PULSAR

LITEPAPER

PULSAR IS A MASSIVELY MULTIPLAYER REAL-TIME STRATEGY GAMING EXPERIENCE

Combine the mechanically and economically complex gaming experience of RTS titles like Starcraft with a truly massively multiplayer world and you have Pulsar. Mine, Build, and Conquer with hundreds of thousands of other players in real time to conquer both the alien inhabitants of Pulsar and your neighboring empires.

Expand Your Empire

Mine and extract rare resources from your Land. There are 12 raw resource types on Pulsar and raw $PLSR that are used as currency and base materials for crafting and building.

Refine raw material into on-chain assets that can be sold for $PLSR, traded for other assets, or used for crafting new NFTs.

Build and craft Structures and Units to expand your mining, production, building, and combat capabilities.

Battle aliens and other players with PVP and PVE combat experiences.

Loot, Trade, Level Up, and Upgrade to become the most powerful territory on Pulsar.

THE WORLD OF PULSAR

No one quite remembers when it started or who intercepted the first signal. All we know is one day our deep space satellites started picking up the irregular sound wave - a never before heard frequency that was completely undecipherable by any instrument or scientist on the planet. All we knew was that the frequency was being emitted from an unfathomably far away transmission source.

The source of the transmission consumed scientists, world leaders, and those who believed that the signal was coming from a civilization with technology, intelligence, and resources that far outpaced what humanity had ever seen. This group of believers dubbed the transmission source Beacon0 and the originating planetary system the Pulsar System, and formed an independent empire and dedicated their resources towards deciphering the transmission and finding its source.

For centuries, the empire has been jumping from the planet, venturing deeper and deeper into the outer reaches of Space. On each planet, the empire establishes a colony, extracts the resources of the planet in preparation for the next jump.

Now the empire has reached Planet W12R, one of the last known planetary outposts before the Pulsar System. With hundreds of solar years between Planet W12R and the Pulsar system, the empire has decided to fully settle the planet and advance our technological capabilities. Terra scans have revealed that Pulsar contains a wealth of resources, but the entire planet is also completely infested with aliens.

For now, the empire has established a ring of space stations around Planet W12R. In order to fuel the space stations and Mother, the AI that operates all of the empire's technological systems, humans need to extract the resources locked below the planet's surface. The battle for control of W12R has just begun…

FREE TO PLAY, FOREVER

We built Pulsar for everyone, and we believe in creating a balanced gaming experience that allows anyone to progress and earn.

Frictionless and non-custodial on ramps allow anyone to play simply by downloading the game, without requiring configuration of a wallet, minting NFTs, or having prior experience with crypto.

Seamless interaction between Web2 and Web3 players allow both types of players to participate in the game economy.

Pay with credit cards or any EVM accepted tokens.

Choose to manage your own assets or keep your assets in the treasury system without needing to configure or connect a wallet..

Play for free and craft on-chain assets, allowing any player to explore the full Pulsar experience.

PLAY TO OWN

Take ownership of every in-game asset from resources to land to units to buildings. Pulsar gives players complete ownership of the resources they mine and the NFTs they craft.
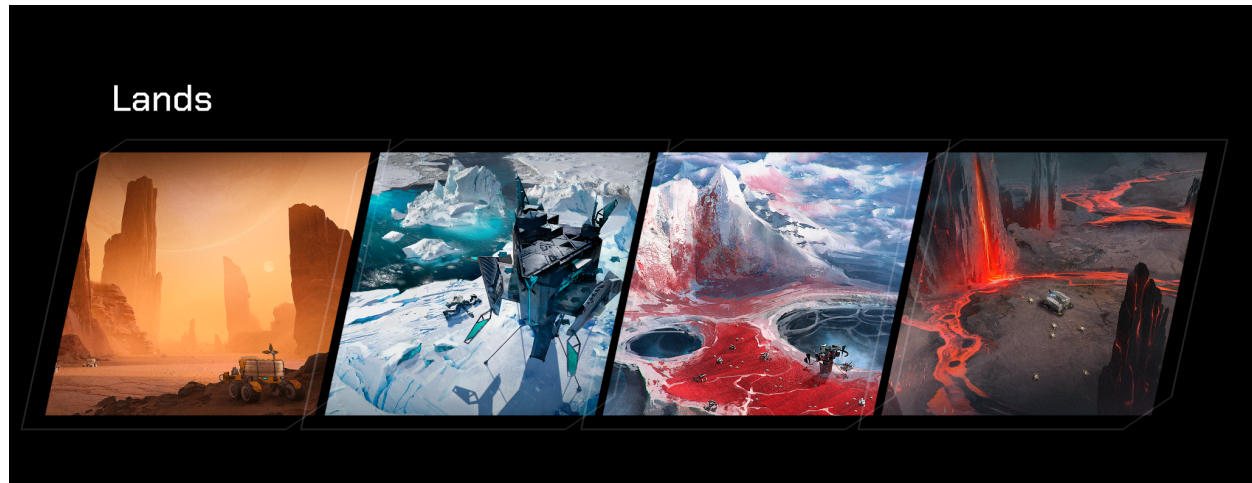
Research, craft, and upgrade your NFTs to level up their in-game combat and production capabilities while also increasing their value in the marketplace.

