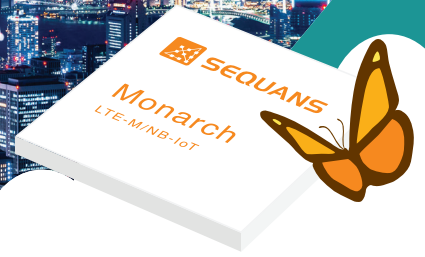


Monarch Go-GPS Starter Kit

Connected by Verizon



Certified LTE IoT category M1 modem component
with embedded antenna and embedded GPS

Monarch Go-GPS - Starter Kit

Connect the Starter Kit to your Windows laptop's USB port and begin your tests by using its rich set of AT commands to transfer your sensors data to your cloud through cellular link. The Starter Kit allows rapid hardware prototyping through industry standard UART interface using the Monarch Go device, your MCU board, and the optional flex cable. A Verizon IoT SIM is included and you can activate it on the ThingSpace platform. The Starter Kit eliminates many barriers system integrators and OEMs face.

Getting started

- Go to <https://thingspace.verizon.com/start> and sign up to activate the SIM card
- Connect Windows laptop to interface board with USB cable (USB 2.0)
- Monarch Go-GPS connects automatically to the Verizon LTE-M network
- Launch serial terminal configured with 115200 baud rate, 8 data bit, hardware flow control, no parity, 1 stop bit. Type AT!1 to get software version and AT+PING="www.sequans.com" to check connectivity
- Full board documentation, including usage of location services and optional flex cable is available for download at www.sequans.com/monarch-go-gps



Content

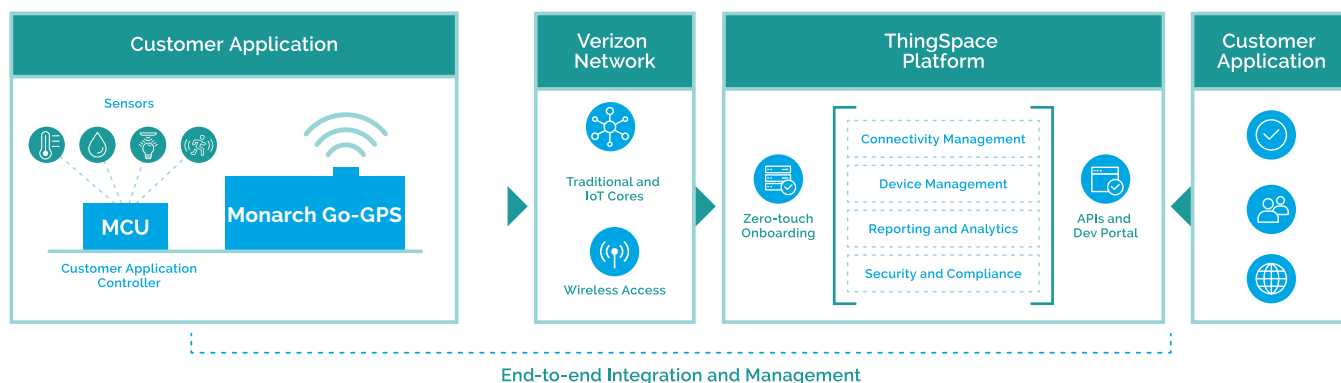
- Monarch Go-GPS modem component with embedded antenna, connected on an interface board for rapid prototyping
- ThingSpace IoT SIM pre-installed
- USB type A, Mini type B cable
- Flex cable for board-to-board connection (optional)
- Screw driver

Available from Avnet

ThingSpace Ready

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Monarch Go-GPS

Product Characteristics

Mechanical

- ❖ Small dimensions: 35 mm (1.38") x 50 mm (1.97") x 14.95 mm (0.59")
- ❖ Plastic enclosure fixable with 2 screws
- ❖ Shipped with ThingSpace SIM pre-installed
- ❖ Embedded LTE antenna and GPS antenna
- ❖ Low profile 20-pin digital board-to-board connector to connect your application controller through industry standard UART interface
- ❖ LED for modem activity
- ❖ LED for GPS activity
- ❖ 16 g weight

Modem

- ❖ Sequans Monarch™ LTE-M chip
- ❖ Pre-installed ThingSpace IoT SIM
- ❖ Certified for use on the Verizon network (LTE band 13) with roadmap for global band support
- ❖ Compatible with Linux, Windows and a wide range of embedded and real-time OSes
- ❖ High-speed UART as data and AT command interface
- ❖ Embedded IP stack with support for UDP, TCP, TFTP, FTP, HTTP, HTTPS, MQTT or MQTTS
- ❖ Location based services ⁽¹⁾
- ❖ SMS send and receive
- ❖ Low power modes PSM, eDRX, RRC IDLE

- ❖ Support for Verizon FOTA services from ThingSpace online management platform
- ❖ LTE Cat M1: 375 kbps uplink and 300 kbps downlink (peak)

LTE-M Data Plan

- ❖ Verizon LTE-M data plans available from ThingSpace online management platform
- ❖ Get started quickly by activating your device/s online at: <https://thingspace.verizon.com/start>

GPS

- ❖ Sensitivity: Tracking -162 dBm; Acquisition -148 dBm
- ❖ Location update rate up to 1 Hz

Electrical and RF

- ❖ Regulated supply voltage 3.1 V to 5.5 V
- ❖ 35 µA ultra low power mode (PSM)
- ❖ 1.8 V UART interface
- ❖ Max transmit power up to +23 dBm, LTE band 13
- ❖ Certified FCC compliant

Environmental

- ❖ Operating temperature: -40° C to +80° C
- ❖ Storage: -40° C to +85° C
- ❖ RoHS compliant