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"ПРИРОДНИЧІ ТА ГУМАНІТАРНІ НАУКИ. АКТУАЛЬНІ ПИТАННЯ"

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ЗВ'ЯЗОК НА НЕВЕЛИКИХ ВІДСТАНЯХ

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NEAR FIELD COMMUNICATION

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Near field communication, or NFC for short, is an offshoot of radio-frequency identification (RFID) with the exception that NFC is designed for use by devices within close proximity to each other. Three forms of NFC technology exist: Type A, Type B, and FeliCa. All are similar but communicate in slightly different ways. FeliCa is commonly found in Japan.

Devices using NFC may be active or passive. A passive device, such as an NFC tag, contains information that other devices can read but does not read any information itself. Think of a passive device as a sign on a wall. Others can read the information, but the sign itself does nothing except transmit the info to authorized devices.

Active devices can read information and send it. An active NFC device, like a smartphone, would not only be able to collect information from NFC tags, but it would also be able to exchange information with other compatible phones or devices and could even alter the information on the NFC tag if authorized to make such changes.

To ensure security, NFC often establishes a secure channel and uses encryption when sending sensitive information such as credit card numbers. Users can further protect their private data by keeping anti-virus software on their smartphones and adding a password to the phone so a thief cannot use it in the event that the smartphone is lost or stolen.