

DATASHEET:
**ADVANCED TRACKER &
CARGO MONITORING SENSOR**
LANA VISION



LANA™ Vision is a cargo occupancy sensor fusion platform consisting of two cameras and a Time-of-Flight ultrasonic sensor which provides improved cargo sensing capabilities where traditional ultrasonic-based cargo sensors fail to provide accurate cargo capacity utilization information.

By implementing direct 3D imaging, LANA™ Vision eliminates image noise from light and shadows increasing cargo measurement accuracy. The camera pair acts as a stereo vision sensor and the ultrasonic sensor provides short range Time-of-Flight data in case the stereo vision is blocked by very close cargo.

For qualitative review, “thumbnail” style low data cost trailer images are available for upload. LANA™ Vision is another example of CallPass’s dedication to provide state-of-art and innovative products that continue to improve asset visibility, reduce costs and improve overall operational efficiencies.

KEY FEATURES

- Stereo Vision Occupancy Sensing
- Time-of-Flight Distance Sensing
- Solar Panel and 12VDC Recharging
- 15 Ah Rechargeable Battery
- Dual CAN Bus, One-Wire Bus
- LTE Cat 4, Penta-band 3G and GSM (with Dual SIM-Carrier support)
- GNSS support: GPS/GLONASS
- Bluetooth 5 and Bluetooth 4.1 Radios
- 2.4GHz Wi-Fi 802.11a/b/g/n
- Light Sensor, Temperature Sensor
- Accelerometer
- External and Internal BT5 and Wi-Fi Antennas
- External Cellular and GPS Antennas

USE CASES

- Trailers
- Containers
- Dry van

LANA VISION SPECIFICATIONS:



MECHANICAL

| | |
|---------------|--|
| Dimensions | 6.25" x 8.81" x 1.75" (15.87 x 22.38 x 4.45 cm) |
| Weight | 24 oz. (680 g) |
| Case Material | PC+PBT |
| IP Rating | IP 65 |

PHYSICAL CONNECTIONS

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -40°F to 158°F (-40°C to 70°C) |
| Harness Connector | Dual CAN bus, 1-wire bus |
| Serial Interface | RS232, CAN |

POWER REQUIREMENT

| | |
|--------------|--|
| DC Power | DC 8 to 28V |
| Power Source | Internal 15Ah rechargeable battery (with solar recharge) |

GPS SPECIFICATIONS

| | |
|----------------------|------------------------|
| Acquisition | -146dBm Cold |
| | -158dBm re-acquisition |
| Tracking Sensitivity | -160 dBm |
| Accuracy | 2.5 meters at CEP-50% |
| TTFF Cold Start | 32 Seconds |
| TTF Hot Start | 2 Seconds |

CERTIFICATIONS

FCC, IC, GCF, PTCRB, AT&T, Verizon, Rogers, T-Mobile, Bell, Telus

CELLULAR SPECS: LTE CAT 4, PENTA-BAND 3G, AND GSM AT&T & VERIZON

| | |
|-------------------|--|
| 4G LTE FDD Bands | 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 28 |
| 3G UMTS Band | 1, 2, 4, 5, 8 |
| 2G EGPRS Bands | PCS (Band 2), GSM (Band 5) |
| Supported Regions | United States |
| SMS Support | MT/MO |
| Comm. Interfaces | LTE Cat 4, 3GPP release 13, 3G UMTS, 2G GSM |
| Power Class | 3 (23 dBm) |

