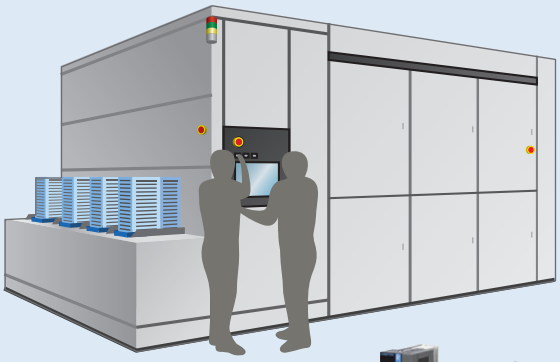


Servo Systems

Closed Loop
Stepping Systems

CT scanners used in the medical field are required to operate quietly and with less vibration to give patients peace of mind, in addition to being accurate and reliable. Our products that are suitable for these devices include a servo system and a closed-loop stepping system that can operate smoothly with low vibration and noise.

Semiconductor Manufacturing Equipment



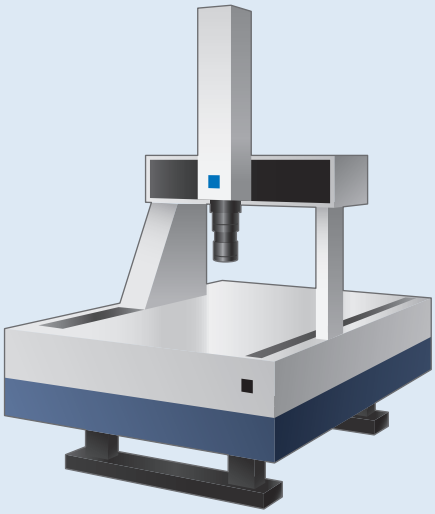
AC Servo Systems

Closed Loop
Stepping Systems

Stepping Systems

High speed and precise positioning are required for driving semiconductor manufacturing equipment, which is increasingly becoming smaller and denser. For such equipment, servo systems and closed-loop stepping systems with high-speed and accurate positioning are suitable.

Coordinate Measuring Machine



DC Servo Motor

For coordinate measuring machines that measure three-dimensional objects such as molds and machine parts, DC servo systems that feature smooth and stable driving even at low speeds are ideal.

