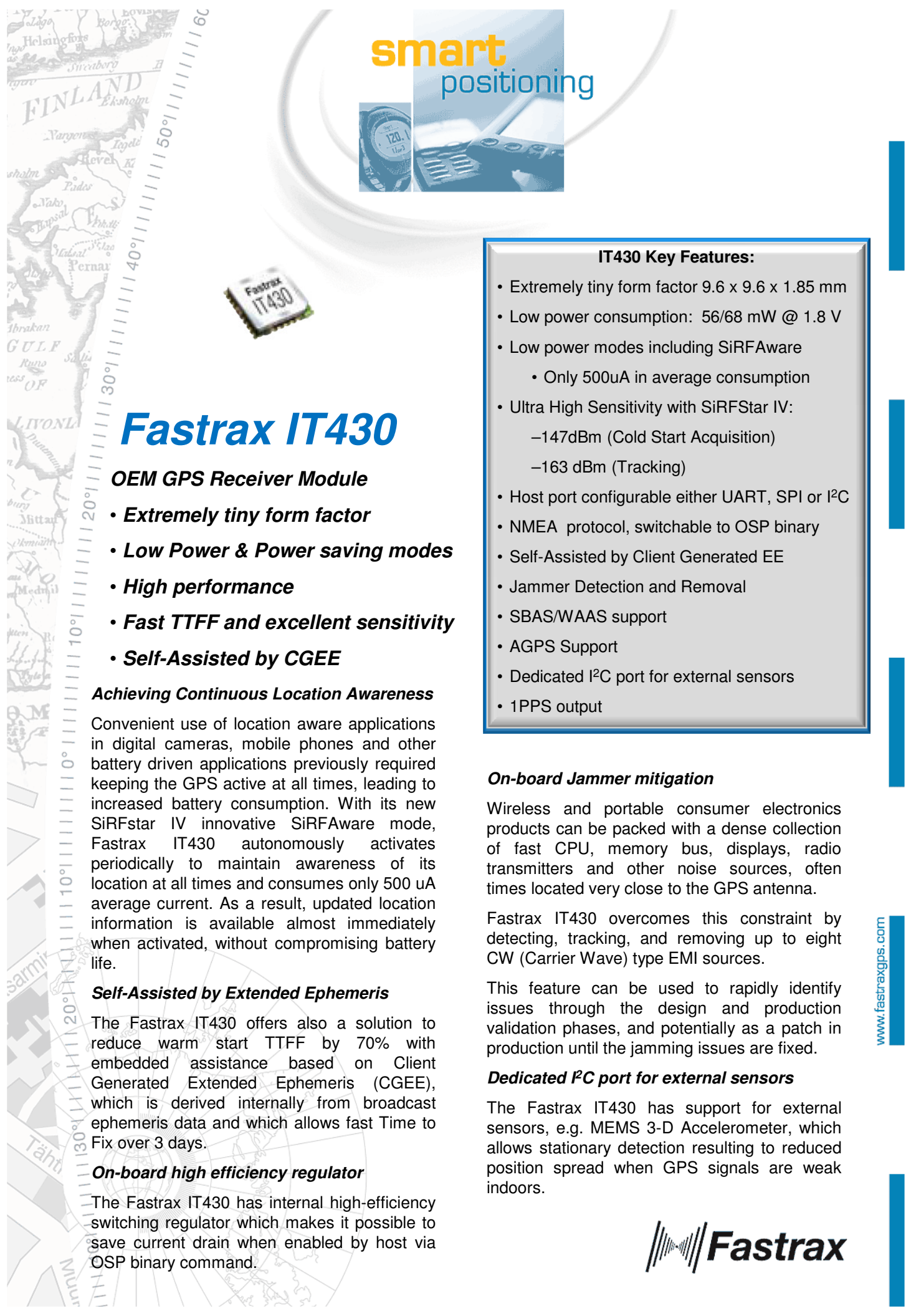




smart
positioning

Fastrax IT430

OEM GPS Receiver Module

- **Extremely tiny form factor**
- **Low Power & Power saving modes**
- **High performance**
- **Fast TTFF and excellent sensitivity**
- **Self-Assisted by CGEE**

Achieving Continuous Location Awareness

Convenient use of location aware applications in digital cameras, mobile phones and other battery driven applications previously required keeping the GPS active at all times, leading to increased battery consumption. With its new SiRFstar IV innovative SiRFAware mode, Fastrax IT430 autonomously activates periodically to maintain awareness of its location at all times and consumes only 500 uA average current. As a result, updated location information is available almost immediately when activated, without compromising battery life.

Self-Assisted by Extended Ephemeris

The Fastrax IT430 offers also a solution to reduce warm start TTFF by 70% with embedded assistance based on Client Generated Extended Ephemeris (CGEE), which is derived internally from broadcast ephemeris data and which allows fast Time to Fix over 3 days.

On-board high efficiency regulator

The Fastrax IT430 has internal high-efficiency switching regulator which makes it possible to save current drain when enabled by host via OSP binary command.

IT430 Key Features:

- Extremely tiny form factor 9.6 x 9.6 x 1.85 mm
- Low power consumption: 56/68 mW @ 1.8 V
- Low power modes including SiRFAware
 - Only 500uA in average consumption
- Ultra High Sensitivity with SiRFStar IV:
 - -147dBm (Cold Start Acquisition)
 - -163 dBm (Tracking)
- Host port configurable either UART, SPI or I²C
- NMEA protocol, switchable to OSP binary
- Self-Assisted by Client Generated EE
- Jammer Detection and Removal
- SBAS/WAAS support
- AGPS Support
- Dedicated I²C port for external sensors
- 1PPS output

On-board Jammer mitigation

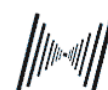
Wireless and portable consumer electronics products can be packed with a dense collection of fast CPU, memory bus, displays, radio transmitters and other noise sources, often times located very close to the GPS antenna.

Fastrax IT430 overcomes this constraint by detecting, tracking, and removing up to eight CW (Carrier Wave) type EMI sources.

This feature can be used to rapidly identify issues through the design and production validation phases, and potentially as a patch in production until the jamming issues are fixed.

Dedicated I²C port for external sensors

The Fastrax IT430 has support for external sensors, e.g. MEMS 3-D Accelerometer, which allows stationary detection resulting to reduced position spread when GPS signals are weak indoors.

 **Fastrax**