Monetize your assets by mining your land, crafting NFTs to sell, looting slain enemies, or lending your land and units to other players.

ASSET TYPES

Land

There are four Land NFT types, or Biomes. Each Biome has a few attributes

- Land Size; the size of the Land dictates the min and max range of $PLSR that is contained in the Land NFT. The size of the Land also determines the amount of Motherships and Units that can operate on that Land.
- $PLSR Quantity; the actual amount of $PLSR contained in the Land NFT.
- Resources; the type of Resources contained in the Land that can be extracted or earned from PVE missions.
- Resource Rarity; the rarity of Resource contained in the Land.
  - Common: good for first levels and keep a basic economy.
  - Uncommon: resources for advanced equipment. 5 times more scarce than common.
  - Rare: competition ready resources, very advanced, 7 times more scarce than common.

- Security Rating (PvE); determines the spawn rate of PVE mobs on your Land and the amount of resources in the Land.
  - High: low spawn rate, lower ratio of resources to Land size.
  - Mid: balanced spawn rate and resource ratio.
  - None: should be prepared to hold waves, you can loot aliens for special material to craft boosters, this type of land has the best ratio of resources inside but requires to build war machines or defenses to hold alien waves.

Additional Land Mechanics

F2P 'Lending'; Land that is marked as OPEN are called Feuds. Feuds allow other players to play on your Land and everything they extract or build is taxed, with a percentage earnings paid towards the Landowner.

Taxation; Landowners tax all players that extract Resources on their Land and all NFTs crafted and sold in the marketplace for $PLSR. Any Resources or NFTs that are sold by users borrowing Land will disburse a tax to the Landowner.

Delegation; Landowners have the capacity to hold NFTs that can be temporarily assigned to their best players, if they have a Mothership. This administration is delegated to another account called Commander. This allows Landowners to delegate management to the Commander, who then administrates the land and resources on behalf of the Landowner. Landowners receive a portion of mined resources as a Tax.

$PLSR is contained in Land, which serves as a mechanism to protect floor price
Depending on the Land type, different types of what we call "in-game" resources (mineral, gas, etc.) exist in the land to be extracted and refined. Those resources help players to customize their NFTs or upgrade levels.

Security Rating & Resource Rarity

Security Rating	Resource Rarity
High	Common
	Uncommon
	Rare
Mid	Common
	Uncommon
	Rare
None	Common
	Uncommon
	Rare

Range of Pulsar Amount per Land

Resource Rarity	$PLSR Range	2x2	4x4	8x8	16x16
Common	Min	381	1,526	6,104	24,414
	Max	1,907	7,629	30,518	122,070
Uncommon	Min	1,907	7,629	30,518	122,070
	Max	4,959	19,836	79,346	317,383
Rare	Min	4,959	19,836	79,346	317,383
	Max	7,629	30,518	122,070	488,281

Buildings

Buildings in Pulsar refine raw materials and $PLSR (Refineries), manufacture Unit NFTs, and allow users to research and upgrade their existing NFTs.

At launch, users will be able to access Resource Refineries.

Genesis Pulsar Refinery
Only these refineries will be able to convert raw pulsar into $PLSR tokens.

Resource Refineries
These refineries convert raw resources into on-chain Resource tokens.

Units

Collect your Starter Kit

Miners; these Units extract Resources from Land, and can transport them to Refineries.

Genesis Pulsar Miners

Only these miners will be able to extract raw $PLSR from $PLSR crystals. Pulsar Miners are incredibly important to the game economy, due to limited supply and their exclusive capability of extracting $PLSR.

Resource Miners

These miners extract raw resources from Land, which can be refined into on-chain Resource tokens.

Combat Units

These Units allow users to defend their Land from alien mobs and participate in multiplayer missions.

Spider Tanks

These Combat Units are the most common infantry unit in Pulsar. They can be leveled up, upgraded, and customized to become more powerful and valuable.

Other Units

These are other Unit NFTs that govern or enable various mechanics in the game.These include quick and nimble combat units like Drones, heavily armored Siege Tanks, and multiple classifications of transport vehicles.

Motherships

These Unit NFTs control the amount of other Unit NFTs that can be present on your Land. As the Mothership levels up, the player can have more Units on their Land to increase production or defense.

- ✦ Genesis Motherships are a Limited Edition version of Motherships with these benefits
  - Permanent production booster for all units +5%
    - ○ All units and structures controlled to the mothership have a permanent production boost.
    - ○ Faster production means higher profits.
  - Units and structures headcount +5%
    - ○ You can have more units and structures on your land.
    - ○ The more units and structures, the more you can do (i.e. fight, mine, build…), therefore, the more profits.

- Special Skin

Mobile Depot

These Unit NFTs improve productivity by shuttling raw resources to Refineries, allowing Miners to continue mining.

