

eca^{1,002 x 10¹²}3G Perfect Ground System

(US Patent No 7,652,865 B2)

Proven performances at various national security sites :
3,845 sites for 16yrs, Protection Success rate : 99.88%



the 3rd Generation Digital Grounding Apparatus
 for Perfect Lightning Surge Protection
 without burying in Ground



LM-Series



LM-Series



TNC-Series



LP-Series



TM-Series



- Total Lightning Protection
- Provide Equi-potential, common grounding function (near zero N-G Potential difference assured)
- Patented technology
- Product Liability Insurance
- Digital Grounding Apparatus (Earthing without burying in ground)

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especially for advanced networked electronic IT based systems

Since 1999, <GROUND Co.,> has provided total lightning protection solution pursuing 100% perfect protection, and has implemented remarkable successful performances with 99.88% protection rate for 15years mostly for National Security Facilities. PL insurance has been provided to the clients together with highly credible technology and further satisfaction.



Environment for Lightning protection is changed as below, so should adopt different concept of lightning protection.

- Most of electronic, communication, data systems are connected under network
- IC chips become high integrated level with very thin internal circuit which is very weak from surge intrusion, and damaged short circuit status could not be seen from outside, Modern systems adopt Automation operation which adopt many IC chips, and will have more troubles from lightning surge intrusions.
- Global warming occurs more frequent lightning, multi-stage lightning (not simple single lightning) which normal surge protective device could not care.
- Near-by direct lightning affects your systems under GPR effect (Ground Potential Rise) which is shown very frequently at out-door or isolate buildings or isolate facilities.



eca3e will provide ideal perfect lightning protection with integrated surge protection for your systems in the protection zone, common grounding, equi-potential function, surge elimination via energy conversion function, and does not require grounding rod and low grounding resistance, targeting perfect lightning surge protection for advanced networked systems.

eca3e will provide perfect protection solution for following environment.

- Networked, Automated, Data communication systems which require integrated lightning surge protection.
- Rocky, mountain area where could not get low grounding resistance for systems.
- Mobile Tactical vehicles which have difficulties to install grounding rod.
- Isolate/separate systems in the field are easily exposed from GPR (Ground Potential Rise)
- Frequently surge damaged sites which could not find perfect protection solution



o eca3g Brief Technology Information

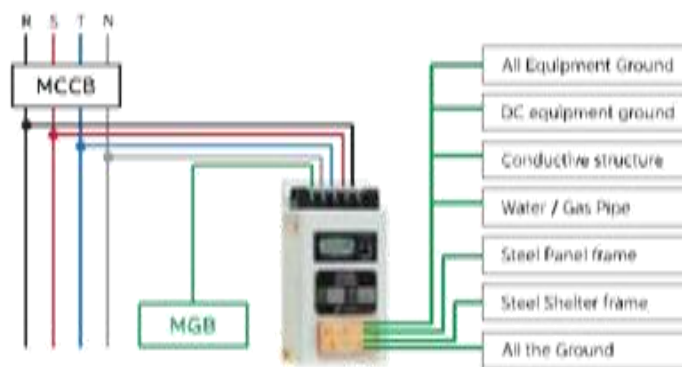
eca3g can detect surge, convert surge energy, neutralize, eliminate surge which may enter into the systems via power line, data line and conductive structures (such as water & gas piping lines, hydrant, steel structures).

eca3g has energy conversion and neutralization function to convert electric characteristics of surge into arc, heat, neutralization, and eliminate the surges.

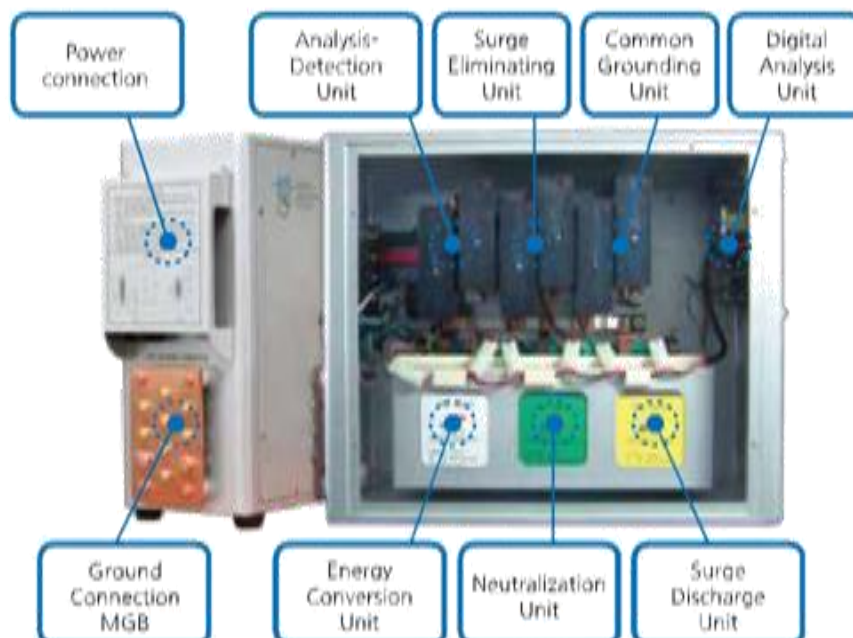
eca3g makes EQUI-POTENTIAL environment of all the equipment and conductive parts etc, which improve earthing resistance also.

eca3g provide INTEGRATED SURGE PROTECTION to be able to connect max 20 ground points(LM model).

o eca3g Installation configuration



o eca3g Component Units



MAJOR CLIENTS/USERS

eca3G has been extensively installed in South Korea for Navy, Army, Air Force, Special Government Departments, National Institutions, Water Service Management Agencies, Railways, Subways, Road Construction Sites, Sewage Treatment Plants, Drinking Water Treatment Plants, Broadcasting Stations, Telecom Base Stations, Universities, Hospitals, Research Institutes, Factories, Golf Clubs, Gas Corporations, Hydro-Nuclear Power Corporations, Mobile Communication Service Providers, Mobile Shelters and etc.

Certificates



USA Patent



CE MARK



Certificate of Korean patent



Certificate for Good product approved by public Procurement Service



Certificate of INNO-BIZ



ISO 14001



Certificate of Performance The head of small and medium business administration



Certificate of enterprise research laboratory



International Patent



Certificate of Product Liability Insurance

TOTAL LIGHTNING PROTECTION SYSTEM

Indian Client:



GROUND Co., Ltd.

Factory / R&D Institute : 950, Deokum-ro, Kumwang-up, Eumsung-gun, Chungbuk, Korea



SN Engineering

Office No 14 Nikhil Complex Kaipur Chok, Gurugram – 122001
9990645119, 9958212307
earthings@gmail.com
www.snengineering.com