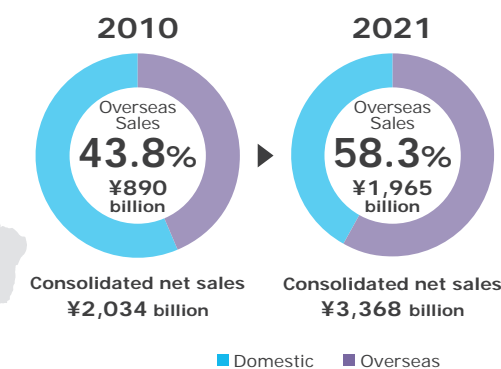
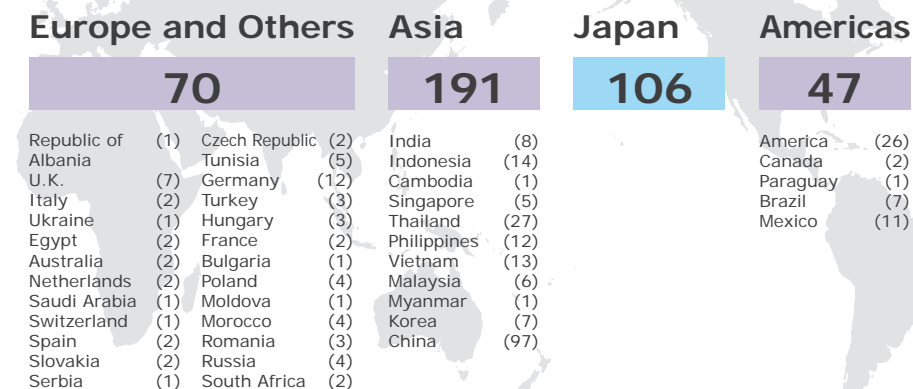


Product Information Electronics

Global Network



Business Locations for Electronics Products

Sumitomo Electric Industries, Ltd.

[Email] electronics-sales@info.sei.co.jp

Head Office (Tokyo)

Electric and Information System Materials Sales Div.
Akasaka Center Building, 1-3-13, Motoakasaka, Minato-ku, Tokyo 107-8468
TEL: +81-3-6406-2718

Head Office (Osaka)

Electronics materials Sales Div.
4-5-33, Kitahama, Chuo-ku, Osaka 541-0041
TEL: +81-6-6220-4480

Chubu District Office

Mobility Electronics Sales Div.
6-1, Nagoya Lucent Tower 35F, Ushijima-cho, Nishi-ku, Nagoya-shi, Aichi 451-6035
TEL: +81-52-589-3851

Shanghai

Sumitomo Electric (Shanghai) Electronics, Ltd.
TEL: +86-21-6219-5959
•Shenzhen Branch TEL: +86-755-8278-6655
•Beijing Branch TEL: +86-10-6581-6959

Korea

Sumitomo Electric (Korea) Electronics, Ltd.
TEL: +82-2-3453-4511

Thailand

Sumitomo Electric (Thailand) Ltd.
TEL: +66-2260-7231

Singapore

Sumitomo Electric Asia Pacific Pte. Ltd.
TEL: +65-6261-3388

Hong Kong

Sumitomo Electric Interconnect Products (Hong Kong), Ltd.
TEL: +852-2805-6777
•Taiwan Branch TEL: +886-2-2325-2588

U.S.A.

