

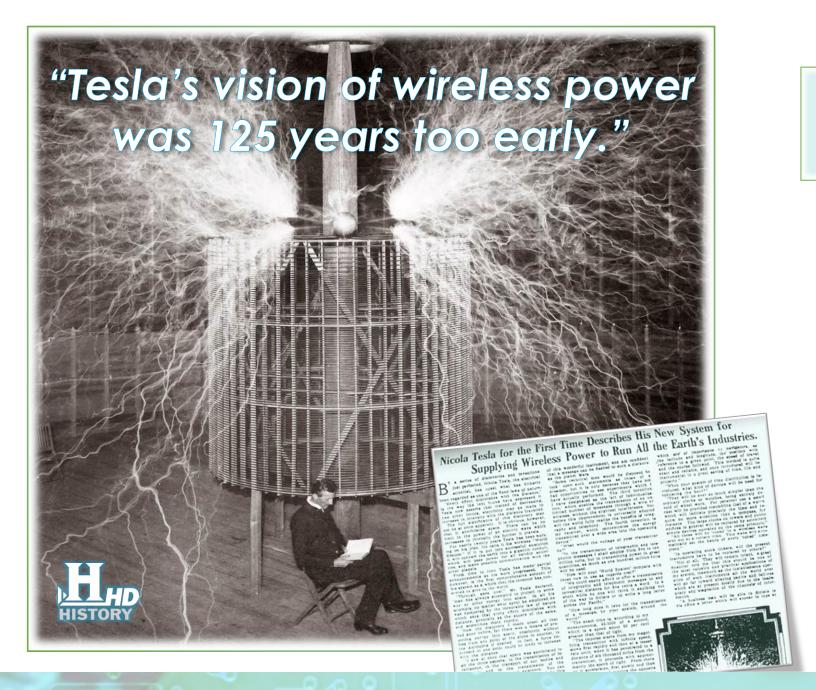
# executive summary



- Spark is a growth phase startup specializing in b2b industrial wireless charging solutions for industrial robotics and light electric vehicles
- Founded in 2018, largely self funded with \$2M in total revenue to date
- Goal to achieve \$250M in revenue in 5 years
- Currently raising a \$5M series A

## massive market size





Spark's vision is to do what WiFi did to ethernet cables - make last-mile device charging wireless and ubiquitous

#### Wireless Power is here to stay

 $2022 \rightarrow 2027$ 

\$8.1B \$20.4B TAM (20% CAGR)

\$3.0B SAM

#### Spark has shipped 2M+ units in the market











Source: ResearchandMarkets.com Jun '22

## spark solves the problem



Charging with a plug-in cable does not work for autonomous systems and unmanned vehicles used in factory automation, logistics, e-mobility, and aerospace & defense

- Requires a human to plug in the device
- Fails in wet or dirty environments
- Uses a different charger for each device



Solution: Spark's break-through technology enables autonomy!

## the founders





**Ken Moore** Founder & CEO

- Serial Entrepreneur
  - 2015: Sold Triune to Semtech
  - 2018: Launched Spark
- 20-yr. success at Texas Instruments
  - Built \$700M business at Cisco
- Industry Advisor & Influencer





BS Electrical Engr. and MBA









#### Ruwanga Dassanayake Founder & COO

- 25-yr. Global Business Leader
  - Power, Semis, Telecom focus
- MD, TI Automotive & Industrial
  - Transformed businesses for growth
  - Created >\$2B in enterprise value
- MD, Nokia and Siemens
  - \$1B+ P&L responsibility
- BA International Business & Economics









#### Dr. Emanuel Stingu Founder & CTO

- Ranked #1, Wireless Power Market
  - Embedded Control Systems
  - Al and Machine Learning
- Architect of Triune's (now Semtech) wireless power portfolio
- Sr. Leader in  $\phi$  wireless power consortium
- Holder, 15 wireless power patents
- PhD Electrical Engineering





# competitive landscape



**Applications** 

**Market Status** 

**Barrier to Entry** 

Differentiation

Scalability

**Market Segments** 

Market Ramp

Phones, earbuds, tablets	Autonomous Mobile Robots (AMR), Automated Guided Vehicles (AGV), Light Electric Vehicles (LEV), Medical Equipment, Power Tools	Full-size Electric Vehicles
Commoditized	Emerging / Growth	Early
Low / Saturated	Very High	Very High
None	Performance & Efficiency, Safety, EMI	Power Level
None (hardware solution)	High Degree (software solution)	None (hardware solution)
Consumer	Industrial, LEV, Aerospace & Defense	Electric Vehicles
2017	2023 (10 - 15 years of growth)	2030

