

# BlinkDrive – Humanity’s First Step Beyond the Stars

**Author:** Mervyn Jagels

---

## 1. Purpose & Vision

BlinkDrive is a **hybrid propulsion system** for deep space exploration, merging **thermal CO<sub>2</sub> thrust**, **quantum-assisted jump mechanics**, and **modular energy systems** to allow humanity to reach beyond our solar system. This blueprint is **open-source**, for the benefit of all.

---

## 2. Executive Summary

The concept combines:

- **Hybrid Impulse Drive:** CO<sub>2</sub>/N<sub>2</sub> heated by industrial lasers for maneuvering
- **FTL BlinkDrive:** Photon-field modulation for spatial displacement
- **Energy Storage:** Tungsten/iridium rods feeding industrial Stirling engines + solar collectors

Mission: **Enable human colonization of Proxima Centauri and beyond**, powered by physics-driven engineering.

---

## 3. System Overview

```
[ Crew Habitat ] -- [ Thermal Reactor ] -- [ Energy Conversion (Stirling) ] --  
[ Blink Core ] -- [ Gas Nozzle ]  
                | Solar Mirrors | Radiator Panels | Quantum Modulator | Capacitor  
Banks |
```

---

## 4. Energy Flow

```
Tungsten Rod → Granite Tube → Copper Mesh → Copper Block → Stirling Engine →  
Supercapacitors → BlinkDrive
```

---

## 5. Key Math

### Thermal to Electric

- Tungsten core mass: 10,000 kg
- Heat capacity: 134 J/kg·K
- Temp swing: 2,500 → 500 K

$E = m \times c \times \Delta T$   
 $E = 10,000 \times 134 \times 2,000 = 2.68 \text{ GJ thermal}$   
Electric @30% = 804 MJ  
Power (24 hrs) = 9.3 kW per rod

Scaling:

- 100 rods = ~0.93 MW
- 1,000 rods = ~9.3 MW

---

### BlinkDrive Charge

Energy for 0.1c equivalent:

$E = (\gamma - 1)mc^2$   
 $\gamma \approx 1.005 \text{ @ } 0.1c$   
 $E \approx 4.5 \text{ EJ for } 188,000 \text{ kg}$   
Charging with 15 TW = ~3.5 days

---

### Gas Thrust ISP

$\text{CO}_2 \text{ @ } 3,000 \text{ K}$   
 $v_e \approx 859 \text{ m/s}$   
 $\text{ISP} \approx 88 \text{ s}$   
 $\Delta v (188t \rightarrow 100t) \approx 541 \text{ m/s}$

---

## 6. Performance Table

Parameter	Value
Heat per Rod	2.68 GJ

Parameter	Value
Electric (per rod)	804 MJ
Continuous Power (per rod)	9.3 kW
Exhaust Velocity (CO <sub>2</sub> )	\~859 m/s
ISP	\~88 s
$\Delta v$	\~541 m/s

## 7. ASCII Cutaway

Top View:

```
[==== Crew ====][== Thermal ==][== Energy ==][== Blink Core ==][== Nozzle ==]
```

Side View:

```
[ Habitat ]
```

↓

```
[ Reactors ] → [ Stirling Gen ] → [ Blink Chamber ] → [ Thruster ]
```

## 8. License

**Creative Commons Zero (CC0)** – No patents, no restrictions. Use ethically for space exploration.

## 9. Manifesto

Technology belongs to humanity, not corporations. BlinkDrive is a gift to the future—built on hope, science, and collaboration.