History of Product Development

COOLING SYSTEMS
San Ace

1920-1970 | 1980-1990 | 2000

Cooling Fans

Cooling Fan
(First cooling fan made in Japan)
San Ace
1965

Start of Blower mass production
B 120
1989

DC Cooling Fan
DC San Ace
1982

Long Life Fan
1991

CPU Cooling Fan
SAN ACE MC
1994

Splash Proof Fan
San Ace W/WS
1997

High Airflow DC Cooling Fan
San Ace G
2003

Counter Rotating Fan
San Ace
2003

POWER SYSTEMS
SANUPS

Power Supply Units

Radio Power Generator
1927

FES Type UPS
1961

Hand Generator
1951

Static UPS
1963

UPS
(First UPS made in Japan)
1955

Power Monitor
1982

UPS
SANUPS
1985

Engine Generator
1995

Gas Turbine Generator
1995

Inverter for Photovoltaic Generation Systems
SANSOLAR
1995

Mobile Generator
1995

Power Management Software
1997

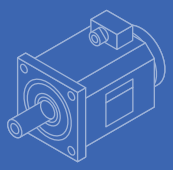
Highly Reliable UPS
SANUPS R
1999

Mid-capacity UPS
SANUPS AMB
2001

Parallel Processing UPS
SANUPS E23A
2002

SERVO SYSTEMS
SANMOTION

Servo Motors



AC Servo Motor
DC Servo Motor
(First servo motor made in Japan)
1952

DC Servo Motor
High Resper
1974

DC Servo Motor
Super Driver

DC Servo Motor
Super Mini
1975

DC Servo Motor
Super U
1980

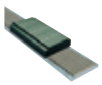
Brushless AC Servo Motor
BL Super
1980

ABS Sensor
1984

Servo Motor with Absolute Encoder
ABS865
1987

AC Servo Motor
SANMOTION P
1994

DC Servo Motor
Super L
1995



Linear Servo System
1997

DC Servo Motor
SANMOTION T
2001

Servo Amplifiers

DC Servo Amplifier
SAN Driver
1975

AC Servo Amplifier
BL Super
1980

AC Servo Amplifier
867Z
1992

AC Servo Amplifier
PU
1995

AC Servo Amplifier
PV

DC Servo Amplifier
DA2
1996

Multi-axis AC Servo Amplifier
SANMOTION PQ
1998

AC Servo Amplifier
SANMOTION PY
1999

AC Servo Amplifier
SANMOTION Q
2002

Stepping Motors

Stepping Motor
(First stepping motor made in Japan)
1959

VR Type Stepping Motor
1960

PM Type Stepping Motor
1965

Ultra-high-vacuum Stepping Motor
1985

Stepping Motor
Pentasyn
1986

2-Phase Stepping Motor
Stepsyn Hseries
1992

5-Phase Stepping Motor
StepSyn
1998

Closed Loop Stepping Motor
SANMOTION Model No.PB
2001

Stepping Drivers

PMA Type Drive Circuit
1961

2-Phase Stepping Driver
1976

Custom ICs for Driving Stepping Motors
1977

5-Phase Stepping Driver
1986

DC Input 2-Phase Stepping Driver
5-Phase Stepping Driver
1986

2-Phase Multi-stepping Driver
1996

Closed Loop Stepping Driver
SANMOTION Model No.PB
1997

DC Input 3-Phase Stepping Driver
1999

Stepping Driver
SANMOTION F
2003

Controllers

Digital Controller
SANDIC
1981

Networking Controller
S-MAC
1997

Industrial PC
SANMOTION SMS-10
1998

Control Language
SANMOTION AML
1999

Industrial PC
SANMOTION SMS-15
2002

2010 2020

Silent Fan
San Ace S
2006

Low Power Consumption Fan
San Ace
2009

Splash Proof Centrifugal Fan
San Ace W
2010

ACDC Fan
San Ace 120AD
2013

Splash Proof Fan
San Ace W
2014

Reversible Flow Fan
San Ace 136RF
2015

PWM Controller
San Ace PWM Controller
2016

Bracket-mounted Centrifugal Fan
San Ace C270
2016

ACDC Fan (Centrifugal Fan, Splash Proof Centrifugal Fan)
San Ace 225AD
2018

Oil Proof Fan
San Ace WF
2004

Centrifugal Fan
San Ace C
2009

High Airflow Long Life Fan
San Ace L
2013

Long Life Counter Rotating Fan
San Ace L
2013

Wide Temperature Range Fan
San Ace T
2014

High Static Pressure Fan
San Ace 60
2015
San Ace 80
2016

Airflow Tester
San Ace Airflow Tester
2016

G Proof Fan
San Ace 120GP
San Ace 172GP
2017

Controller
San Ace Controller
2019

PV Inverter
SANUPS P73D
2004

Static Transfer Switch
SANUPS S11A
2007

Parallel Processing UPS
SANUPS E33A
2008

Remote Monitoring Tool
SANUPS PV Monitor
2010

Peak Cut Device
SANUPS K33A
2011

PV System Status Monitoring Service
SANUPS NET
2013

PV Inverter
SANUPS P83E
2013

Online UPS
SANUPS A11K
2015

PV Inverter
SANUPS P73L
2017

Power Conditioner for Wind and Hydro Power Generation Systems
SANUPS W73A
2017

Emergency Diesel Generator
SANUPS G53A
2018

A Rectifier for Wind Power and Hydro Power Generation Systems
SANUPS W75A
2020

Online UPS
SANUPS A23C
2004

Inverter
SANUPS D11A
2008

Voltage Dip Compensator
SANUPS C23A
2009

Regenerative Power Compensator
SANUPS K23A
2011

Grid Management System
SANUPS K23A M Type
2012

PV Inverter
SANUPS P61B
2013

Online UPS
SANUPS A11K-Li
2017

Standby UPS
SANUPS N11B-Li
2017

Online UPS
SANUPS A22A
2018

Hybrid UPS
SANUPS E11B
2018

Online UPS
SANUPS A11M
2019

AC Servo Motor
SANMOTION Q
2002

AC Servo Motor
SANMOTION R
2006

Low Inertia AC Servo Motor
SANMOTION R
2012

AC Spindle Motor
SANMOTION S
2013

AC Servo Motor 275 mm sq.
SANMOTION R
2014

Battery-less Optical Absolute Encoder
Model No. HA035
2014

Compact Cylinder Linear Servo Motor
SANMOTION
2014

AC Servo Motor 20 mm sq.
SANMOTION R
2014

Center Magnet Type Linear Servo Motor
SANMOTION
2016

DC Servo Motor
SANMOTION K
2019

AC Servo Amplifier
SANMOTION R
2005

AC Servo Amplifier
SANMOTION R ADVANCED MODEL
2008

AC Servo Amplifier
SANMOTION S
2013

AC Servo Amplifier
SANMOTION R 3E Model
2013

Multi-axis DC Servo Amplifier with EtherCAT Interface
SANMOTION R ADVANCED MODEL
2015

5-Phase Stepping Motor
SANMOTION F
2003

2-Phase Stepping Motor with Integrated Driver
SANMOTION F2
2006

5-Phase Stepping Motor with Integrated Driver
SANMOTION F5
2009

5-Phase Linear Actuator Stepping Motor
SANMOTION F5
2010

14 mm sq. 2-Phase Stepping Motor
SANMOTION F2
2011

Synchronous Driver
SANMOTION G
2004

5-Phase On-board Type Stepping Driver
2007

Closed Loop Stepping Driver with EtherCAT Interface
SANMOTION Model No.PB
2011

DC Input 4-Axis Integrated Closed-Loop Stepping Driver with EtherCAT Interface
SANMOTION Model No.PB
2017

