## A Study on the Device that Controls Power Dispersion of Distribution Line and Its Method

Sooyoung Jung\*, Jun-Ho Huh\*\*, Seung-il Moon\*\*\* \* Department of Electrical and Computer Engineering, Seoul National University, Seoul, Republic of Korea \* CEO of Hanmi E&C Inc

Author: sjung7@snu.ac.kr

\*\*Department of Software, Assistant Professor of Catholic University of Pusan, Republic of Korea
<u>\*\*Corresponding author: 72networks@cup.ac.kr</u>

\*\*\*Department of Electrical and Computer Engineering, Professor of Seoul National University, Seoul, Republic of Korea

Abstract. This study is on the device of controlling power dispersion of the distribution line. Specifically, it is on the device that controls power dispersion of improved distribution line so that it prevents unauthorized access by intensifying IoT security in the combination of security chip, IoT security terminal, IoT key distribution server and security management application in case of smart mirroring using IoT as a means of smart grid and also so that the power of distribution line can be efficiently distributed and controlled by using metering information according to the smart metering. Accordingly, among the distribution technologies, this study proposed a power dispersion control of the distribution line. Specifically, it is on the device that controls power dispersion of improved distribution line so that it prevents unauthorized access by intensifying IoT security in the combination of security chip, IoT security terminal, IoT key distribution server and security management application in case of smart mirroring using IoT as a means of smart grid and also so that the power of distribution line can be efficiently distributed and controlled by using metering information according to the smart metering.

**Keywords:** Monitoring, Controls Power Dispersion, Distribution Line, Micro Grid, Smart Metering, IoT.