



IndoTraqTM

HSKTTM
Technology
Specifications

September 2018

HSKT™

This high-speed technology combines 12 axes of information into a tiny package to give a precise location. The location data are available on both the Master Anchor and Tags for reporting purposes.



Performance

- Position Update Frequency: up to 150 Hz
- High Speed Network Latency: 6 ms (1 tag and 4 anchors) / 10 ms (4 tags and 8 anchors)
- Super Speed Network Latency: 10ms (with 8 tags and 8 anchors)
- Distance Precision: ± 5 mm
- Orientation Precision: ± 0.06 deg

Ultra Wide Band Transceiver

- Frequency: 3.5 GHz – 10 GHz
- Range: 100 m Indoors / 200 m Outdoors
- Multiple systems on separate RF channels can occupy the same space.

Anchor

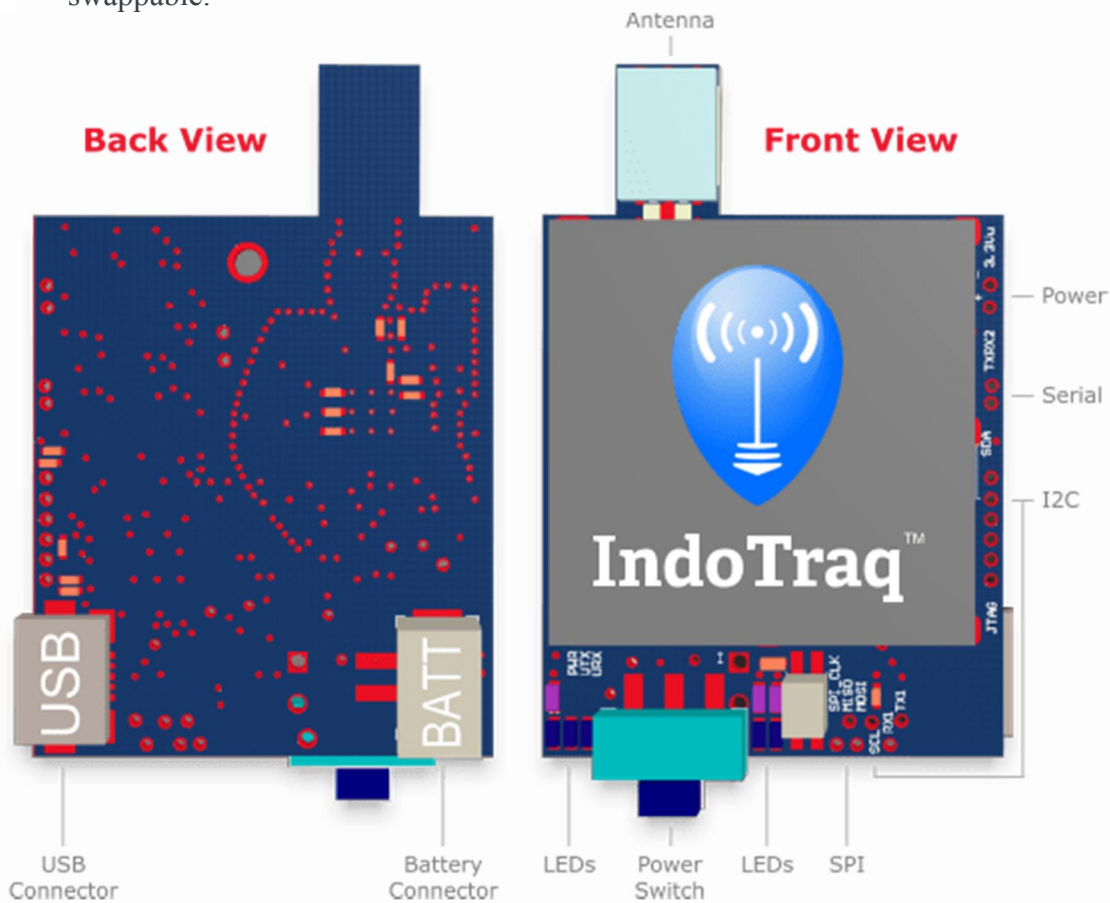
- Internal 2500 mAh li-poly 3.7V battery (12hr life - rechargeable)
- USB communication
- Wi-Fi communication (Optional for Master Anchor Only*)
- Bluetooth communication (Optional for Master Anchor Only*).
- Dimension: Approximately 4" W x 3" H x 1.4" D

**must be specified at time of order*



Tag

- Can act as Tag role or Anchor role (allows for tiny anchors)
- USB communication
- SPI communication
- I2C communication
- Spare IO for your own purpose
- Internal tag has a small attached antenna as shown below.
- 500 mAh li-poly 3.7V battery (rechargeable) with standard JST connector which is swappable.



- External tag has U.FL connectors (50 ohm), with 3" cable and omni-direction antenna.
 - Other customer supplied antennas with 50 ohm male SMA connectors can also be tested.
- Approximately 1.18" W x 1.7" H x 0.25" D without battery. Weighs 7.1 grams.
- Approximately 1.18" W x 1.7" H x 0.4" D with battery. Weighs 17.8 grams.

Antenna

Large

- Circular polarized
- Directional
- Approximately 2.4" W x 2.6" H



Small

- Omnidirectional
- Approximately 1.6" W x 1.2" H



IMU

- Update rate 1000 Hz
- 9 axis
- Acceleration, Gyroscope and Magnetometer

Battery Life

SAMPLE FREQUENCY	BATTERY LIFE (500MAH)
200 Hz	2 hour
60 Hz	3.5 hours
every 5 seconds	20 hours *

* longer battery life available upon request

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