Motion Controller
SANMOTION C
2005

Image Processing Device and Touch Panel
SANMOTION C
2014

Motion Controller with EtherCAT interface
SANMOTION C Model SMC100
2018

Wireless Adapter 3A for Motion Controllers
SANMOTION C
2020

Production Sites

Location: Ueda-shi, Nagano

Kangawa Works

Total area: 67,140 m²
Number of employees: 681
ISO 9001, ISO 14001

Main Products

Motor

Kangawa Works utilizes an integrated manufacturing system to produce motors for our Servo Systems Division. Our technologically advanced machinery and equipment are efficiently arranged. Out of consideration for the environment, we have installed a rainwater treatment facility and a solar power generation system. Kangawa Works also houses the headquarters of SANYO DENKI Techno Service CO., LTD.

Fujiyama Works

Total area: 95,632 m²
Number of employees: 523
ISO 9001, ISO 14001

Main Products

Fan | Cooling Systems Product Options | Renewable Energy Inverter | UPS | Generator | Driver/ Amplifier | Controller

Fujiyama Works is a production site for our Cooling, Power, and Servo Systems Divisions. We use highly efficient automated production lines throughout the entire facility. We also have a solar power generation system.

Shioda Works

Total area: 6,503 m² ISO 9001, ISO 14001

Tsuiji Works

Total area: 11,517 m² ISO 9001, ISO 14001

Location: Subic Bay Freeport Zone, Philippines


Automatic Solder Paste Printing Machine

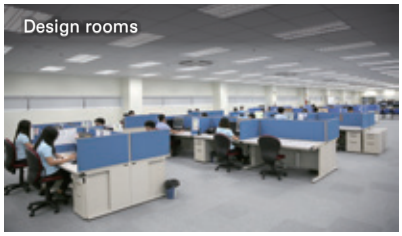

Surface Mounter

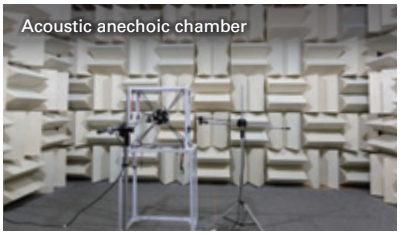

1st Works , 2nd Works


3rd Works


Automatic Optical Inspection Machine

Technology Center


Design rooms


Acoustic anechoic chamber

Research and development base for Cooling, Power, and Servo Systems products produced at SANYO DENKI PHILIPPINES, INC.

SANYO DENKI *PHILIPPINES, INC.*

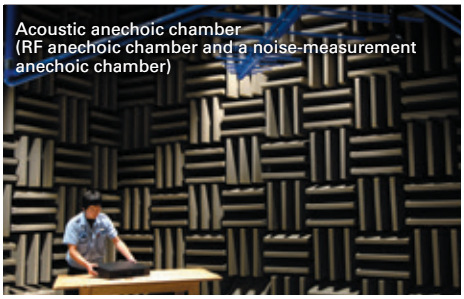
Total area: 61,113 m^2
Number of employees: 1,116
ISO 9001, ISO 14001,
OHSAS 18001

Main Products

Fan | Renewable Energy Inverter | UPS | Motor | Amplifier

SANYO DENKI PHILIPPINES, INC., established in 2000, is a production site for our Cooling, Power, and Servo Systems products. Automated production lines, such as SMT (surface mount technology) lines, are highly efficient.

Location: Ueda-shi, Nagano


Acoustic anechoic chamber
(RF anechoic chamber and a noise-measurement anechoic chamber)


Design rooms


Large laboratories

Technology Center has a vibration testing lab, high-speed testing lab, and environmental testing lab.

Technology Center

Total area: 44,926 m²
Number of employees: 350
ISO 9001, ISO 14001

Technology Center is our primary product research and development facility. We are constantly designing and developing highly reliable and high performance Cooling, Power, and Servo Systems products, in close coordination with our Ueda, Nagano production sites.

Technical Centers around the world

As a research and development base for our products, each technical center works to develop original products to meet local customers' needs, and conduct technical support and product maintenance.


Double chamber measuring device
(for measuring airflow and static pressure)


Acoustic anechoic chamber

SANYO KOGYO CO., LTD.

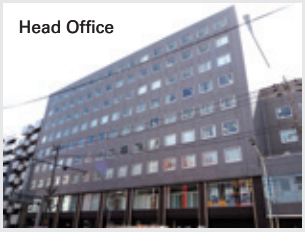
SANYO KOGYO CO., LTD. was established in 1944, and became a member of the SANYO DENKI Group in July 2009.
It is an engineering and trading company engaged in a wide variety of business activities ranging from the sale of electronic and electrical devices, to planning and design of industrial control system, to engineering and maintenance.

