

# 4G/Multiband Handheld Device Antennas and Their Antenna Systems

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## Abstract

Promising 4G/multiband antennas for handheld devices will be presented. Some low-profile, small-size and wideband techniques for LTE/WWAN antennas will be addressed. The ground antenna design concept and promising ground antenna structure will be introduced, which is especially suitable for slim, flexible handheld devices. The promising antenna systems using the same for achieving wideband high-isolation antenna systems for MIMO, diversity or dual WWAN operation will be discussed.

Future trends for the handheld device antennas including the reconfigurable and tunable antennas that can be adaptive to environmental changes or tunable to cover different bands or switched to have multi-beams or suitable for antenna systems will also be discussed.

## Biography



Prof. Kin-Lu Wong is Sun Yat-sen Chair Professor of National Sun Yat-sen University, Kaohsiung, Taiwan. He has published more than 500 refereed journal papers and 250 conference articles. He holds over 200 patents and is the author of three books including Compact and Broadband Microstrip Antennas (Wiley, 2002) and Planar Antennas for Wireless Communications (Wiley, 2003). Dr. Wong's published works have been cited over 14,000 times in Google Scholar.

Dr. Wong is an IEEE Fellow and received many awards including NSC (National Science Council) Outstanding Distinguished Researcher in 2013, top 50 NSC scientific achievements in past 50 years (1959~2009) in Taiwan, and the Academic Award from Ministry of Education of Taiwan, in 2012. He was selected as top 100 honor of Taiwan by Global Views Monthly in August 2010 for his contribution in mobile antenna researches. Dr. Wong received the 2008 APMC Best Paper Award (APMC Prize), and is an IEEE AP-S Awards Committee member (2011~2013). Dr. Wong was General Chair of 2012 APMC and will also serve as General Chair of 2014 ISAP at Kaohsiung, Taiwan.