Sumitomo Electric USA., Inc.
TEL: +1-310-782-0227
Sumitomo Electric Interconnect Products, Inc.
TEL: +1-760-761-0600
Judd Wire, Inc.
TEL: +1-800-545-5833

Germany

SEI Interconnect Products (Europe), Ltd.
TEL: +49-40-5265-0160

Manufacturing Sites for Electronics Products

	Location	Irrated Electronic Wire-Cable Assembly-Flat Component	FPC	Fine Poymer	Compound Semiconductor	Micro Connection Parts & Materials	CELMET™	Aluminum
JAPAN	Tochigi	●						
	Gunma					●		
	Shiga		●					
	Osaka (Kumatori)			●				
	Osaka (Himejima)					●		
	Hyogo (Itami)					●		
	Hyogo (Kobe)					●		
Overseas	Toyama						●	●
	Suzhou	●		●				
	Shanghai	●						
	Shenzhen	●						
	Zhongshan			●				
	Hsinchu			●	●			
	Vietnam	●	●	●				
	Thailand							●
	Malaysia	●					●	
	Philippines		●					
	Massachusetts	●						
California				●				
Oregon					●			
Germany				●				
Hungary	●							

Sumitomo Electric Industries, Ltd.

[HP] <https://sei.co.jp/products/electronics/>

[in] <https://www.linkedin.com/showcase/sumitomo-electric-electronics-products/>



* "Thunderbolt" is registered trademark of Intel Corporation.
* "LinkedIn and LinkedIn logo are either registered trademarks or trademarks of LinkedIn Corporation or its affiliates in the United States and/or other countries.

The Sumitomo Electric Group strives to provide solutions to contribute to the advancement of societies. We strive to uphold our core values based on the Sumitomo Spirit, which has been passed down through the generations for 400 years since the founding of the Sumitomo Group.

The Sumitomo Spirit

The Sumitomo Electric Group is built on three principles based on the Sumitomo Spirit that forms the foundation of our culture and serves as a compass for the decisions we make every day.

萬事入精
Banji-nissei

Banji-nissei means "do your sincere best, not only in business, but also in every aspect of your life." It is a pivotal teaching in the Sumitomo Spirit, Sumitomo personnel are expected to work not only to make money, but also to cultivate their character and grow into better human beings.

信用確実
Shinyo-kakujitsu

The Business Principles Article 1 emphasizes the importance of integrity; that is, being worthy of the trust of others.

不趨浮利
Fusu-furi

Article 2 speaks of the importance of working proactively, pursuing profit by quickly and appropriately responding to changes in society and not being content with the status quo. Article 2 emphasizes the importance of harmonizing business gains with the public interest and scorns reckless or careless actions in pursuit of easy gain.

Company Profile

Company Name / Sumitomo Electric Industries, Ltd.
Head Office / 4-5-33, Kitahama, Chuo-ku, Osaka, Japan
Established / April 1897
Capital Stock / 99,737 million yen
President / Osamu Inoue

Corporate Principles

Each company of the Sumitomo Electric Group shall

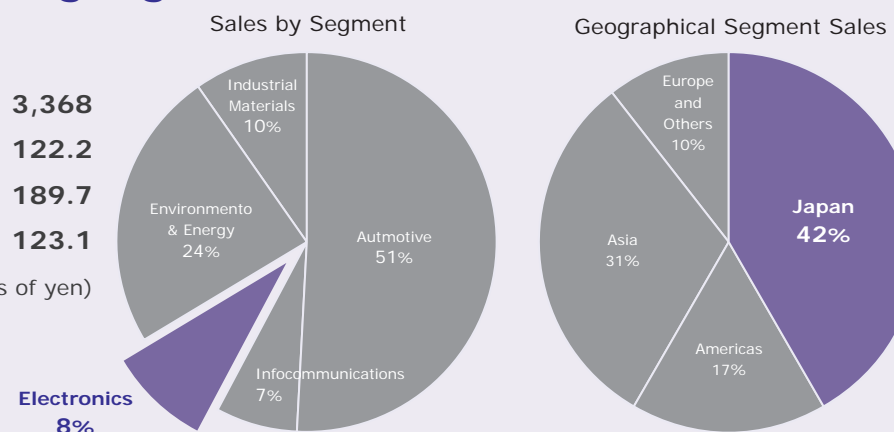
- Offer the very best goods and services to satisfy customer needs.
- Build technical expertise, realize changes and strive for consistent growth.
- Contribute to creating a better society and environment, with a firm awareness of our social responsibility.
- Maintain high corporate ethics and strive to become a company worthy of society's trust.
- Nurture a lively corporate culture that enables employee self-improvement.

