

**IEEE Standard for  
Local and metropolitan area networks—**

**Part 15.4: Low-Rate Wireless Personal Area  
Networks (LR-WPANs)**

IEEE Computer Society

Sponsored by the  
LAN/MAN Standards Committee

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**IEEE Std 802.15.4™-2011**  
(Revision of  
IEEE Std 802.15.4-2006)

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**IEEE Computer Society**

Approved 16 June 2011

**IEEE-SA Standards Board**

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**American National Standards Institute**

**Abstract:** The protocol and compatible interconnection for data communication devices using low-data-rate, low-power, and low-complexity short-range radio frequency (RF) transmissions in a wireless personal area network (WPAN) were defined in IEEE Std 802.15.4-2006. In this revision, the market applicability of IEEE Std 802.15.4 is extended, the ambiguities in the standard are removed, and the improvements learned from implementations of IEEE Std 802.15.4-2006 are included.

**Keywords:** ad hoc network, IEEE 802.15.4, low data rate, low power, LR-WPAN, mobility, PAN, personal area network, radio frequency, RF, short range, wireless, wireless personal area network, WPAN

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