ATrack
CONNECTING THE FUTURE

AK11 | LTE FLEET HUB

TU-Automotive **AWARDS 2020** FINALIST

TAIWAN EXCELLENCE 2020

AK11

IC FC PTCRB

ATrack's Flagship product AK11 Fleet Hub is a versatile LTE device suitable for real-time management of both small and large fleets across various market verticals. Additional WiFi hotspot feature offers other in-vehicle devices LTE network access, and Bluetooth feature offers communication with mobile Android/iOS applications. The compatibility with OBDII, J1939, J1708, and FMS protocols means AK11 is suitable for all vehicle classes. Plug & play adaptors make the installation process quick & easy. Its high sensitivity GNSS design provides fast & accurate vehicle locations, the multiple input/output configurations allows for sensor monitoring, and wired communication interface provides convenient connection to external devices.

4G LTE

4G LTE Connectivity
With 3G fallback in US, 2G fallback in Europe.

CAN bus

Multiple Vehicle Compatibilities
Supports major vehicle bus protocols: OBDII, J1939, J1708 and FMS.

ELD

ELD-Ready In-Vehicle Hardware
Reads and reports required ECU data parameters for ELD mandate.

Wi-Fi

Wi-Fi Hotspot
Built-in Wi-Fi hotspot 2.4GHz 802.11b/g/n for connecting other devices.

Bluetooth
Optional Bluetooth Low Energy (BLE) for IoT applications.

Optional Accessories

I/O Expansion
RS1:1 to 3 RS232 Expander Cable
RS2:RS232-to-RS485 Adapter

Safety
12V / 24V Relay
CMOS Camera CAM7570 (F/W 2.0)
CMOS Camera CAM5650 (F/W 2.0)
SOS Push Button Cable (Unlocked)
Business / Private Trip Switch Button Cable (Locked)

Identification
1-Wire® iButton Reader & Tag
1-Wire® Magnetic iButton Reader & Tag
1-Wire® Trailer ID
RFID Reader & Tag
Active RFID Reader & Tag

Utility
1-Wire® Temp. Sensor Probe
Mounting Bracket

3rd Party Peripherals
Garmin:PND (FMI 2.0)
Squarell:FLEX and SOLID
Mobileye:ADAS

ATrack Proprietary Tool
ACT (ATrack Configuration Tool)
ADM (ATrack Device Management Portal)

CELLULAR

AK11-LX (AT&T)	LTE FDD Cat.1
	B2 (1900), B4 (AWS1700),
	B5 (850), B12 (700)
	WCDMA B2 (1900), B5 (850)
AK11-LX (Verizon)	LTE FDD Cat.1
	B2 (1900), B4 (AWS1700), B13 (700)
AK11-LS (Sprint)	LTE FDD Cat.1
	B2 / B25 (1900), B4 (AWS1700)
	B5 / B26 (850), B12 (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 (Optional external antenna)

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 Inputs	Up to 8 (Configurable)
Digital Outputs	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, Wi-Fi, BT)
Buzzer	>80dB @ 10cm
Bluetooth (Optional)	Bluetooth Low Energy
Wi-Fi (Optional)	2.4GHz IEEE 802.11b/g/n AP Mode
	Data rate DL: 3Mbps UL: 1.5Mbps

ELECTRICAL

Operating Voltage	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

SENSORS

Accelerometer	3-axis ±16g

ENVIRONMENTAL

Operating Temperature	–40 to +70 °C (without battery)
	–20 to +60 °C (with battery)
Humidity	95%RH @ 50° C non-condensing
Vibration/Shock	MIL-STD-810G

PHYSICAL

Dimension	152mm × 98mm × 30mm
	(5.98" x 3.86" x 1.18")
Weight	229g (0.50 lb)
Enclosure	Flame Retardant ABS+PC
Mounting Method	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
External GPS	SMA
Configuration Interface	Mini USB Port
Vehicle BUS Interface	Molex 12 Pin Connector
	Optional Wire Harness for OBD-II,
	DEUTSCH 6Pin/9Pin Connector

DEVICE MANAGEMENT

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

CERTIFICATIONS

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

About ATrack

ATrack Technology Inc. specializes in GPS telematics hardware designing and manufacturing, and has a product portfolio including solutions for cars, trucks, containers & non-powered assets, trailers, and motorcycles. In addition to a line of stable and robust hardware, we are also experienced in firmware and hardware modifications, and customized product developments. ATrack always strives to provide the most reliable hardware and excellent service for our customers and has obtained ISO 9001 Quality Management Systems to enhance product quality and ultimately improve levels of customer satisfaction. For System Integrators & Telematics Service Providers who value vendor responsiveness and flexibility, and are looking for a hardware partner who does not have a competing business model, ATrack is globally proven to be the best choice.

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