Financial Highlights

(FY2021)

Net sales 3,368
Operating Income 122.2
Capital Expenditure 189.7
R&D Expenses 123.1

(Billions of yen)



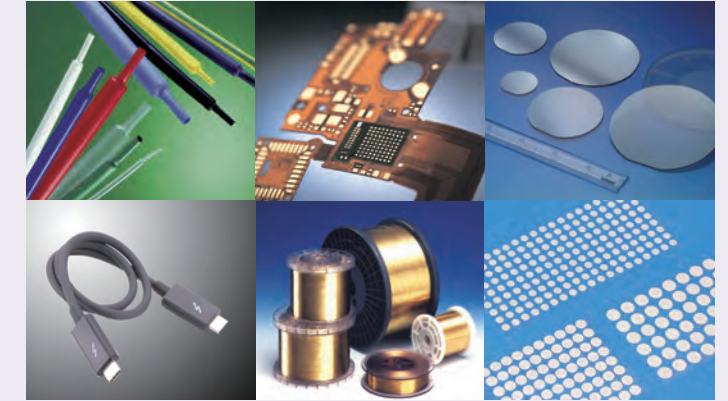
Business Segment

Our 5 business units provide high quality products and services as part of our commitment to the responsibility of "supporting society", which we have been fulfilling since the foundation of the Sumitomo copper business 400 years ago. We now share this commitment among over 273 thousand staff in 390 group companies around the world.

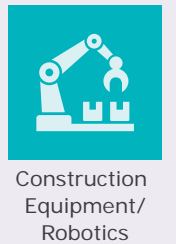
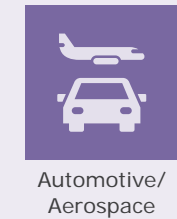
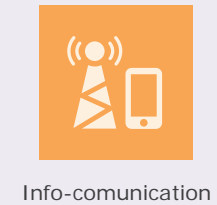
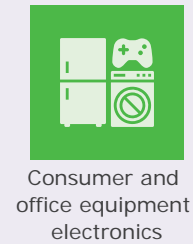
Electronics

Supporting further evolution of mobile devices, automobiles and aviation equipment

Data transmission volumes of mobile devices are increasing exponentially, accelerating the development of new functionalities and new standards. Also, there are increasing needs for car electronics in electric and autonomous vehicles and for aviation equipment. Sumitomo Electric intends to support these growing markets and become a top global supplier of unique high-performance cables, components and materials.



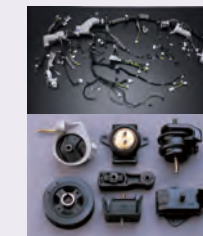
Electronic products widely support society.



Automotive

Contributing to accelerating improvement delivered by CASE and to the evolution of mobility

Sales of eco-friendly vehicles are also growing in line with tightening environmental regulations. The improvement delivered by CASE* is accelerating and new entrants from other industries are entering the market, taking the automotive industry to the verge of a major period of change. Against this backdrop, we are committed to contributing to the evolution of mobility.

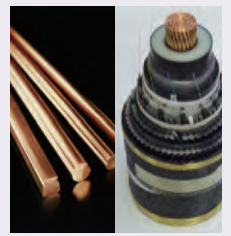


*CASE: A term for the trends in the automotive industry; an acronym for Connected, Autonomous, Shared, and Electric

Environment & Energy

Building next-generation energy systems for the increasing use of renewable energy

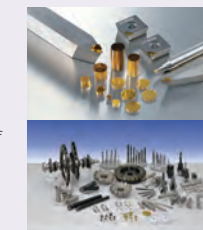
We see the unveiling of major international grid-interconnection projects in Europe and the growth in electrical power infrastructure demand in emerging nations. The wealth of experience and technology active in the environmental and energy sectors are sought after against the backdrop of increasing introduction of renewable energy and widespread use of EV.



