



GROUND

Ground Co., Ltd. is a professional provider of grounding and lightning protection equipment and services

We pursue 100 % perfection,
100 % guaranty of responsibility and 100 % safety.

We declare a war against lightning
which incapacitates human lives and equipment
by developing PGS method of construction
which has been verified during last 10 years
and environment-friendly third generation
digital grounding device, eca3G,
which doesn't have to be buried underground.

PGS technology is optimized
for KSC-IEC Korean Industrial Standard.



GROUND IS SCIENCE !!



Ground Co., Ltd.
www.ground.co.kr

P.r.o.l.o.g.u.e

We came to see more lightning than before due to abnormal change in the weather and the effect of global warming.

The frequency of lightning occurred in Korea in 1996 was 118,950 times and it was 1,568,839 times in 2006. The amount of damage caused by lightning has exceeded 5 trillion Won.

In a small container box in Gogi-ri, Yongin-si, Gyeonggi-do, the challenge began against such oppressive nature in June 1999.

At that time when we were greeting the new millennium, the field of lightning arrestor and grounding in Korea was copying Japanese technology.

The reality was stifling as we were sticking to Japanese method although the structure of electricity supply itself was different from Japanese.

We who were confronted with the reality before being confronted with nature correctly understood Korean environment of electric power and developed grounding method which best fits to the same.

Advancing one step further from this, our passion led us to develop environment-friendly third generation digital grounding device, eca3G, which can be simply installed at the site without having to bury a ground rod underground.

Technical supports from doctors of science of KAIST, in-depth discussion between site engineers, technical verification of officially authorized organizations and our sense of duty were the driving forces that made PGS technology to be acknowledged as an essential technology in Korea.

PGS grounding which is the optimum method for Korea has been constructed and installed 782 times (as of Jan. 2009) for organizations from Cheong Wa Dae, to Navy and each local autonomous organizations.

We have started our second leap by completing Chungbuk factory at Geumwang-eup, Eumseong-gun, Chungcheongbuk-do in Sep. 2008. Further, our goal is to register the company in KOSDAQ market in Nov. 2011.

We will take a leading role in promptly replacing Japanese method of grounding, still widely used although the theoretical background of PGS method was reinforced when KSC was changed to KSC-IEC in 2005, into lightning protection technology which fits to Korean circumstance.

And we will provide our customers with services far more rapidly and far more correctly before being asked, and will create unmeasurable sensation and happiness of customers by providing far more positive and far more perfect services to satisfy customers and make them pleasant and by making far more efforts.



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In June 1999, doctors of science, professor An Seungjun, Park Cheolgeun and An Seongjun, Son Hoseob professional electric engineer, Goon System and 017 ShinSegi Telecom, Inc. organized PGS project team with an object to establish basic measures of lightning protection by scientifically analyzing the causes of lightning damage.

PGS is grounding and lightning protection system developed by PGS project team based on Runge-Kutta numerical analysis and physics.

Perfection

99.61% success rate of preventing lightning damage

PGS is covering 100% product liability insurance for lightning protection system from 1999.

The success rate of preventing lightning damage was 99.61% until the end of 2008 showing only 3 damage cases out of total 782 cases.

The damages of 3 cases were 100 % compensated by product liability insurance giving no economic burden to the customers.

PGS grounding facility can be economically maintained as the lifetime and quality are guaranteed for longer than 30 years.

Guarantee

100% coverage by product liability insurance

PGS gives top priority to provision of perfect construction and zero defect products to the customers and promises 100% compensation of damages by covering product liability insurance of LIG for 10 billion Won.

Security

Guaranty for safety by officially recognized function

PGS and eca3G products have been recognized as technology and construction method optimized for Korean Industrial Standard(KSC-IEC) through ISO 9001, 14001, KETI, UL, CE certification, registration as superior products in Public Procurement Service, functional certification of Small and Medium Business Administration, and test performed by KERI.

PGS is safely protecting human lives and equipment from the danger of lightning and electricity.

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Good product approved by Public Procurement Service



ISO9001:2000
ISO14001:2004



Korean patent



UL listed



Mark to signify conformance with EU regulations



Quality guarantee Q Mark



INNOBIZ certification



Functional certification of Small and Medium Business Administration



Research and Development venture business certification



Performance guarantee insurance of Machinery mutual aid association



Performance verification by KETI



A billion won insurance from LIG PL

The will of PGS for ceaseless development of technology and its technical capability have been technically verified by a number of officially authorized organizations.

