

## BITCOIN – WHAT IS IT?

Bitcoin is a **digital currency**. It is used on a **peer to peer** computer network and has no paper money system. The currency stores its transactions on a ledger, called the **Blockchain**. Bitcoin is an open-source network software code, which is enabled by **cryptography** which secures and verifies Bitcoin transactions.

The Blockchain is a ledger like any other accounting system, yet it connects one group of transactions to the next. These groups are called **Blocks**. They are blocks of transaction records.

The blocks of transactions on the Blockchain are copied onto computers all over the world that people like you and I voluntarily operate. These copies of the blockchain are called **Nodes**. Some cryptocurrencies pay their node operators for maintaining this system. The Bitcoin network does not pay its node operators.

There are approximately 9500 Bitcoin nodes in the world. The data size for these is over 150 Gigabytes and increases every day. These are referred to as **Full Nodes**, as they contain the entire Bitcoin Blockchain. Some software contains part of the blockchain for current transaction records.

Because nobody owns the Bitcoin Blockchain, and it is copied around the world in a way that nobody has control over it, it is **Decentralized**. Some cryptocurrencies are centralized due to being issued and managed by corporations. This system is also referred to as a **Distributed Ledger**.

The many redundant copies of the blockchain create security in it as the nodes, as they are in so many different locations around the world, making the blockchain **Immutable**. The data cannot be changed. If one node fails or is lost, the rest still exist and can be copied again to other new nodes.

# HOW TO USE BITCOIN

To use Bitcoin, you need to first have a **digital wallet**.

A digital wallet for Bitcoin uses **cryptography** to create a 32 character wallet address. The 32 characters are created through a mathematical algorithm that currently cannot be reversed. Your digital wallet can be installed and used on a **smart phone, tablet or desktop computer**. These devices use your wallet address and store a duplicate of the wallet address with a **QR code**. Pictured below is the QR code and the matching wallet address.



13gWtMQJdg3H6XBpFjMELcHLJc1HHp79vD

A QR code and wallet address can be printed and stored on paper. This is referred to as a **Paper Wallet**. If the paper is the only version of the wallet in the world, then it becomes very secure. Some store these paper wallets in safes, safety deposit boxes and other high security locations. Paper wallets should be considered safe but susceptible to being physically ruined.

If the software for a Bitcoin wallet is lost, or if a paper wallet is damaged or destroyed, the Bitcoin can be lost forever. Some examples of Bitcoin wallet software include, Jaxx, Blockchain, Exodus, Mycelium & Electrum.

You can also store Bitcoin or other cryptocurrencies on physical storage units. Some brands of these include Trezor, Ledger & Keepkey. These physical storage units should also be kept in very secure locations so that they are not lost or damaged.

Jaxx



BLOCKCHAIN



EXODUS

Bitvo



mycelium



electrum

# HOW TO BUY BITCOIN

Buying bitcoin is a simple process. It can be done in many ways. Here is a breakdown of how each of these sources work:

**Digital Exchange:** You can register for an account on a website that is a digital exchange. You can buy Bitcoin through an online exchange, such as [bitnational.com](http://bitnational.com), [bitvo.com](http://bitvo.com), [bittrex.com](http://bittrex.com), [coinsquare.ca](http://coinsquare.ca), [quadrigacx.com](http://quadrigacx.com), [coinbase.com](http://coinbase.com), [gemini.com](http://gemini.com), [binance.com](http://binance.com), [bitfinex.com](http://bitfinex.com). If you purchase through a digital exchange, it is an excellent idea to do so with a company based in your country of residence.

**Bitcoin ATM:** Visit the website [www.coinatmradar.com](http://www.coinatmradar.com) to locate a Bitcoin ATM near your area. You can pay with debit or credit card and have the Bitcoin deposited to your digital wallet on your smart phone through a picture of your QR code for your wallet. This is generally the most expensive way to buy Bitcoin, but it is convenient.

**Local Brokers:** Buying bitcoin locally from a business is a safe way to obtain it. Research any business you plan on doing a purchase with. Set your budget and do not exceed it.

**[localbitcoins.com](http://localbitcoins.com)** : is a website that generally should only be used by experienced users of cryptocurrencies. Dealing one on one with an individual can be risky and you should know of security precautions before doing this.



# HOW TO SPEND BITCOIN

Spending bitcoin is a simple process that will only take a few seconds. When you have the use of a mobile app, you may wish to spend bitcoin or BTC in a retail setting.

The process will be similar from one app to another:

1. Open your Bitcoin wallet app that you have already setup and funded. Choose the “Send” area of the app.
2. Scan the QR code for the wallet that you want to send bitcoin to.
3. Enter the amount of either bitcoin or local currency you want to send.
4. Select the fee you will pay based on the speed of the transaction. Choose regular for your initial transactions.
5. Confirm the details and press continue or send.

You will be able to confirm your transaction in your mobile apps list of transactions. You can also confirm the transaction once it received confirmations on the blockchain.

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For more information, please visit our website if you haven't already done so. You will be able to read more articles, connect with local education groups and share your questions with the crypto community.



[WWW.CRYPTOCULTUREMAGAZINE.COM](http://WWW.CRYPTOCULTUREMAGAZINE.COM)