The Helium Network Token

The Helium Network Token ("HNT") is the native cryptocurrency and protocol token of the Helium Network ("the Network").

The original Helium blockchain produced the first HNT on July 29th, 2019, on block 93. There was no pre-mine of HNT before the launch of the Network.

Navigate to https://explorer.helium.com/stats for up-to-date information on Network tokens.

HNT Usage

HNT serves the needs of the two primary parties in the Helium Ecosystem:

1. **Hotspot Hosts and Operators.** Hosts are rewarded in network tokens like IOT or MOBILE while deploying and maintaining network coverage. These network tokens are redeemable for HNT.
2. **Enterprises and Developers use the Helium Network** to connect devices and build IoT applications. Data Credits, which are a $USD-pegged utility token derived from HNT in a burn transaction, are used to pay transaction fees for wireless data transmissions on the Network.

HNT Token Economic Concepts

The Network uses three token economic concepts to ensure HNT supply is both plentiful for usage needs and relatively scarce, with a known maximum.

Max Supply

The Network targeted the distribution of 5,000,000 HNT per month at launch. Following the community approval of HIP-20, the Network uses a two-year halving schedule, resulting in a maximum HNT supply of 223,000,000 HNT.

Year[1]	HNT at Year Start	Target HNT Emission
1	0	60,000,000
2	60,000,000	60,000,000
3	120,000,000	30,000,000
4	150,000,000	30,000,000

> The full token emission schedule can be viewed in the HNT section of this document: Token Emissions as of Solana Migration.

Burn and Mint Economics

Data Credits ("DC") are a $USD-pegged utility token derived from HNT in a burn transaction and used to pay all transaction fees on the Helium Network. DC is only produced by burning HNT.

One Data Credit will always cost $0.00001. Or, $1.00 will always exchange for 100,000 DC.

This HNT to DC relationship is based on a design commonly called a burn and mint equilibrium ("BME") and intends to allow for the supply of HNT to respond to Network usage trends such that the amount of HNT that exists remains static month on month. The amount of DC produced by burning HNT will increase and decrease based on the USD price of HNT as reported by the HNT Price Oracles.

Below are a few examples of HNT to DC conversion calculations:

Example 1: 1 HNT = $1.00

- The price of one DC is $0.00001.
- The current HNT Oracle price is $1.
- Burning 1 HNT would produce 100,000 DC.

Example 2: 1 HNT = $5.00

- The price of one DC is $0.00001.
- The current HNT Oracle price is $5.
- Burning 1 HNT would produce 500,000 DC.

> ⓘ DATA CREDITS ARE NON-TRANSFERABLE
> Once the burn transaction is complete, the receiving Helium Wallet owns all of the DC and **cannot** transfer them to any other Helium Wallet.

Net Emissions

Net Emissions give the protocol enough HNT for rewards in perpetuity.

Net Emissions enable the Network to monitor the number of HNT burned for DC in a given epoch and add that to the number of HNT to mint that epoch.

For example, if 10 HNT burn for DC in an epoch, the system would mint 10 additional HNT than were expected in that given epoch.

A cap on the number of HNT minted via Net Emissions per epoch ensures the desired deflationary effect of Burn and Mint and the resulting reduction of supply. Because HNT produced via Net Emissions do not add to the total outstanding, they do not violate max supply.

Review the complete Net Emissions discussion in the HIP for more information.