- ISO 9001, 14001, KETI, UL, CE certification, registration as superior products in Public Procurement Service, functional certification of Small and Medium Business Administration, and test performed by KERI
- 1 International patent, 3 Korean patents, 3 Utility models.

In a container warehouse in Gogi-ri, Yongin-si, Gyeonggi-do, we started our challenge for lightning protection and grounding field under the company name of Goon System in Jun. 1999.

Having seriously felt uncertainty of future vision and limitation of competitiveness during 10 years of business in electric and communication construction field, we tried to find a new business.

We found lightning protection business, a niche market where there was no company started earlier and which would exist until the earth falls. Above all things, we started lightning protection solution business because we wanted to challenge 100% lightning protection which is thought to be impossible.

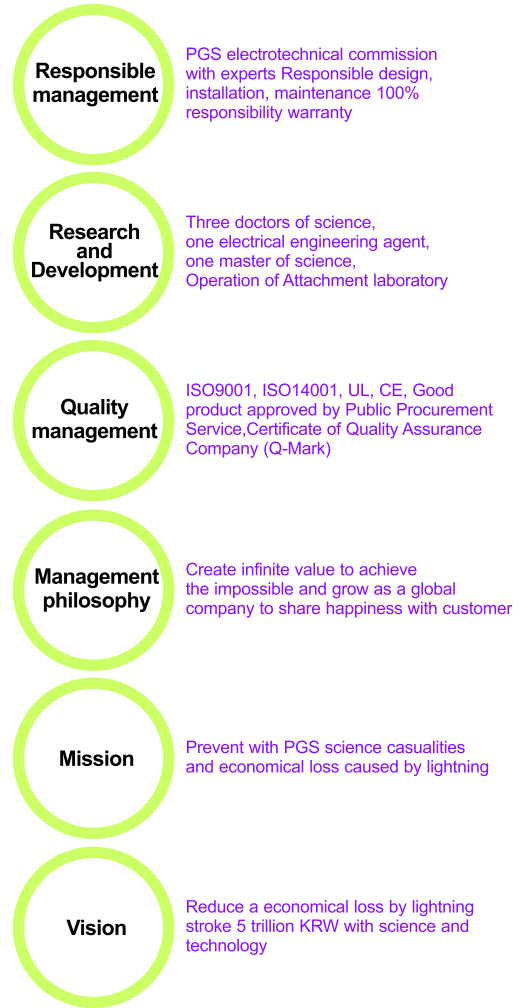
Technical capability of PGS method was recognized through performing service contract of 017 ShinSegi Telecom, Inc to provide solution for their base stations vulnerable to lightning and construction of lightning protection for telecommunication building of presidential security service in Cheong Wa Dae and, finally, Energy and Ground Bank Co., Ltd. was established in Jan. 2001 at Yangjaedong, Seoul mainly by themembers who completed PGS method.

PGS method was successfully applied to Heuksando base and Anmado base of Mokpo Sea Area Defense Head Quarter of Navy, and, in 2002, we could acquire three patents favored by free technical direction of professors and support for research and development equipment after we moved to the new business incubating center of Sunmoon University.

In 2004, we changed the company name to Ground Co., Ltd. moving the head office to Daecheong Tower, Gaepo-dong, Seoul.

The company continued growing thanks to recognition of PGS method and 100% lightning protection solution by the customers and performance of service contracts of national organizations, public organizations and large enterprises and, finally, we purchased our own factory in the apartment type factory complex in Seongnam-si and moved into the new factory in 2006 escaping from the rental factory.

After 2 years from that time, in 2008, Ground established a new factory and research center at Geum-wang-ub, Chungcheongbuk-do, completing the foundation for improvement of product quality which will ensure far deeper trust and love of our customers and for research and development, and, at the same time, the environment for mass production of eca3G which is the third generation grounding device and continuous growth through export.



Company

Ground Co., Ltd.

