



AI074

Positioning Products

Advanced Telematics Platform

The AI074 family of telematics products combines fastest time-to-market, an excellent price-performance ratio, and state-of-the-art technology. It addresses all mobile applications that require accurate positioning and communication that is based on cost-effective, convenient and secure standard internet protocols. The heart of the AI074 family members is the industry standard ARM7TDMI 32-bit RISC CPU, optimized for embedded applications requiring lowest power consumption.

- Complete ■ Ready-to-use product
- Short time-to-market ■ Wide support for application implementation
- Standard interfaces ■ Lowest system costs
- Compliant to worldwide legislation ■ CE, FCC, A-tick
- Use in vehicles ■ E-Marking
- Numerous expansion options ■ Additional wired or wireless interfaces

Vast Application Areas

Further features of the family include robust I/O, a wide power input range, a CANbus interface and battery option, making the A1074 family ideal for automotive applications. As qualified and certified products with standard interfaces for I/O and antenna connections, the A1074 family members provide advantages in terms of low system, installation and market entrance cost. With excellent tools and professional support for application implementation to save our customers' investment and know-how, this product is ideally suited for easy integration into existing client & server based back end office solutions.

A1074 Advanced Telematics Platform



- Transport & Logistics
- Security & Surveillance
- Insurance Rental
- Cars/vans/trucks
- Company car pool management
- Private/business trip recording
- Taxi/bus fleets management
- Motor homes and caravans
- Boats
- Mobile construction equipment
- Farm machinery
- ...

MAJOR COMPONENTS

GPS Receiver	Vincotech A1080-A SiRFStarIII
Channels	20 parallel tracking
Position accuracy (horizontal)	< 2.5 m CEP autonomous
Sensitivity	-159 dBm (tracking) -142 dBm (acquisition - cold)
GSM/GPRS modem	Enfora Enabler IIIG
Quad-band	850/900/1,800/1,900 MHz
Mode	GPRS, CSD, SMS, Voice
GPRS	Multi-Slot Class 10 (4Rx/2Tx) up to 85.6 kbps
µ-Controller	STR710 ARM7TDMI 32-bit RISC
SRAM	512 kbit internal plus up to 8 Mbit ext.
Flash	8 Mbit ext. (default) up to 32 Mbit

MECHANICAL (standard battery version)

Dimensions	135.0 x 89.0 x 35.5 mm ³ 5.3" x 3.5" x 1.4"
Weight (with battery)	255 g / 9.0 oz.

MECHANICAL (large battery version)

Dimensions	135.0 x 89.0 x 53.5 mm ³ 5.3" x 3.5" x 2.1"
Weight (with battery)	465 g / 16.4 oz.

ENVIRONMENT

Temperature	
Operation	-30°C to +75°C (no battery)
Storage	-40°C to +85°C
Humidity	95 % max. non-condensing
Protection	up to IP54

Technical Details A1074

POWER

Input voltage	8 to 32 VDC
Current draw	
Operational	85 mA (typ.)
Sleep mode	0.5 mA
Battery	LeadAcid
Standard	6V / 0.5 mAh
Large	6V / 1.2 mAh
Power alarm	External power fail Low battery voltage
Protection	Reverse polarity protection Over-voltage protection Internal self-resetting fuse

COMMUNICATION*

Internet	
UDP/IP	User Datagram Protocol
TCP/IP	Transfer Control Protocol
FTP	File Transfer Protocol
XMPP	Extensible Messaging and Presence Protocol
Email	Standard message format for addressing human beings
SMS	Short Message Service
Data call	Asynchronous 9.6 kbps when no GPRS is available

INPUT/OUTPUT

Digital inputs	3 (protected transistors)
Ignition	1 (protected transistors)
Digital outputs	3 (LSS / prot. FET) 32 V / 1 A
Serial data	1 RS232 (Rx/Tx)
Tremble switch	1 int. with configurable sensitivity
LED/button	2-wire interface
Dallas interface	1-wire interface
CANbus	Optional** for vehicle diagnose
Expansion boards	Optional**, e.g. 2nd RS232, RS485, 2nd CANbus, LIN, K-Line, 802.15.4/ZigBee, RF-ID reader, etc.
Micro SD card holder	Optional** for micro SD card up to 8 GB (logging, mapping)

CONNECTORS

Main	25-pin D-sub (female)
GPS antenna	SMA (female)
GSM antenna	FME (male)

PRODUCTS

A1074-x	Advanced Telematics Platform "x" is a placeholder**
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* Depending on application

** Please contact Vincotech for details, available options, variants and application firmware support

YOUR PARTNER

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