Industrial Materials

Contributing to the growth of industries and social infrastructure by developing and supplying high-functionality materials

There is growing demand for lightweight materials for EV development. In the medical and aviation industries, demand is also growing for our products. We will aim to become a leading global supplier of high-performance, high-functionality products by leveraging its world-class materials and process technology.



Infocommunications

Endeavoring to realize high-speed, high-capacity telecommunications meeting the challenge of the increasing data traffic volume

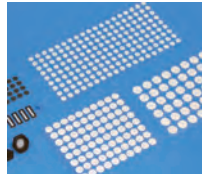
Data traffic has been increasing dramatically due to the expansion of cloud services and the increase in the scale of data centers, the advent of the 5G communication system. With its strength in the development capabilities and manufacturing technologies for info-communication products, we will achieve large-capacity, high-speed communication.



Fine Polymer Products

●●●● POREFLON™

A flexible and fibrous structural sheet made of PTFE (Polytetrafluoroethylene) with excellent resistance to heat and chemicals. It also has high efficiency of small particle retention while being air permeable. Applications include various separators and media for filtration and venting processes.



Application Cartridge filter, Automotive parts, Various electronic devices, Various support membranes

● SUMIMARK™ / SUMITAG™ Cable Identification System

It is an identification product that achieves excellent print quality by applying proprietary printing technology to heat-shrinkable tube and sheet products that apply technologies such as improving shape memory and mechanical properties of plastic by electron beam irradiation.



Application For railway vehicles / aircraft: - Identification of electric wires
- Mechanical protection

● TERALINK™ Cross-Linked Thermoplastic Polymer

An injection-moldable engineering plastic, cross-linked by electron beam irradiation. It is used in parts that can withstand wear and fatigue, such as gears and washers. It is also used in lens packages for optical connections, as it can withstand reflow processes.



Application Transparent heat-resistant grade: Reflow compatible lens (for infrared)
Sliding grade: Sliding gear (replacement with metal parts)

Irradiated Electronic Wire

●● Irradiated Electronic Wire

Irradiated electronic wire, using original insulation materials and irradiation technologies, meets various needs such as high heat resistance, high flexibility and high durability.



Application home appliances, electric devices, railway, aircraft and automotive.

●● SUMITUBE™ Irradiated Heat-Shrinkable Tubing

It is a heat-shrinkable tube that applies the shape memory effect of plastic using electron beam irradiation technology to our unique material suitable for a wide range of applications. We have a rich lineup of polyolefin resin, fluorine resin, thermoplastic elastomer resin, and more.



Application In various fields such as electronic equipment / automobile / aircraft, Binding wires and harnesses, Heat protection, Insulation protection, Waterproof, Corrosion protection

● FEX : Fluoro Ethylene Cross-linking

FEX™ is a fluoropolymer cross-linked by high energy electron beam irradiation. It offers high resistance to abrasive wear and strong adhesion to metals, without sacrificing its original fluoroethylene properties, such as low coefficient of friction, high heat and chemical resistance. We have released a new product "FEX™ Tape", which provides the same high wear resistance property of FEX™.



Application Improvement of slipperiness of conveyor shooters and conveyor guide rails, measures against chafing, etc.

● Polyimide Tube

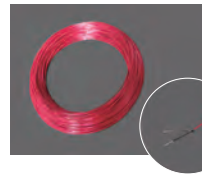
Developed as a functional part of laser or multifunction printers by utilizing the tube's seamless structure, thinness, stability and excellent thermal resistance.



Application Office printer

●●●● Data Transmission Cables

Data transmission cables are coaxial and multi-core cables using specially tuned conductors and insulation materials, and having fine diameters, high flexibility and excellent high-speed transmission characteristics.



Application PC and peripheral devices, mobile communications, industrial machinery, robotics, automotive information, healthcare equipment and more.