Established

March 1995

Head Office

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Website: www.ground.co.kr

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Factory and research and development center

176-10 Yonggye-ri, Gumwang-ub, Umseong-gun, Chungbuk, South Korea 369-903

Main business areas

- Manufacturing of grounding devices and lightning arresters
- Installation of grounding system and lightning protection system
- Diagnosis of lightning protection system and provision of solution
- Diagnosis of grounding system and provision of solution
- Telecommunication construction business
- Construction of grounding and lightning protection system
- Design of grounding and lightning protection system
- Noise and ESD solution

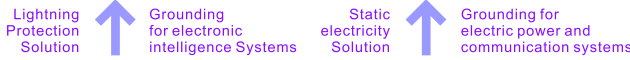
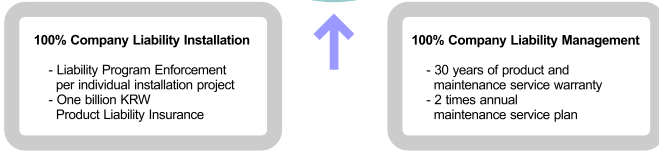
Introduction

Let us prevent human injury and economic loss caused by lightning using PGS science

Three doctors of science of KAIST, a global university, a professional electric engineer, researchers who have careers over 30 years in Daewoo Electronics and so on, all worked together from the time the company was established!

Men of national merits and veterans who got medals for their national loyalty shown in Army, Navy and Air Force joined us to 100 % perform the duties and responsibilities allocated to each person under the spirit they had when they acted as members of Polar Star and Dove in the Armed Forces.

Now, under a goal to register the company in KOSDAQ market on Aug. 8, 2011, all the staffs and employees of Ground will be closely united together with one mind to pursue 100% lightning protection which is considered to be impossible and, within near future, we will grow to a global company that can continuously share happiness with customers.



PGS technology development team developed PGS (Perfect Ground System) method which is a protection measure against lightning and surge having high frequency character based on theory of physics.

Based on PGS method developed like that, from Jun. 1999, we promised to our customers **'guaranty of function for 30 years'**, **'100% product liability coverage'** and **'free inspection for 10 years'**.

At earlier stage, there were many customers who laughed at it and did not trust us. In the worst case, some people treated us just like crooks. Customers, however, came to trust us as years passed by.

The promises we made at that time are still valid and 100% product liability coverage will continue being valid as far as Ground exists.

PGS products and technology have been fully verified through registration as superior products in Public Procurement Service, functional certification of Small and Medium Business Administration, UL, CE certification and test performed by KERI and, based on this technical capability, Ground is registered as an INNOBIZ enterprise and Research and Development venture enterprise.

Further advancing one more step, PGS technology led us to development of environment-friendly third generation digital grounding device, jumping over the general grounding method, which does not have to be buried underground.

What made all this possible was the trust and love of customers for PGS.

