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CCS N10



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 29910.5-2013

**Industrial communication networks - Fieldbus specifications -
Type 20 HART specification - Part 5: WirelessHART wireless
communication network and communication profile**

工业通信网络 现场总线规范 类型20：HART规范 第5部分：WirelessHART 无线
通信网络及通信行规

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Foreword

This document was issued on 17 December 2013 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 May 2014.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 25.040, Chinese classification N10.

1 Scope

GB/T 29910.5-2013 is Part 5 of the Chinese Type 20 HART fieldbus specification, and defines WirelessHART. It is the wireless form of the protocol that most of the world's process instruments already speak, and it was designed around a constraint the office wireless world does not have: a plant is full of steel that reflects, vessels that move, and instruments that must report reliably on battery for years. WirelessHART answers it with a self-organising mesh in which every device routes for the others, and with time-synchronised channel-hopping so that a blocked frequency delays a message rather than losing it. The standard specifies the physical layer service and protocol, the data link layer service definition and protocol including the link scheduling and DLPDU structure, and the application layer service definition and protocol, with normative annexes on security, the wireless protocol, network management, the gateway, the command response codes and the common tables, and informative annexes on the published data schema, network manager and gateway implementation and the handheld device. It took effect on 1 May 2014.

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