Number of employees: 112

Headquaters: Meguro-ku, Tokyo

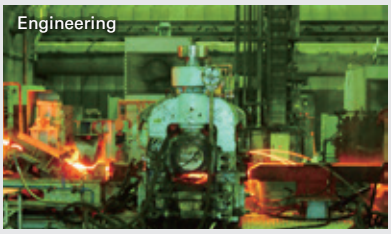
Sales sites: Tokyo / Kanagawa / Tochigi / Nagano / Osaka / Hiroshima

Main business: Electrical contracting and sales of electrical equipment, control devices, and electrical materials for industrial use


Head Office


Engineering


Meguro Office


Engineering


Sales of electrical and electronic products

SANYO DENKI Techno Service CO., LTD.

SANYO DENKI Techno Service CO., LTD. was established in 1999 as a member of the SANYO DENKI Group. This company supports the group's manufacturing and service activities.

Number of employees: 594

ISO 9001, ISO 14001

Headquaters: Ueda-shi, Nagano

Main business: Electronics manufacturing, repair, and maintenance; field service; logistics service; facility maintenance; recycling; solar power generation; car maintenance service; insurance agency business, etc.


PCB design


Electronics manufacturing

Aug. 1927
Sanyo Shokai founded by Hideo Yamamoto to import and sell electrical components

Jun. 1932
Sanyo Shokai Special Electric Works, a production factory of small AC and DC generators and power units for communications equipment, established in the Nishi-Sugamo (current Higashi-Ikebukuro) area of Tokyo

Dec. 1936
Reorganized into a joint stock company (Sanyo Shokai Co., Ltd.)

Apr. 1942
Renamed SANYO DENKI CO., LTD.

Feb. 1944
Ueda factories (Ueda Kita Works, former Midorigaoka Works) established

Dec. 1945
Head Office and Tokyo Works relocated to the Sugamo (current North Otsuka) area of Tokyo

Sep. 1962
Listed on the Second Section of the Tokyo Stock Exchange

Apr. 1979
Shioda Works established

Mar. 1980
Tsuiji Works established

Nov. 1984
Aoki Works established (current Logistics Center)

Dec. 1988
SANYO DENKI EUROPE S.A. (France) established

Apr. 1990
Fujiyama Works established

Apr. 1995
SANYO DENKI AMERICA, INC. (U.S.A.) established

Jul. 1997
Technology Center established

Mar. 1999
SANYO DENKI Techno Service CO., LTD. established

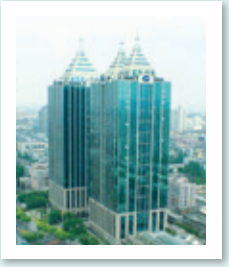
1920—1939
1940—1959
1960—1979
1980—1999

2000—2009

2010—

Feb. 2000
SANYO DENKI PHILIPPINES, INC. (Philippines) established

Apr. 2003
SANYO DENKI SHANGHAI CO., LTD. (China) established



Jun. 2005
SANYO DENKI (H.K.) CO., LIMITED (China) established

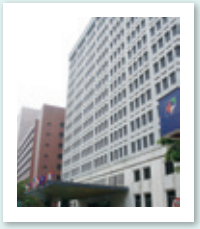
Jun. 2005
SANYO DENKI Techno Service (Shenzhen) CO., LTD.
(current SANYO DENKI ENGINEERING (Shenzhen) CO., LTD.) established.

Aug. 2005
SANYO DENKI SINGAPORE PTE. LTD. (Singapore) established

Oct. 2005
SANYO DENKI GERMANY GmbH (Germany) established

Nov. 2005
SANYO DENKI KOREA CO., LTD. (Korea) established

Dec. 2005
SANYO DENKI TAIWAN CO., LTD. (Taiwan) established



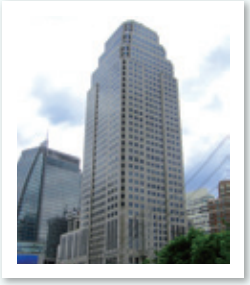
Jan. 2008
SANYO DENKI (Shenzhen) CO., LTD. (China) established

