Wireless Harness Inside ICT Equipments

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***Abstract*—**We have been investigating point-to-multipoint wireless communication suitable for the use inside Information and Communication Technology (ICT) equipments to accommodate demands for weight saving, environmental lifecycle CO2 reduction and improvement of assembly/maintenance efficiency by means of replacing communication wire harnesses with wireless technology, that is wireless harness. Through the radio propagation measurements inside four equipments of automatic teller machine (ATM), ticket vendor, vending machine, and printer, a consistent specification applicable to them has been determined. Based on this specification, a test wireless system has been developed. It showed a good performance even inside the ATM that has the most lossy environment among the four equipments we tested**.**

***Keyword*—2.4 GHz ISM band, ICT equipment, radio communication equipment, radio propagation, wireless harness**

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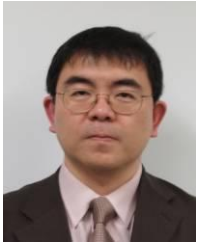

Tomohiro Oka was born in Kanagawa, Japan, on August 1968. He received the B.E., and M.E. degrees from Hosei University, Japan, in 1991 and 1993, respectively.

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