Harness

●●●● MFCX™ Micro Flex Coaxial Harness

This is an assembled cable harness with 0.10mm-0.35mm diameter coaxial cables, which has excellent mechanical properties and high-speed transmission characteristics. MFCX harnesses are used in healthcare equipment and various electric devices.



Application healthcare equipment and various electric devices.

●●● High-Speed Data Transmission Harness

We provide metal cable harnesses with the newest standards such as USB4.0 and Thunderbolt™ with official certifications and AOC (Active Optical Cable) for higher transmission and longer distance connection. They are used in PC and peripheral devices, game consoles, broadcast equipment, industrial machinery and more.



Application PC and peripheral devices, Home game console, broadcast equipment, industrial machinery and more.

Compound Semiconductor

●● Compound Semiconductor

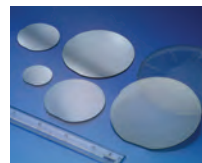
We are a leading supplier of high-quality compound semiconductor wafers used in lasers, LEDs and RF devices for mobile communications. Available in mass production are conductive and semi-insulating GaAs 3,4 or 8-inch diameter and InP 2,3,4 or 6-inch diameter substrates.



Application GaAs: laser, VCSEL, LED, High frequency power amplifier, Solar cell, etc
InP: lasers for optical communication, photo detectors, sensors

●●● Gallium Nitride Substrate

Leveraging our expertise in Vapor Phase Epitaxy, we are a leading supplier of free-standing GaN substrate. Available in mass production are GaN 2-inch diameter substrates for laser and 4-inch diameter substrates for power devices.

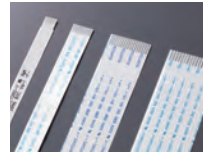


Application Laser projector, Laser headlight, Laser for optical disk, Laser pointer, Lighting and automotive LEDs, Power devices

Flat Component

●● SUMI-CARD™ Flexible Flat Cable

SUMI-CARD™ is a multi-core flat wiring solution that is possible to mate with connectors easily and with high reliability. As it is thin, lightweight and flexible, it can realize high-density wiring in tight spaces and contributes to downsizing and weight saving of devices as well as prevention of incorrect wiring. SUMI-CARD meets UL standards with voltage ratings from 30V to 300V and temperature ratings from 80°C to 125°C.



Application Audio system, Home game console, Office equipment such as scanners/copiers, Server, Car audio, Car navigation system, ADAS, Power train, In-vehicle apparatuses such as the battery

●●● SUMI-CARD™ High Frequency Flexible Flat Cable -Flex Flyer™-

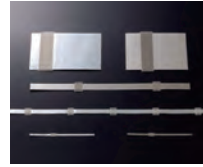
It is the flat cable for high-speed transmission. It achieves the same transmission performance as the coaxial harness and Twinax, and is compatible with the latest high-speed transmission standards such as USB4 and PCIe 5.0.



Application LCD TV, Laptop / Desktop / Gaming PC, Server, Storage, Office equipment such as scanners / copiers, Home game console

● Tab-Lead

Our tab-lead is a flexible flat cable specially designed for drawing electricity from lithium-ion batteries or electric double-layer capacitors covered with aluminum laminated film. The insulation of our tab-lead prevents heat deformation and is also remarkably resistant to battery electrolytes, providing excellent sealing reliability.



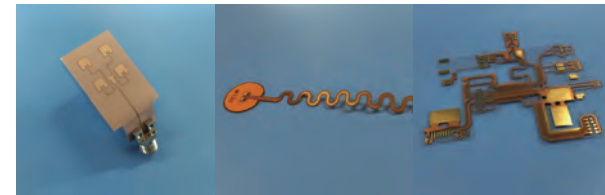
Application Battery electrode

Flexible Printed Circuits

●●●● Flexible Printed Circuits

It is the wiring materials that formed an electric circuit of copper foil on the insulation film, it is adopted to the mobile terminal such as smartphones and a car widely. Other than small size, the light weighting purpose of the apparatus. We suggest an FPC corresponding to the needs of high-density wiring and the high-speed transmission.

