Miniaturized footprint and minimal power consumption, along with high-end performance, characterize Vincotech’s new GPS module A1082-A - at only 1.8 V. Limited space is a typical constraint, especially for handheld devices. The A1082-A provides GPS position, velocity and time information by requiring only 14 x 12 mm² PCB area. Fastest start-up behavior and various power save modes extend the lifetime of battery-powered devices. The A1082-A – one of Vincotech’s solutions for easy and fast integration of GPS based functionality into your application.

**Complete GPS functionality – at 1.8 V**

- Highly sensitive: -157 dBm tracking
- Fastest TTFF (Time To First Fix): < 37 s under cold start condition (typical)
- Ultra small footprint: 14 x 12 mm²
- Ultra-low power consumption: 65 mW average in tracking mode
- Various power save modes
Positioning Receiver Portfolio

With the mission to support our customers in implementing GPS functionality into their systems, Vincotech is offering a large product portfolio to cover almost all integration possibilities in an easy way. A dedicated R&D team located in the Munich region, Germany, develops sensitive positioning solutions based on state of the art technologies. All GPS products are manufactured in our ISO9001 and TS16949 certified factory in the EU. Our modules comply to the RoHS standard and are 100% electrically and functionally tested prior to packaging. This way we constantly guarantee high quality products.

**PRODUCTS SHOWN IN ACTUAL SIZE**

**GPS Receivers**

- A1080-A
- A1082-A
- A1084-A
- A1088-A
- A1035-D
- A1035-E
- A1035-H

**Smart Antenna Modules**

**Technical Details A1082-A**

**PERFORMANCE**
- **Channels**: 12 parallel tracking
- **Correlators**: 32,000 plus
- **Frequency**: L1 - 1,575 MHz
- **Sensitivity**: Tracking: -157 dBm, Acquisition (cold start): -142 dBm
- **Position accuracy**: < 2.5 m CEP autonomous
- **Time To First Fix**: Hot start: < 1 s, Warm start: < 35 s, Cold start: < 37 s

**COMMUNICATION**
- **Standard GPS software**: NMEA message switchable
  - GGA, GSA, GSV, RMC, ZDA, GLL
- **Baud rate**: 19,200
- **Serial ports**: 1.8 V CMOS compatible
  - Tx0: NMEA output
  - Rx0: NMEA input

**ENVIRONMENT**
- **Temperature**: Operating: -30°C to +85°C, Storage: -40°C to +85°C
- **Humidity**: Non-condensing

**POWER**
- **Input voltage**: 1.8 to 1.9 VDC
- **Current draw**: Tracking (trickle mode): 35 mA (typical), Standby: 16 μA (typical)

**MECHANICAL**
- **Dimensions**: 14.0 x 11.4 x 2.4 mm³
  - 0.55" x 0.45" x 0.095"
- **Weight**: 1 g / 0.035 oz.

The information provided herein is believed to be reliable at press time. Vincotech assumes no responsibility for inaccuracies or omissions. Vincotech assumes no responsibility for the use of this information, and all such information shall be entirely at the users own risk. Prices and specifications are subject to change without notice. Vincotech does not authorize or warrant any of its products for use in life support devices and/or systems.

**YOUR PARTNER**

Vincotech GmbH
Biberger Straße 93
82008 Unterhaching/Germany

Phone: +49 (0)89 8780 67-0
Fax: +49 (0)89 8780 67-300

www.vincotech.com/gps