Jan. 2009
Kangawa Works established

Jul. 2009
SANYO KOGYO CO., LTD. became a wholly owned subsidiary

Apr. 2011
SANYO DENKI (Zhongshan) CO., LTD. (China) established

Jul. 2011
SANYO DENKI (THAILAND) CO., LTD. (Thailand) established



Mar. 2013
Listed on the First Section of the Tokyo Stock Exchange

Aug. 2013
Head Office relocated to its current location

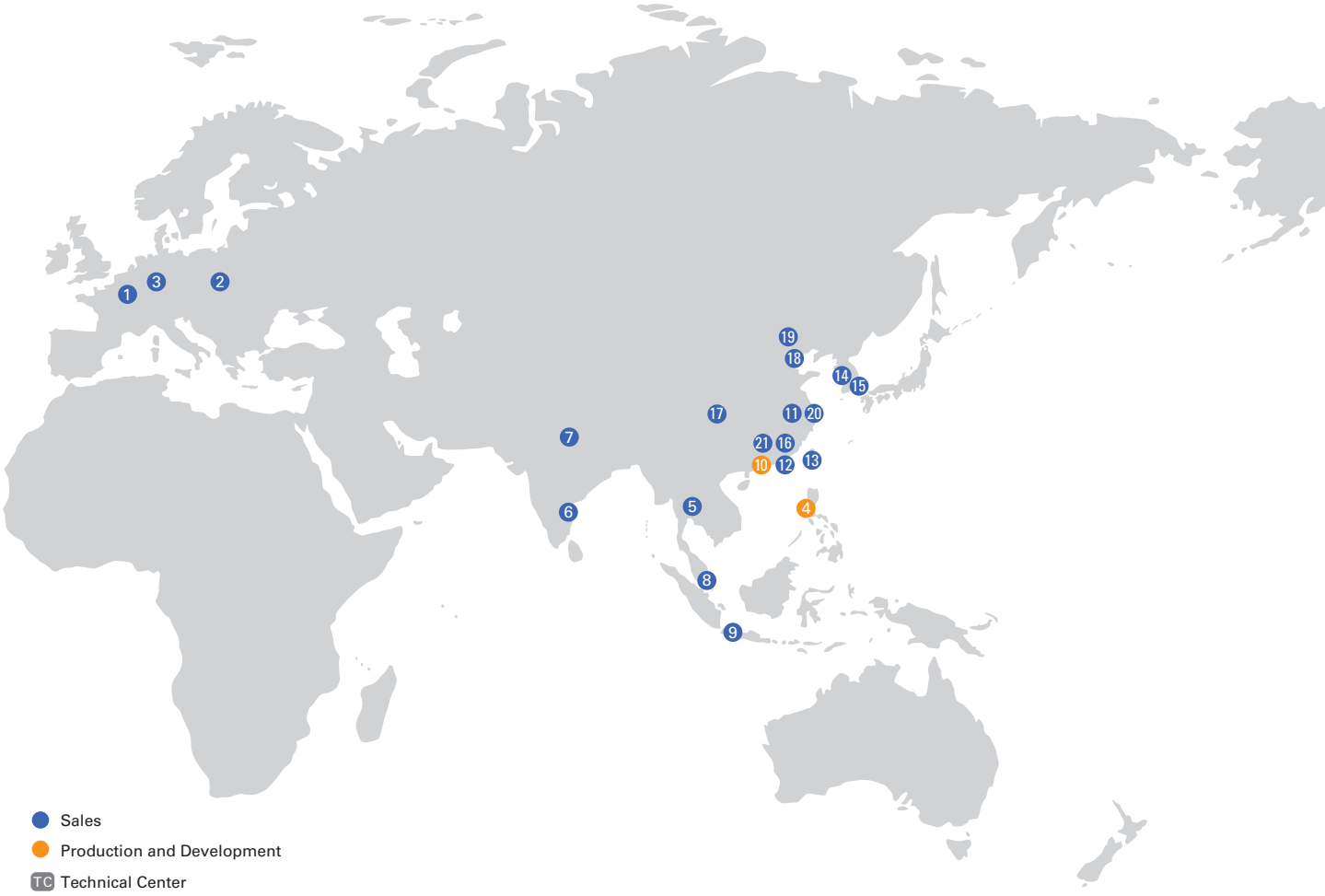
Nov. 2014
SANYO DENKI ENGINEERING (Shanghai) CO., LTD. (China) established

Feb. 2015
SANYO DENKI INDIA PRIVATE LIMITED (India) established

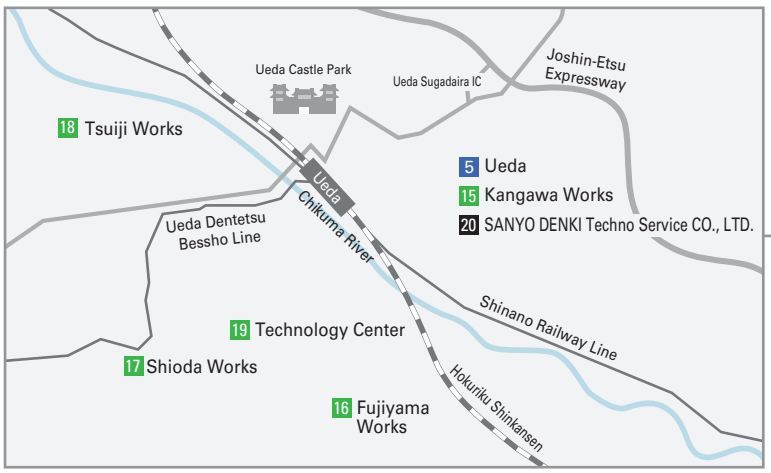
Mar. 2019
Technology Center established in SANYO DENKI PHILIPPINES, INC (Philippines)

Apr. 2019
SANYO DENKI (Tianjin) CO., LTD. (China) established

Global Network



Ueda Works



Japan

SANYO DENKI CO., LTD.