• Fine-pitch FPC • High-speed transmission FPC • Thin high flexural FPC • Multilayered FPC • High heat resistant (150°C) FPC

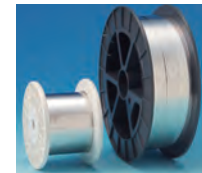


Application Mobile terminal, wearable terminal, car, high frequency antenna, transmission and reception module, robot, actuator, vibration board, camera shake revision function, medical equipment, hard disk of the camera

Electronics Components

●● Dumet Wire (Iron-Nickel Alloy Coated with Cuprous Oxide)

Made from composite materials, our Dumet wires are ideal for sealing glass and are used as weldable leads for various electronics and electronic parts such as thermistors, glass diodes and automobile lamps.



Application Glass sealing materials such as Glass diodes / Misters / Car lamps

●● Nickel Alloy Wire for Spark Plugs in Internal Combustion Engines

Having secured more than 25% market share, our nickel alloy spark plug electrode material enables automobile engines to achieve high output, faster revolution speeds and longer life.



Application Electrode materials for gasoline engine plugs for automobiles and diesel engine plugs for environmental measures

● Discharge Machining Electrode Wire

Used for a wide range of applications such as die fabrication and parts machining. We have introduced various product lines such as Premium Brass EMD Wire, the SUMISPARK™ series and tungsten wires to meet growing demand for high-precision and high-speed machining.



Application Electrode wire for electric discharge machining

●● Electroplated wire

Used for various electronic parts. Our product has uniform plating thickness and shape by original technique, production engineering in the straight angle line. We will cope with various plating wires to meet the needs of the customer. Nickel, silver, tin to brass, gold, a phosphor bronze, the copper compound metal wires.

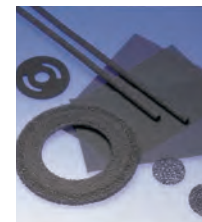


Application Pins for connecting connectors and printed circuit boards, wire wrapping connection terminal

Porous Metal

●●● CELMET™

It is a porous metal body with three-dimensional half-tone plate structure. We have lineups such as Ni-Cr, Ni-Sn as not only main Ni but also alloy system. It has a much higher porosity of up to 98%. In addition, it has eight levels with a hole diameter of 0.45 to 3.2 mm, and can be processed into various shapes by cutting or pressing.

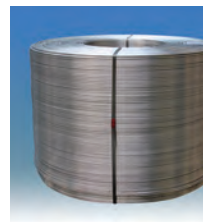


Application Current collectors for nickel-metal hydride batteries for hybrid vehicles Components of a fuel cell, Electrode materials for hydrogen generator, Grease filter, Catalyst carrier

Aluminum Wire and Bar

● Aluminum Wire and Bar

It is an aluminum alloy wires and bars for various forging and cutting by our unique method. Compared with the extrusion method, the metal structure can be made finer and longer (maximum weight 2t). Realizes high forgeability and machinability, contributing to improved yield and productivity.



Application Forging / Cutting materials for automobiles, bicycles, electronic components, etc. Welding materials for shipbuilding and railways

Electronics products

in such places



Consumer and office equipment electronics

We offer a variety of products that can be used in inside/outside wiring materials of home appliance and the digital appliance. It features high-speed transmission, smallness, lightness, heat resistance.