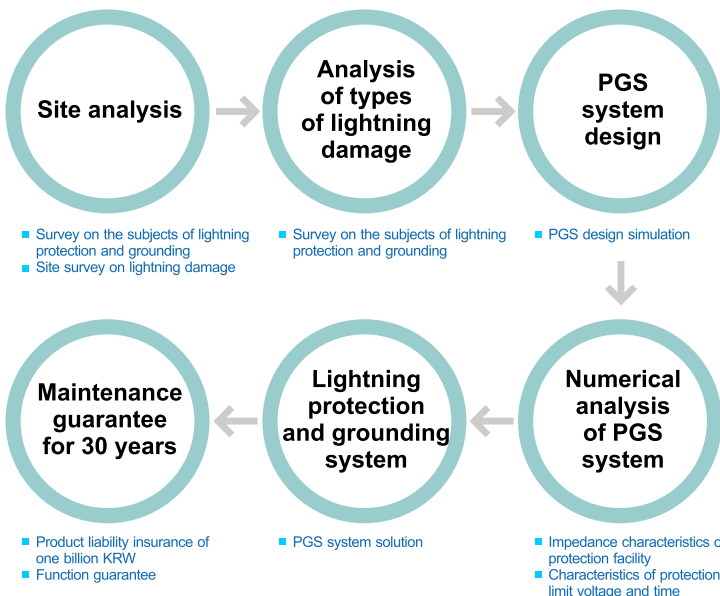
Perfect Ground System



Perfection Guarantee Security

PGS Engineering

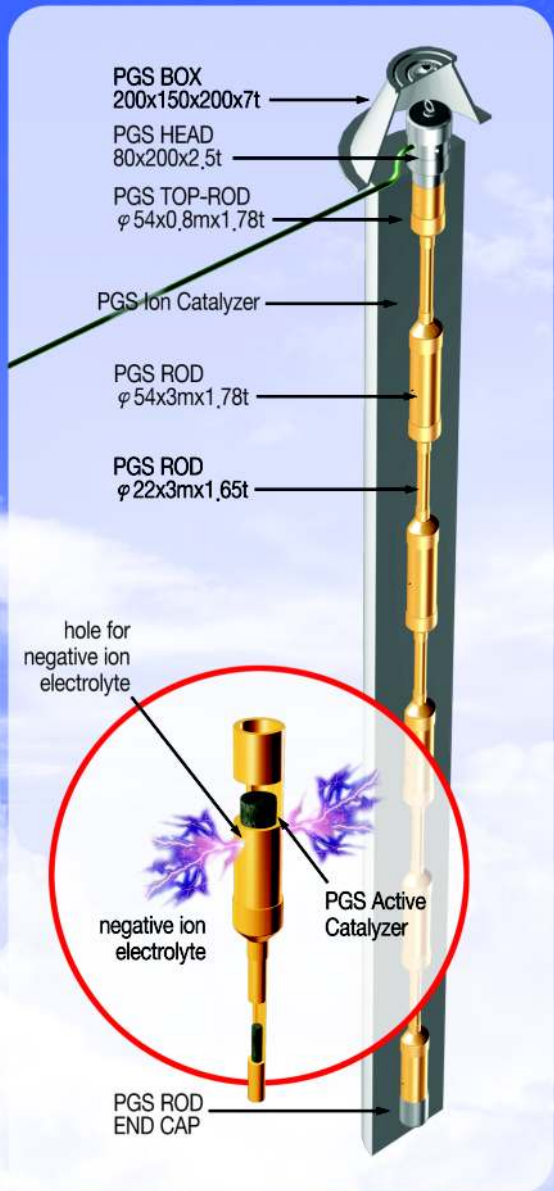
- PGS system modeling optimized for design purpose through detailed analysis of specification
- Efficient design preventing the effect of mutual interference with adjacent structures
- Application of innovative lightning protection and grounding system based on Runge-Kutta numerical analysis
- Deduction of optimum design model through thorough analysis of lightning, surge, noise and so on
- Establishment of 100% function of lightning protection and grounding system through advance analysis using numerical analysis, sham lightning and surge simulation.
- Construction guarantee with 100% liability through covering one billion KRW product liability insurance and maintenance guarantee for more than 30 years.



PGS Installation Method

PGS method is scientifically deduced solution by applying Runge-Kutta numerical analysis to correlation of grounding resistance and grounding impedance, and characteristics of lightning for the first time in the world.

The theory of PGS method and perfection of PGS products were verified as being superior by having been applied to construction sites of lightning protection system, grounding system, instrumentation grounding, static electricity, improvement of electric quality, electric power, communication, water supply and drainage facility and hospitals.



When we started our study of ground rod, in our poor knowledge about grounding, we even tested a copper pipe ground rod of 100mm diameter with a thought that we could reduce the grounding resistance by enlarging the sectional area of contact with the ground. But, the grounding resistance was not reduced much and, above all, the discharge speed was too slow in the surge current discharge test using lightning surge simulator.

After agony, I shouted 'help' to the professors throwing away all my pride. As always, they clearly analyzed the reason and even gave us a way to solve all the problems at once including the high price of copper pipe, the raw material for ground rod, because of which we thought of increasing the price of the product.

We could learn that the parallel set coefficient which is determined by the distance between ground poles such as ground rods or copper ground plates and potential interference and reiteration between ground poles acted as negative factors lowering the value of grounding resistance, and the diameter of the ground rod caused impedance problem of the ground rod by influencing values of reactance and capacitance.

Through such process, the PGS electrolyte ground rod was developed which can economically lower grounding resistance value and quickly remove the current of lightning and surge by discharging.