1 Head Office	8 Hamamatsu	15 Kangawa Works
2 Sapporo	9 Kariya	16 Fujiyama Works
3 Sendai	10 Nagoya	17 Shioda Works
4 Utsunomiya	11 Kyoto	18 Tsuiji Works
5 Ueda	12 Osaka TC	19 Technology Center
6 Kofu	13 Hiroshima	
7 Kanazawa	14 Fukuoka	

20 SANYO DENKI Techno Service CO., LTD.

21 SANYO KOGYO CO., LTD.

Europe

1 SANYO DENKI *EUROPE S.A.* TC
2 Poland Branch

3 SANYO DENKI *GERMANY GmbH* TC

Southeast Asia

4 SANYO DENKI *PHILIPPINES, INC.*

5 SANYO DENKI *(THAILAND) CO., LTD.* TC

6 SANYO DENKI *INDIA PRIVATE LIMITED*
7 New Delhi Office

8 SANYO DENKI CO., LTD. *Singapore Branch* TC

9 SANYO DENKI CO., LTD. *Jakarta Representative Office*

East Asia

10 SANYO DENKI *(Zhongshan) CO., LTD.*

11 SANYO DENKI *SHANGHAI CO., LTD.* TC

12 SANYO DENKI *(H.K.) CO., LIMITED*

13 SANYO DENKI *TAIWAN CO., LTD.* TC

14 SANYO DENKI *KOREA CO., LTD.* TC
15 Busan Branch

16 SANYO DENKI *(Shenzhen) CO., LTD.* TC
17 Chengdu Branch

18 SANYO DENKI *(Tianjin) CO., LTD.* TC
19 Beijing Branch

20 SANYO DENKI *ENGINEERING (Shanghai) CO., LTD.*

21 SANYO DENKI *ENGINEERING (Shenzhen) CO., LTD.*

North America

22 SANYO DENKI *AMERICA, INC.* TC
23 Silicon Valley Office
24 Chicago Office
25 Detroit Office (Repair Center)

Offices / Branches

Head Office
3-33-1 Minami-Otsuka, Toshima-ku, Tokyo,
170-8451, Japan
TEL: +81 3 5927 1020 FAX: +81 3 5952 1600

Sapporo
7-3-2 Kita1Jyounishi, Chuo-ku, Sapporo-shi, Hokkaido,
060-0001, Japan
TEL: +81 11 280 1202 FAX: +81 11 280 1212

Sendai
2-2-6 Chuo, Aoba-ku, Sendai-shi, Miyagi,
980-0021, Japan
TEL: +81 22 224 5491 FAX: +81 22 224 5493

Utsunomiya
3-1-1 Higashisyukugo, Utsunomiya-shi, Tochigi,
321-0953, Japan
TEL: +81 28 639 1770 FAX: +81 28 639 1660

Ueda
5-4 Tonoshiro, Ueda-shi, Nagano,
386-8634, Japan
TEL: +81 26 871 8544 FAX: +81 26 823 8155

Kofu
2-3-16 Aioi, Kofu-shi, Yamanashi,
400-0858, Japan
TEL: +81 55 236 3434 FAX: +81 55 236 3488

Kanazawa
3-1-1 Hirooka, Kanazawa-shi, Ishikawa,
920-0031, Japan
TEL: +81 76 235 2041 FAX: +81 76 235 2040

Hamamatsu
111-2 Itaya-machi, Naka-ku, Hamamatsu-shi, Shizuoka,
430-7712, Japan
TEL: +81 53 455 3321 FAX: +81 53 455 3396

Kariya
2-15 Otemachi, Kariya-shi, Aichi,
448-0857, Japan
TEL: +81 56 627 0221 FAX: +81 56 627 0231

Nagoya
1-11-11 Nishiki, Naka-ku, Nagoya-shi, Aichi,
460-0003, Japan
TEL: +81 52 231 3335 FAX: +81 52 231 3209

Kyoto
733 Uematsu-cho, Matsubara-sagaru,
Teramachi-dori, Shimogyo-ku, Kyoto-shi, Kyoto,
600-8028, Japan
TEL: +81 753 442 515 FAX: +81 753 442 513