Internal/outside wiring for Home appliance

- Air-conditioner
 - Flex-resistant wire
 - SUMITUBE™ Irradiated Heat-Shrinkable Tubing
- Electric bulb, thermistor
 - Electroplated Wire
- Microwave oven, cooking appliances
 - FFC for high heat resistance
 - FFC for high temperature, high humidity
- Refrigerator
 - SUMITUBE™ Irradiated Heat-Shrinkable Tubing

Internal/outside wiring for digital appliance

- 4K/8K TV
 - Halogen free wire
 - High voltage wire
 - FFC for high frequency
- Desktop, laptop
 - Fine-pitch FPC
 - FFC for high frequency
 - Electronic Wire for Mobile Communication Device



- Printer
 - Fuser roller, belt
 - FFC for high frequency
- Digital camera
 - Thin high flexural FPC
 - Electronic Wire for Mobile Communication Device
- High-speed outside wiring
 - Thunderbolt™ (high-speed data transmission)
 - Low-loss coaxial cable

VR/AR, game consoles

- Internal wiring
 - Fine-pitch FPC
 - FFC for high frequency
- High-speed outside wiring
 - Low-loss coaxial cable



Construction Equipment/Robotics

We offer a variety of products that can be used in wiring materials and components of industrial machinery and robotics, healthcare equipment and more. It features high-speed transmission, smallness, flexible design. These contribute to development of a medical technology and the industrial technique.

Healthcare equipment

- outside wiring
 - Flexible multi-core cable
- fine wiring in the probe
 - Fine-pitch FPC



< ultrasonic diagnostic equipment >



< surgery assistance robot >

Robotics



- Internal/outside wiring
 - Highly Flexible FPC
 - Micro flex coaxial cable
 - High strength conductor
- Mechanism part(ex.gears)
 - TERALINK™ Cross-Linked Thermoplastic Polymer

industrial machinery



- filtration, waste liquid treatment
 - POREFRON™
- EDM machine
 - Discharge Machining Electrode Wire
- Mechanism part(antifriction part)
 - FEX : Fluoro Ethylene Cross-linking
- High power laser processing machine
 - Compound Semiconductor



Info-communication

We offer a variety of products that can be used in smartphone, information device, data center, communication base station. It features high-speed transmission, smallness, lightness, high-functional. These contribute to development of infocommunication society.

Communication base station



- antenna board, RF module
 - fluorocarbon polymers FPC(FUOROCUIT™)
 - FFC for high frequency
- High-speed outside wiring
 - Low-loss coaxial cable

Smartphone, Information device



- Microphone, loudspeaker(water resistant)
 - POREFRON™
- LCD
 - Ultra-soft FPC

Data Center



- Internal wiring
 - Fine-pitch FPC
- 5G, high-speed communication
 - fluorocarbon polymers FPC(FUOROCUIT™)
- optical device, wireless communication device, laser module
 - Compound Semiconductor
- High-speed outside wiring
 - Low-loss coaxial cable
- site to site connection
 - fluorocarbon polymers FPC(FUOROCUIT™)
 - FFC for high frequency
- HDD
 - Thin high flexural FPC



Automotive/Aerospace

We offer a variety of products that can be used in automobile, aerospace and more. It features heat resistance, high voltage, high-speed transmission. We address a range of need such as EV and ADAS etc.

Automotive

- Wiring Harnesses
 - Heat resistant cables for automotive
 - SUMITUBE™ Irradiated Heat-Shrinkable Tubing
 - Heat-shrinkable cap
- in-vehicle infotainment (dash cam)
 - FFC for high heat resistance
 - High heat-resistann FPC
- battery
 - CELMET™ (Porous Metal)
 - High heat resistant FPC
 - Tab-Lead
- ECU
 - FFC for high heat resistance
 - POREFRON™
- Brake pipe(water resistant, anticorrosion)
 - SUMITUBE™ Irradiated Heat-Shrinkable Tubing
- transmission, converter, inverter
 - High heat resistant FPC
 - FFC for high heat resistance
 - Sensor cable
- Spark plug
 - Nickel Alloy Wire
- collision prevention radar(5G communications)
 - fluorocarbon polymers FPC(FUOROCUIT™)
 - High heat-resistann FPC
 - Compound Semiconductor



Aeroport



- Cable for aerospace
 - SUMITUBE™ Irrated Heat-Shrinkable Tubing
 - SUMITAG™ Cable Identification System

Drone



- Micro flex coaxial cable
- FFC for high frequency