# spark differentiation



- $^{*}\mathbf{1}$  Peerless in 100W 3kW with 5-inch charging air gap
- 95% power transfer efficiency (parity with wired EV charging)
- Improved battery health and safety
  - Significantly reduced risk of fires during charging
  - 15-20% lower CapEx
    - Lower hardware cost than wired chargers
- 30% lower Total Cost of Ownership (TCO)
  - No moving parts compared to wired chargers
  - No wear and tear
  - No maintenance

## market validation and traction





## Kraken 10W

Category-creating product for IKEA turns any piece of furniture into a wireless charging hot spot







#### **Beast 15W**

Automotive in-cabin Qi v1.3 smartphone charging with best-in-class EMI and safety.











## **Minotaur 90W**

Integrated wireless charging into laptops, docking stations and tablets







## modules 2023+



### Titan 1.5kW - 3kW

3W/4W Light Electric Vehicle (LEV), autonomous robots, AGV





# Yeti 500W

2W EV, LEV, e-Bike, drones, autonomous robots, AGV





## Ogre 100W

e-Bikes, LEV, e-scooters, power tools, drones





# strategic market focus



autonomous lawn mower



autonomous mobile robot (AMR)



personal service robot (PSR)



industrial robotics

automated guided vehicle (AGV)



autonomous floor cleaner



2-wheel EV



3-wheel EV



e-cargo



light electric vehicles



e-pallet trucks

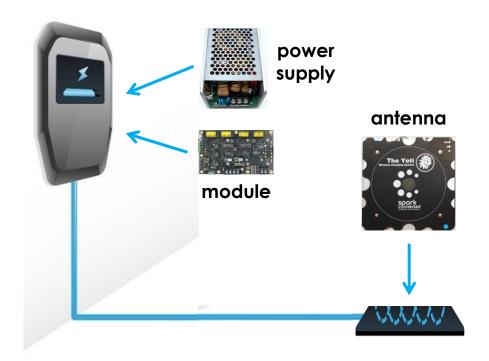


# spark ready-to-integrate modules

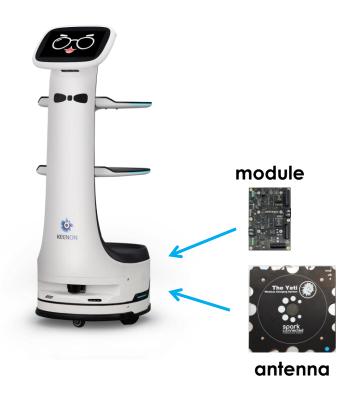




#### Charger side (transmitter)



#### Device side (receiver)



# business model and product revenue cycle







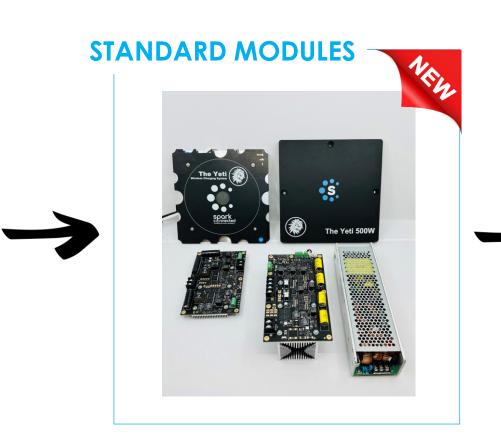
# spark manufacturing, sales and distribution channels



#### **MANUFACTURING**

Partner 1
China
(production)

Partner 2 India (evaluating)



#### **SALES and DISTRIBUTION**

Channel 1
Spark Connected Online



Channel 3
Ecosystem Partners











# investment opportunity

# S

## series A capital raise \$5M

- \$1M of the original \$5M target raised
- Goal to close by end of 2023



## use of funds

- Build, manufacture and market
  - Titan 1500W product
  - Titan 3000W product
- Grow operations team
- Establish Spark subsidiary in India



# powering the world, wirelessly™