Osaka
1-2-27 Shiromi, Chuo-ku, Osaka-shi, Osaka,
540-6007, Japan
TEL: +81 6 6946 6006 FAX: +81 6 6946 6003

Hiroshima
1-2-21 Matoba-cho,
Minami-ku Hiroshima-shi, Hiroshima,
732-0824, Japan
TEL: +81 82 263 5011 FAX: +81 82 263 5156

Fukuoka
3-1-1 Hakataeki Higashi, Hakata-ku, Fukuoka-shi,
Fukuoka, 812-0013, Japan
TEL: +81 92 482 2401 FAX: +81 92 482 2398

Singapore Branch
988 Toa Payoh North, #04-08,
Singapore 319002
TEL: +65 6223 1071

Jakarta Representative Office
Summitmas II 4th Floor,
Jl. Jend. Sudirman Kav.61-62,
Jakarta 12190, Indonesia
TEL: +62 21 252 3202

Ueda Works

Production Sites

Kangawa Works
5-4 Tonoshiro, Ueda-shi, Nagano
386-8634, Japan
TEL: +81 26 822 8585 FAX: +81 26 823 8355

Fujiyama Works
4016 Fujiyama, Ueda-shi, Nagano
386-1212, Japan
TEL: +81 26 838 8111 FAX: +81 26 838 8183

Shioda Works
517 Goka, Ueda-shi, Nagano
386-1324, Japan
TEL: +81 26 838 6611 FAX: +81 26 838 0585

Tsuiji Works
827 Tsuiji, Ueda-shi, Nagano
386-1107, Japan
TEL: +81 26 827 8520 FAX: +81 26 826 5841

Research and Development

Technology Center
812-3 Shimonogo, Ueda-shi, Nagano,
386-1211, Japan
TEL: +81 26 837 1700 FAX: +81 26 837 1704

Logistics Center
252-5 Tonodo, Aoki-mura, Chiisagata-gun, Nagano,
386-1604, Japan
TEL: +81 26 831 3440 FAX: +81 26 831 3430

Group Company

Japan

SANYO KOGYO CO., LTD.
Head Office
Higashiyama Building, 1-1-2 Higashiyama,
Meguro-ku, Tokyo,153-0042, Japan
TEL: +81 3 6452 4350 FAX: +81 3 3714 0210

Meguro Office
2-17-12 Aobadai, Meguro-ku, Tokyo,
153-0042, Japan
TEL: +81 3 3464 0211 FAX: +81 3 3461 7558

SANYO DENKI Techno Service CO., LTD.
5-4 Tonoshiro, Ueda-shi, Nagano,
386-8634, Japan
TEL: +81 26 871 8577 FAX: +81 26 823 8355

Europe

SANYO DENKI *EUROPE S.A.*
P.A. PARIS NORD II
48 Allée des Erables-VILLEPINTE, BP 57286,
F-95958 ROISSY CDG CEDEX, France
TEL: +33 1 48 63 26 61

Poland Branch
ul. Wodocią¸gowa 56
30-205 Kraków, Polska
TEL: +48 12 427 30 73

SANYO DENKI *GERMANY GmbH*
Frankfurter Strasse 80-82
65760 Eschborn, Germany
TEL: +49 6196 76113 0

Southeast Asia

SANYO DENKI *PHILIPPINES, INC.*
No. 2 Block F-1 Subic Techno park,
Argonaut Highway Boton Area,
Subic Bay Freeport Zone
PHILIPPINES 2222
TEL: +63 47 252 1735

SANYO DENKI *(THAILAND) CO., LTD.*
388 Exchange Tower, 25th Floor,
Unit 2501-1, Sukhumvit Road,
Klongtoey, Klongtoey,
Bangkok 10110 Thailand
TEL: +66 2261 8670

SANYO DENKI *INDIA PRIVATE LIMITED*
#14 (Old No. 6/3), Avenue Road, Nungambakkam,
Chennai - 600034 Tamil Nadu, India
TEL: +91 44 420 384 72

New Delhi Office
Unit No. 2.19, Avanta Business Center
2nd Floor, E- Block, International Trade Tower
Nehru Place, New Delhi-110019
Delhi, India
TEL:+91 11 3044 6613

East Asia

SANYO DENKI *(Zhongshan) CO., LTD.*
1st Floor, Building A2, eNet Industrial Park,
17 Fuze Road, Sanjiao Town,
Zhongshan 528445 China
TEL: +86 760 89936321

SANYO DENKI *SHANGHAI CO., LTD.*
Room2106-2110, Bldg A,
Far East International Plaza, No. 319,
Xianxia Road, Shanghai, 200051, China
TEL: +86 21 6235 1107

Technical Center
Area B 1F, Building 8, No. 1199 Ji Di Road,
Minhang District, Shanghai, China
TEL: +86 21 6221 7069