PGS ground rod was a ground pole in the form of copper pipe of 54 mm diameter and was changed into the current PGS electrolyte ground rod developed in 2003 which lowered the parallel set coefficient, lowered the value of ground resistance by more than 30% by removing the negative factors resulting from potential interference and reiteration, and made discharge of the ground current faster by lowering ground impedance.

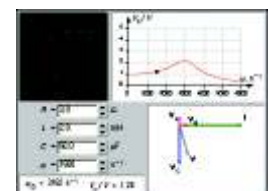
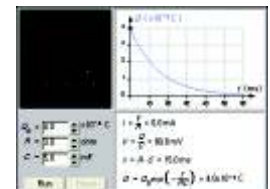
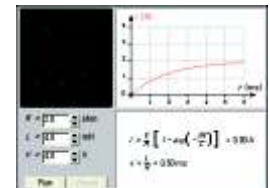
When we openly requested to suggest the name for PGS electrolyte ground rod, names like 'Juljuri ground rod', 'Plump and lanky ground rod', 'Ohm ground rod' and '20-50 ground rod' were suggested, and it is still fresh in my memory that I understood only at that time why the diameter of XIT ground rod was 54 mm, which was developed in USA before we developed PGS ground rod.

PGS Ground Rod's Characteristics

- Pure copper of 99.9% purity
- Lifetime of a ground rod is longer than 30 years.
- Patent on the effect of preventing parallel set coefficient
- Patent on the effect of preventing potential interference
- Patent on the effect of preventing reiteration effect
- Ground pole considering ground impedance
- Quick discharge of lightning and surge current
- Neutralization of excess current of electric characteristic

Operation Principles

- Reduction of impedance of PGS ground pole to the minimum level by optimizing XL and XC of the main ground pole and connected ground poles so that resonance occurs.
- Design where the form and specification are to be adjusted to fit the site conditions and effects of parallel set coefficient, potential interference and reiteration are improved by utilizing Runge-Kutta numerical analysis and computer simulation
- Quick discharge and neutralization of high frequency current with impulse character such as lightning, surge, noise and ESD through scientific design



PGS Ground Rod



Public Procurement Service Good products are preferentially supplied to public organization by private contract following national contract laws.

- ISO 9001, 14001, CE certification
- INNOBIZ certification
- Registration as superior products in Public Procurement Service
- Functional certification of Small and Medium Business Administration
- 1 billion KRW Product Liability Insurance
- 100% product liability coverage

In the past, materials like salt, lime, cement, ashes after burning and human excrements were used to lower the ground resistance. At that time, it was thought that the materials were fine if they only lowered the ground resistance. **Environmental factor of deteriorating soil environment, issue of lifetime related to corrosion of ground pole and, above all, ground impedance which determines fast discharge and removal of ground current were not considered.**

The chance to start research and development of materials lowering ground resistance of PGS was given by requesting Mineral Lab in USA to analyze ingredients of excrements of cats or pet dogs to export them as materials lowering ground resistance. The result of analyzing **bentonite and zeolite** for which we requested analysis at that time showed that **they have capability to absorb moisture and have characteristics of alkaline electrolyte and negative ions, which are adequate as a material to lower ground resistance, and, above all, that they are composed of ingredients harmless to soil and human body.** But, the material to lower ground resistance of PGS at that time provided some function but was not satisfactory.

After long thought, we reminded using ashes after burning as material to lower ground resistance and started studying ash and then carbon. **We further advanced the research by revitalizing bentonite and zeolite after adding natural activated carbon made of palm tree.**

Activated carbon newly extracted in this study had minute holes of molecular size formed in the revitalization process and had character of absorbent with specific surface area of 1100 m/g. **Activated carbon developed by PGS not only improves electric conductivity by absorbing heavy metal and metal ions but also lowers electric resistance and has a strong point of preserving natural environment.**

As a result, PGS could secure technical capability to preoccupy grounding market and came to develop PGS-ACTIV & ION CATALYZER, which greatly contributed to the development of the third generation grounding device.

