



## FEATURES

- » 4G LTE
  - CAT. 1
  - BANDS: 2/4/5/12/13/25/26
- » SUPPORTS CAN BUS SYSTEMS
  - J1939
  - J1708
  - OBD-II
- » 64MB INTERNAL FLASH MEMORY
- » 3-AXIS ACCELEROMETER
- » BUILT-IN BUZZER
- » VIBRATION / SHOCK TESTED
- » OPTIONAL 920mAh BATTERY
- » OPTIONAL WIFI
- » OPTIONAL BLUETOOTH
- » OPTIONAL ANTENNA EXTENSION

## Benefits:

- Location Based Services
- ELD Compatible
- Engine Vehicle Data
- Interval: 15 seconds
- Up to 120,000 logs
- Configurable inputs / outputs
- Supports Temperature
- Supports iButton
- Supports External Antenna
- Supports PTO
- Optional Backup Battery

## MiFleet Multi-Function:

### ATrack AK11 | 4G LTE

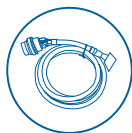


The AK11 is a versatile device with robust capabilities and interfaces. Supports major vehicle bus protocols, including J1708, J1939, OBD, and FMS. Reads and reports ECU data for ELD. Supports multiple GPIO attachments for Power-Take-Off, RFID, PND, Camera, Temperature, iButton, and additional relays. This solution is ideal for trucking transport, public safety, construction and other vehicle transportation applications.



### ELD Ready

Device is used to **electronically record a driver's Record of Duty Status**, which replaces the paper logbook some drivers currently use to record their **compliance with Hours of Service requirements**.



### Multiple Install Options

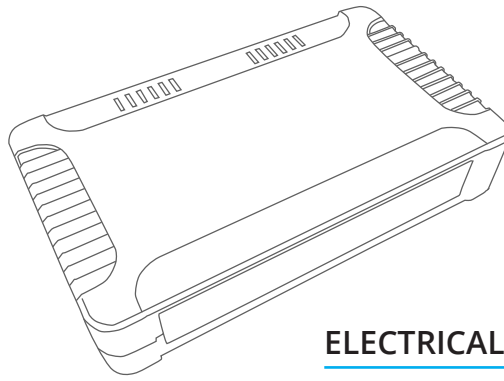
This device has the ability to install into a verity of vehicles using one of its **many install options: J1939, J1708, ODD, and FMS**.



### Expandable Sensors

The AK11 has **general purpose inputs for variable sensor needs** including temperature, RFID and more.





## CELLULAR

AX11-MX (AT&T)	LTE FDD Cat.1 B2 (1900), B4 (AWS1700), B12 (700)
AX11-LS (Sprint)	LTE FDD Cat.1 B2 / B25 (1900), B4 (AWS1700) B5 / B26 (850), B12 (700)
AK11-LX (Verizon)	LTE FDD Cat.1 B2 (1900), B4 (AWS1700), B13 (700)
AK11-LU (Telstra)	LTE FDD Cat.1 B1 (2100), B3 (1800), B5 (850), B8 (900) B28 (700) WCDMA B1 (2100), B5 (850), B8 (900)
Data Support	UDP / IP, TCP / IP, SMS over IMS
Antenna	Embedded cellular antenna

## GPS

Receiver Type	72 Channel Engine
Location Technology	GPS & GLONASS
SBAS Support	WAAS, EGNOS, GAGAN, MSAS
Tracking Sensitivity	-167dBm
Acquisition Sensitivity	-148dBm
Location Accuracy	2.5m CEP 50%
Antenna	Internal

## INPUTS / OUTPUTS

Vehicle BUS Protocols	ISO 15765-4 (CAN) ISO 14230-4 (KWP2000) ISO 9141-2 SAE J1850 VPW / PWM SAE J1939/ J1587/J1708
Digital Ignition Input	1 Positive Input
Digital Input	Up to 8 (Configurable)
Digital Output	Up to 5 (Configurable) Max. sink current 300mA
Analog Inputs	Up to 3 (Configurable) DC 0~5V, DC 0~40V (12bits resolution)
1 Wire Interface	1 (Driver ID, Temperature sensors)
LED Indicators	5 LEDs (Power, GPS, Cellular, WiFi, BT)
Buzzer	>80dB @ 10cm
Bluetooth (Optional)	Bluetooth BLE 4.1
WiFi (Optional)	2.4GHz IEEE 802.11b/g/n AP Mode Data rate DL: 3Mbps UL: 1.5Mbps

## ELECTRICAL

Operating Temperature	Vehicle 12V / 24V System
Current Consumption	Operating: 45-180mA @ 12V Deep Sleep: 1.4mA @ 12V
Backup Battery (Optional)	3.7V 920mAh

## MEMORY

Internal Flash Memory	64 Megabit Up to 120,000 logs Up to 21,000 queues
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## SENSORS

Accelerometer	3-axis ±16g
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## ENVIRONMENTAL

Temperature	-40° to +70° C (connected to primary power) -20° to +60° C (operating on internal battery)
Humidity	95% RH @ 50° C non-condensing
Shock and Vibration	MIL-STD-810G

## PHYSICAL

Dimension	152mm × 98mm × 30mm (5.98" × 3.86" × 1.18")
Weight	229g (0.50 lb)
Enclosure	Flame Retardant ABS+PC
Mounting	Screw Mounting Bracket, Adhesive

## CONNECTORS

I/O Connection	Molex 14 Pin Connector
SIM Card Socket	Mini SIM(2FF)
PC/Accessory Interface	4 Pin RS232 with 5V (±5%) Power SMA
External GPS	Mini USB Port
Configuration Interface	Optional Wire Harness for OBDII
Vehicle BUS Interface	DEUTSCH - 6 PIN / 9 PIN Connector

## DEVICE MANAGEMENT

Configuration	ADM, SMS, USB Cable
Firmware Update	ADM, FOTA, USB Cable

## CERTIFICATIONS

Standards	FCC, IC, PTCRB, NCC, RoHS
Carriers	AT&T, Sprint, Verizon, U.S. Cellular