SANYO DENKI *(H.K.) CO., LIMITED*
Room 1603, 16/F, South Tower,
Concordia Plaza, 1 Science Museum Road,
TST East, Kowloon, Hong Kong
TEL: +852 2312 6250

SANYO DENKI *TAIWAN CO., LTD.*
N-711, 7F, Chia Hsin 2nd Bldg.,
No. 96, Sec.2, Zhongshan N. Rd.,
Taipei 10449, Taiwan
TEL: +886 2 2511 3938

SANYO DENKI *KOREA CO., LTD.*
15F, KDB Building, 372,
Hangang-daero, Yongsan-gu,
Seoul, 04323, Korea
TEL: +82 2 773 5623

Busan Branch
8F, CJ Korea Express Building,
119, Daegyo-ro, Jung-gu,
Busan, 48943, Korea
TEL: +82 51 796 5151

SANYO DENKI *(Shenzhen) CO., LTD.*
04B-07, 11/F, AVIC Center, No.1018
Huafu Road, Futian District,
Shenzhen, 518031, China
TEL: +86 755 3337 3868

Chengdu Branch
Room2105B, Block A, Times Plaza,
2 Zongfu Road, Jinjiang District,
Chengdu, 610016, Sichuan, China
TEL: +86 28 8661 6901

SANYO DENKI *(Tianjin) CO., LTD.*
Room AB 16th Floor TEDA Building,
No. 256 Jie Fang Nan Road,
Hexi District, Tianjin 300042 China
TEL: +86 22 2320 1186

Beijing Branch
Room1807, Gaohe Lanfeng Building,
No.98 East Third Ring South Road,
Chaoyang District, Beijing 100122 China
TEL: +86 10 5861 1508

SANYO DENKI *ENGINEERING (Shanghai) CO., LTD.*
Area B 1F, Building 8, No. 1199 Ji Di Road,
Minhang District, Shanghai, China
TEL: +86 21 6221 7069

SANYO DENKI *ENGINEERING (Shenzhen) CO., LTD.*
3rd Floor, 11th Building,
Niucheng 2nd industrial Area,
Niucheng Village, Nanshan,
Shenzhen, 518055, China
TEL: +86 755 8342 5095

North America

SANYO DENKI *AMERICA, INC.*
468 Amapola Avenue,
Torrance, CA 90501 U.S.A.
TEL: +1 310 783 5400

Silicon Valley Office
1500 Wyatt Dr.,Suite 5,
Santa Clara, CA 95054 U.S.A.
TEL: +1 408 988 1700

Chicago Office
1340 Remington Road Suite E,
Schaumburg, IL 60173 U.S.A.
TEL: +1 224 353 6420

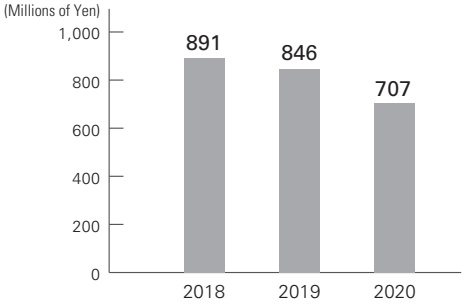
Detroit Office
(Repair Center)
37511 Schoolcraft Road,
Livonia, MI 48150 U.S.A.
TEL: +1 734 525 1806

Corporate Data

Founded	August 1927
Incorporated	December 1936
Capital	9.9 billion yen (As of March 31, 2020)
Consolidated Sales Revenue	70.7 billion yen (For the year ended March 2020)
Chairman of the Board & CEO	Shigeo Yamamoto
President & COO	Nobumasa Kodama
Number of Employees	SANYO DENKI Group 3,638 (As of September 30, 2020)
Corporate Headquarters	3-33-1 Minami-Otsuka, Toshima-ku, Tokyo, 170-8451, Japan TEL: +81 3 5927 1020 FAX: +81 3 5952 1600
Stock Listing	The first section of the Tokyo Stock Exchange
Website	https://www.sanyodenki.com

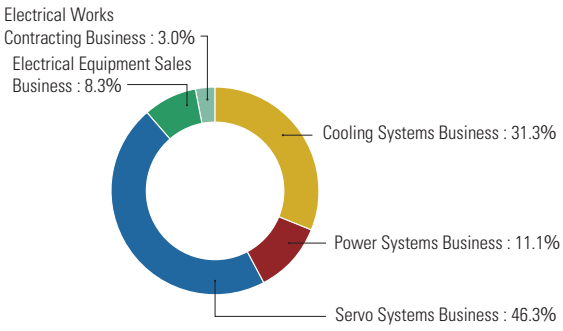
Consolidated Operating Revenues

For the year ended March 2020



Consolidated Operating Revenues Composition by Business Segment

For the year ended March 2020



As of December 2020
'20.12SZ

山洋電気株式会社
SANYO DENKI CO., LTD.