- ⌵ Weight : 50 lbs / Barrel / Gel Ø260 × Ø300 × 350 [mm]
- ⌵ Packaging Material : PVC
- ⌵ Main Ingredients : Bentonite, Calsolyte, Zeolite, Lynconite, Activated Carbon, and various other natural mineral additives
- ⌵ Ph(20°C) : 9.9(Alkaline Gel)
- ⌵ Purpose : Power system grounding, lightning arrestor grounding, surge, noise and ESD protection system grounding, and communication and measuring system grounding
- ⌵ Environmental Compatibility : Korea Testing and Research Institute's Soil Pollution test and KERI test qualified product
- ⌵ Technology Right : Patent No.0444909 registered at Korean Intellectual Property Office
- ⌵ Product Warranty : 30 to 50 years of product warranty upon installation
- ⌵ Product Features : Perform as an energy conversion catalyzer, create and supply electrolyte to the target ground, and absorb at least 9 times more moisture than its volume

PGS-Catalyzer Series Features

- Neutralize the electrical characteristics of lightning strikes and surge current
- Create alkaline electrolyte at less than pH10; decrease grounding resistance.
- Absorbing water does not affect the catalyzer performance or shape; they stay as gel, and maintain same grounding resistance reduction capability. At least 30-yeaes product warranty is guaranteed.
- Possess minus charges; quickly discharge electric current of lightning strike and surge.
- Composed of metal ions that exchange the ions with each other through pore and channel; excellent performance in causing electrical catalysis.
- Entirely manufactured from natural minerals; Korea Testing and Research Institute's Soil Pollution test qualified products.
- Combined active and ion catalyzer creates alkaline electrolyte, and performs excellent electrical conductivity.

Frequency [KHz]	Company A		Company B		PGS Catalyzer	
	Z [Ω]	R [Ω]	Z [Ω]	R [Ω]	Z [Ω]	R [Ω]
1KHz	15.4	15.6	13.7	13.9	7.9	7.6
10KHz	15.8	15.3	13.0	13.3	4.9 (38%)	4.8 (38%)
100KHz	15.4	15.0	13.9	13.2	2.6 (68%)	2.4 (68%)



PGS Ion and Active Catalyzer

- **PGS-ION CATALYZER (Gel)**
- **PGS-ACTIVE CATALYZER (Gel)**
- **PGS-NORMAL CATALYZER (Powder)**

- ISO 9001, 14001, INNOBIZ certification
- KERI and KOTRIC Test Qualified Products
- Registration as superior products in Public Procurement Service
- Target Product (Sponsored by Korean Ministry of Commerce, Industry and Energy)
- Functional certification of Small and Medium Business Administration
- 1 billion KRW Product Liability Insurance
- 100% product liability coverage

1,602 x 10¹¹
eca3G

Earthing Device without burying



eca3G
 the 3rd
 Generation Digital
 Grounding Apparatus

- ISO 9001, 14001, CE certification
- INNOBIZ certification
- Registration as superior products in Public Procurement Service
- Functional certification of Small and Medium Business Administration
- 1 billion KRW Product Liability Insurance
- 100% product liability coverage
- 100% refund and recall

Surveying sites of lightning damage for several years, we got several questions. The places where there were a lot of lightning rods installed had much damage and, especially, the places where lightning rods of high price so called 'wide area lightning rod' or 'electrical trouble dispersion type' were installed had the biggest damage.

An aircraft with full of high technology electronic devices is safe even though it is fully exposed to lightning though it does not have anything to do with grounding and we can say that it has infinite value of grounding resistance.

Arranging the records we collected surveying many sites for several years, we found that, regardless of the fact whether there is grounding facility or not, there were several places with ground resistance of almost over 500 Ω which did not have lightning damage while there were some places with ground resistance of 5 Ω or less than 1 Ω which suffer from lightning damage every year. If so, **it may not be the only solution for the problem to lower the ground resistance.**

A lightning rod does not prevent lightning but rather tempt it. SPD not only cuts off surge.

We have verified through test that SPD discharges part of abnormal voltage through ground or, on the contrary, surge enters through ground line connected to the ground to SPD and supply abnormal voltage to the source.

When the current of lightning or surge is discharged to the ground through grounding, the discharged current may influence other equipment or adjacent facilities coming through ground line or through ground.

