

# In-cab Advanced – Trinity AG / FT-700 / FT-750



## Key Value Proposition

- Advanced Capabilities
- Internal and External Antennas

## Applications

- Heavy Truck
- School Buses

## Capabilities

- Motion Detection
- High Frequency Tracking
- Vehicle Diagnostics (ISO-15765, J1939)
- Ignition Detection
- Ignition On Tamper Detection
- Starter Disable (via relay)
- Operator ID (1-wire)
- Digital inputs / outputs

## Future Capabilities

- Driver Behavior
- ELD tablet communication
- Camera video upload

# In-cab Advanced – Trinity AG



## Dimensions

7.3" x 3.23" x 1.22" (184mm x 82mm x 31mm)

## Weight

TBC

## Location

GPS (multi-constellation)  
Assisted acquisition: 2s (via cloud)  
Acquisition Sensitivity: -160dBm (1)  
Tracking Sensitivity: -167dBm (2)

## Internal Sensors

9-axis IMU  
System temperature  
Battery level

## Internal Antennas

Cellular primary and secondary  
GPS, Bluetooth, WiFi

## External Connectors

Cellular primary  
GPS  
USB  
Power in (6-48VDC)  
Power out (2.5W)  
1-Wire  
ADC (48V) x 2  
Digital Input x4  
Digital Output x 3  
Ignition Detection  
CAN 2.0B x1 (ISO-15765 or J1939)  
CAN 2.0B or FD x1 (ISO-15765 or J1939)  
RS-232 x2  
ISO-9141 (K line for Tachometer)  
J1708 (Firmware support TBC)

## Battery

1.3Ah

## User Interface

Power button, 5 LEDs  
Buzzer

## Global Cellular Connectivity

FT-700 Standard SKU:  
• 4G (Cat M/NB-IoT) Global Bands  
• 2G: 850,900,1800,1900

## Local Area Connectivity

WiFi: 802.11 b/g/n (2.4GHz) station & softAP (6)  
BLE: 5.0 (master, slave, LE data packet length)  
USB: mass storage (host), ACCM (client)

## Operating Temperature

Powered: -40°C – 70°C  
Battery: -20°C – 60°C  
Charging: 0°C – 45°C

## Housing

Industrial grade Polycarbonate (PC)  
Ingress Protection (IP): 4X

## Security

Secure boot  
TLS/SSL  
FIPS 140-2 (Optional)

## Certifications

FCC, IC, CE, PTCRB, RCM

## Environmental

RoHS, Reach, SAEJ1455 [Thermal Shock (4), Humidity (5), Mechanical Vibration, Mechanical Shock, Electrostatic Discharge]

(1) (2) Based on GPS chipset specification  
(4) (5) Inside operating temperature range  
(6) For telemetry & ELD applications only; not intended for generic hotspot capability; throughput limited to ~20Kbps (TBC)

## **FCC Regulations:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **RF Exposure Information**

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm during normal operation.

## **ISED Notice**

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause

undesired operation of the device.

Le présent appareil est conforme aux CNR Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en

This device complies with the Canadian ICES-003 Class B specifications. CAN ICES-003(B)/NMB-003(B)

## **ISED RF Exposure Statement**

This device complies with ISED RSS-102 RF exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the IC RSS-102 RF exposure limits, human proximity to the antenna shall not be less than 20cm (7.87 inches) during normal operation.

Cet appareil est conforme aux limites d'exposition aux rayonnements de la CNR-102 définies pour un environnement non contrôlé. Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la CNR-102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm (7.87 pouces) pendant le fonctionnement normal.