- ✦ Genesis Mobile Depots are a Limited Edition version of Mobile Depots with these benefits
  - Multipurpose Storage Container
    - Unlike any of the other depots in the game, which can only store one type of material (i.e. mineral or gas), these highly versatile depots can store any of the raw materials of the game, may it be mineral, gas, liquid, organic or pulsar.
    - If you have different deposits on your land (i.e. mineral and gas) you can use these depots to transport them, removing the need to buy additional depots.
  - Storage capacity +5%
  - Special Skin

Resources & $PLSR

$PLSR

$PLSR is the primary currency in Pulsar and the most important resource that can be mined. Raw pulsar will be extracted from the Land (mined) and refined into $PLSR (on-chain) by using Miners and Refineries (NFTs). There is a limited circulating supply of the NFTs with the ability to extract and refine $PLSR.

The chart below is a demonstrative example of how the extraction rate of $PLSR changes as Pulsar Miners level up. Other factors like the number of miners also impact extraction rate.

Raw Pulsar is mine by special and unique NFT workers

Level	1	25	50	75	100
# of miners	1	1	1	1	1
Time of MiningDecrease	-	20%	33%	45%	50%
Buffer Increase	-	5%	10%	15%	20%
Time of Mining (min)	10.0min	8.0min	6.7min	5.5min	5.0min
Buffer of raw pulsar	0.050	0.053	0.055	0.058	0.060
Max cycles per day	144.00	180.00	214.93	261.82	288.00
Raw Pulsar mine per cycle	0.50	0.42	0.37	0.32	0.30
Raw Pulsar / day	7.20	9.45	11.82	15.05	17.28
Raw Pulsar / year	2,628	3,449	4,315	5,495	6,307

Raw Pulsar is converted into $PLSR by special and unique NFT Pulsar Refineries

Level	1	25	50	75	100
# of refineries	1	1	1	1	1
Conversion Ratio Increase	-	25%	33%	45%	50%
Time of Conversion Decrease	-	5%	10%	15%	20%
Buffer Increase	-	10%	15%	20%	25%
Conversion Ratio	50.00%	62.50%	66.50%	72.50%	75.00%
Time of Conversion (min)	1,440	1,368	1,296	1,224	1,152
Buffer of raw pulsar	30	33	35	36	38
Max cycles per day	1.00	1.05	1.11	1.18	1.25
$PLSR refined per cycle	15.00	20.63	25.49	30.71	35.16
Conversion of $PLSR / day	15.00	21.71	28.32	36.12	43.95
Conversion of $PLSR / year	5,475	7,924	10,338	13,185	16,040

In-game resources

In addition to $PLSR, there are Resources of various rarity and value that can be extracted from Land or looted from slain aliens. These unrefined resources can be refined into on-chain tokens like $GAS that can be used to craft NFTs or traded on the open market.

GAME RELEASE & NFT SCHEDULE

	July	August	September	October	November	December	Q1 / 2023
	Seed Round						
NFT Development		NFT - Beta Pass Drop	NFT - Mint Pass Drop	NFT - Land + Miner Units	NFT - Buildings + Battle Units		
	Trailer Public Announcement				DEX Listing	Pulsar Exchange	
Game Development	Whitepaper	Public Beta		Game launch - Mining Active	Game - Building Active	Full PVE Game Launch	Game Launch - PVP

CADET   LIEUTENANT   COMMANDER   CAPTAIN   ADMIRAL

MINT PASSES

Mint Passes work like vouchers. The Pass you mint can then be redeemed for Land, Unit, and Building NFTs. This means that Pass minters get the entire value of their Pass mint **and** they also get to unlock discounts on the NFTs that are minted using the Pass.

The Mint Pass tiers and initial benefits are listed below. Mint Passes provide holders early access to mint prior to the public and a discount on all mints (even after the value of the Pass has been used).

- Cadet - $250; 3% Discount All Mints, 5 minute early mint
- Lieutenant - $500; 5% Discount All Mints, 15 minute early mint
- Commander - $1,500; 10% Discount All Mints, 45 minute early mint
- Captain - $2,500; 15% Discount All Mints, 1 hour early mint, bonus skin for one of your units
- Admiral - $10,000; 20% Discount All Mints, 6 hour early mint, bonus exclusive in-game unit + bonus skin

Users can exceed the value of the Mint Pass when they mint NFTs. The Mint Pass amount will be deducted from the total cost of the mint. The Mint Pass discounts are applied to the total cost of the mint, even if it exceeds the value of the Mint Pass.

BETA PASSES & TEAM ALPHA

In early August, we will launch our first cohort for Team Alpha, by inviting 10 users to join the program. Each user will be whitelisted to mint a Team Alpha Badge, as well as 9 whitelist spots to give out to users. Anyone holding an Alpha Badge can access Team Alpha perks, but the selected Ambassadors will be called Alpha Ambassadors.

Alpha Badge

- Early access to Discord, private Alpha channel and Team Alpha role
- Pre-release access to private gameplay streams

XIRW
TWELVE RANDOM WORDS

- Alpha access to the first publicly playable version of Pulsar
- 24H early minting access to Mint Pass
- Eligible for exclusive unit airdrops and skins

Beta Passes

Team Alpha will receive Beta Passes to access the beta version of Pulsar, an off chain game build that includes multiplayer PVE as well as mining mechanics.