Accordingly, we concluded that, **if we can remove abnormal voltage or abnormal current from its source, it will be far more perfect measure against lightning and surge.**

Five years after we began research and development, **the third generation ground device, eca3G(energy conversion apparatus 3rd Generation) which does not have to be buried underground** is introduced to the world.

eca3G got the patent 90 days after the application was submitted to Korean Intellectual Property Office. We at first thought that the reason why the patent decision was made in a record-breaking speed while it generally takes 2 years was because of the existence of corporation patent attorney who was registered as a director. But when we asked the patent attorney about the reason, the answer was that it was because the technology and theory of the third generation ground device for which patent is applied were clear and because they followed the examination regulation that examination should be expedited in order to protect the original technology.

eca3G's have been installed at the sites where lightning damage was serious from 2006 and are achieving 100 % lightning protection. It covered 50 % of the total sales of the company in 2007 and 2008 after completing theoretical and site verification.

eca3G is the main product of Ground Co., Ltd. which is much trusted and loved by the customers as it can provide highly reliable lightning protection economically without spending much expense and can simply solve ground problem even in places where grounding is impossible.

Besides, it will greatly contribute to growth of Ground to a global company, which is one of the management principle of Ground, as many overseas customers are expressing much interest in the product together with favorable comment.

- **No need to be buried underground**
- **Install on the ground not bury under ground**
- **Convenient as anyone just plug into plug socket and uses**
- **Being installed on the ground, guarantee, replacement and repayment can be done**
- **100% liability guarantee by 1 billion KRW Product Liability Insurance**
- **Science that developed by the PGS technology of doctors team of science in KAIST**

- International patent: PCT/KR2006002907 (applied in China, USA and Japan)
- Patent No. 10-0599359 (Jul. 4, 2004)
- Certification of ISO14001: 2004 (Aug. 29, 2006)
- CE Certification: PGS-0101~3 (Feb. 12, 2007)
- Function certification of Small and Medium Business Administration No. 27-098 (Mar. 8, 2007)
- Completed functional test by Korea Electronics Technology Institute (KETI)
- Selected as an INNOBIZ enterprise No.6066-3249 (Dec. 14, 2006)
- Selected as a new technology venture enterprise No.061625231-1-00669 (Apr. 21, 2006)

A distressing story of Osan-ri village suffering from lightning for years was introduced through a KBS program titled 'Such a story in the world', which is a part of morning of the world program. We heard the story from the dean of IT Convergence Campus and visited the village.

In the not so big village, only the aged like our parents were living. The person in charge in the Gun office was only reviewing the plan to install a lightning rod on the mountain because no budget is yet allocated.

When we checked the contents of lightning damage, all were electronic appliances which were damaged.

So, we explained about the wrong recognition we had about lightning rod and that installation of a lightning rod will not protect electronic appliances of the village and decided to construct lightning protection solution for the village which costs about 30 million Won at no charge.

On Sep. 5, 2008, we agreed on sisterhood relationship with Gangjin-gun and signed on the agreement with Gun Head Hwang Juhong in the large conference room of Gangjin-gun office. We promised to support lightning protection facilities worth of about 100 million Won at no charge for 10 years from then on.

The product developed at that time to suit the country village was 'Thunder Shield'.

Kwangshin Total Electric Co., Ltd., which is the first PGS branch in Gyeonggi province, is maintaining street lights of Anseong-si. They told us that they are suffering from damage of the street light control board caused by lightning every year. The members of PGS research center visited the site and developed 'Thunder Vigil' for street lights.

The name 'Thunder Vigil' was proposed by the division director Kim Gukyeong, a reserve army colonel who received Order of National Security Merit Samiljang, the Meritorious Service Medal and Legion of Merit from US government and a presidential citation, reminding his days as a night watch

'Thunder Magma' is a product specially developed to be installed for protection of green houses of Jakmokban (an organization established for joint cultivation and joint forwarding) located at Daegwanryeong, Gangwon-do, vinyl houses in Jeju Island and lighthouses in islands fully withstanding strong wind and heavy snow in the mountain area and sea wind and salt content of the sea.

The name 'Thunder Magma' was an idea of Han Jaewon section manager, a flower of Ground, who majored in mechanical engineering in Hanyang University, is fluent in Japanese and English and who completed MBA course as well.



Thunder Shields



Thunder Shields for lighthouse



Thunder Magma



Thunder Vigil



PGS-SPA



Lightning Surge Alarm



**PGS and eca3G method guarantees
100% protection from lightning stroke by
100% technology assurance which is
demonstrated through no accident for 100,000
hours and PL insurance (a billion KRW)**



Other Products

- Thunder Shields
- Thunder Vigil
- Thunder Magma
- Lightning Surge Alarm
- PGS-SPA

PERFECT GROUND SYSTEM
reduce environmental loss by lightning stroke,
5 trillion won with science and technology

Major Supply Records

PERFECT GROUND SYSTEM
reduce economical loss by lightning stroke.
\$ billion won with science and technology.

 CHEONG WA DAE Office of the President CHEONG WA DAE Office of the President	 대한민국해군 REPUBLIC OF KOREA NAVY Republic of Korea Navy	 대한민국 육군 REPUBLIC OF KOREA ARMY Republic of Korea Army	 대한민국공군 REPUBLIC OF KOREA AIR FORCE Republic of Korea Air Force
 대한민국 국방부 Ministry of National Defence Ministry of National Defence	 대한민국 해병대 REPUBLIC OF KOREA MARINE CORPS Republic of Korea Marine Corps	 해양수산부 Ministry of Maritime Affairs & Fisheries Ministry of Maritime Affairs & Fisheries	 산림청 Korea Forest Service Korea Forest Service
 K water 한국수자원공사 Korea Water Resources Corporation Korea Water Resources Corporation	 한국관광공사 Korea Tourism Organization Korea Tourism Organization	 Gunsan Regional Maritime Affairs & Fisheries Office Gunsan Regional Maritime Affairs & Fisheries Office	 기상청 Korea Meteorological Administration Korea Meteorological Administration
 SEOUL METROPOLITAN GOVERNMENT SEOUL Metropolitan Government	 부산광역시 BUSAN METROPOLITAN CITY BUSAN Metropolitan City	 광주광역시 GWANGJU CITY GWANGJU Metropolitan City	 OUNG City CHANWON CHANWON City
 CHUNCHEON CITY CHUNCHEON City	 GURI-SI GURI City	 천안시 CHEONAN CITY CHEONAN City	 GWANGYANG-SI GWANGYANG City
 GANGHWA COUNTY GANGHWA County	 Pyeongtaek Super PYEONGTAEK City	 Seoul Metro 서울메트로 SEOUL METRO	 5678 서울메트로 서울메트로 Seoul Metropolitan Rapid Transit Corporation SEOUL Metropolitan Rapid Transit Corporation
 National Emergency Management Agency National Emergency Management Agency	 KBS Korea Broadcasting System	 SBS Seoul Broadcasting System	 KNN Korea Network Busan Broadcasting System KNN
 KTF KTF	 KT Freetel Korea Telecommunication	 SK telecom SK Telecom	 hanaro telecom Hanaro Telecom
 kti 한국산업기술시험원 Korea Testing Laboratory Korea Testing Laboratory	 환경관리공단 Environmental Management Corporation Environmental Management Corporation	 CRMO 중앙전파관리소 Central Radio Monitoring Office Central Radio Monitoring Office	 HYUNDAI HEAVY INDUSTRIES CO., LTD. HYUNDAI Heavy Industries Co., Ltd.
 SAMSUNG 삼성전기 SAMSUNG	 SAMSUNG 삼성SDS SAMSUNG SDS	 한양대학교 Hanyang University HANYANG University	 장안대학 JANGAN UNIVERSITY JANGAN University
 posco POSCO	 SeAH SeAH Steel Corporation SeAH Steel Corporation	 KCCH 원지력병원 Korea Cancer Center Hospital Korea Cancer Center Hospital	 명지병원 MYONGJI HOSPITAL MYONGJI Hospital

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PGS is a grounding method providing a solution for grounding, lightning protection and static electricity, which guarantees 100 % protection against lightning and 100 % product liability coverage if damage occurs and 30 years after service for PGS grounding facility.

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ISO9001:2000
ISO14001:2004



Korean patent



UL listed



Mark to signify conformance with EU regulations



Quality guarantee Q Mark



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Performance verification by KETI



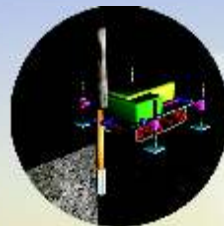
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2G



3G



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