

# SynTRAC™ PL1

## Embedded Cellular Modem

4G LTE Cat 1 / 3G / 2G

SynTRAC™ PL1 is a 4G LTE Cat 1 and 3G HSPA communications and tracking development platform. It features multi-GNSS satellite navigation technology, supporting in parallel GPS, GLONASS, Galileo, BeiDou, as well as QZSS. SynTRAC™ PL1 incorporates sophisticated power saving algorithms to last longer on a single battery charge than other systems.

### ABOUT THE SynTRAC™PLx SERIES

SynTRAC™ PL1 is a member of the SynTRAC™PLx family of embedded cellular modem's which enable solutions providers, OEMs and others to harness the potential of the Internet of Things, making their products connected end devices.

More than just a modem, the PLx family of devices are complete, fully featured, pre-certified edge devices, with cellular connectivity, GNSS/GPS receivers and fully-integrated antenna systems. The PLx family of products support a wide range of applications, including tracking, location data, connectivity for sensors, digital signage, instrumentation and other applications that require wireless connectivity.

### ORDERING INFORMATION

<b>SynTRAC-PL1-200</b>	LTE Cat 1 for US (VODAFONE,AT&T, TMO); global 3G & 2G	Cellular Modem/ Evaluation
<b>SynTRAC-PL1-202</b>	LTE Cat 1, 3G for US (VODAFONE,AT&T, TMO); no 2G	Cellular Modem/ Evaluation
<b>SynTRAC-PL1-204</b>	LTE Cat 1 only for US (VERIZON)	Cellular Modem/ Evaluation
<b>SynTRAC-PL1-200- TR</b>	LTE Cat 1 for US (VODAFONE,AT&T, TMO); global 3G & 2G	Tracking
<b>SynTRAC-PL1-202- TR</b>	LTE Cat 1, 3G for US (VODAFONE,AT&T, TMO); no 2G	Tracking
<b>SynTRAC-PL1-204- TR</b>	LTE Cat 1 only for US (VERIZON)	Tracking



### FEATURES

- Small form- factor with integrated antenna
- Multi- GNSS satellite navigation technology: GPS, GLONASS, Galileo, Beidou, QZSS.
- Connectivity via USB
- Multiple firmware versions available for download from our website, upon request.

### BENEFITS

- PTCRB Certified
- FCC & ISSED Certified
- Reduced time to market.
- Power saving algorithms
- AT commands
- FreeRTOS coming soon

### MARKET APPLICATIONS

- Transport & Telematics
- Smart manufacturing & industrial IoT
- Smart buildings/cities
- Smart energy & utilities
- Retail



Made in the U.S.A.

## SPECIFICATIONS

	SynTRAC™ PL1-200	SynTRAC™ PL1-202	SynTRAC™ PL1-204
<b>Regions</b>	North America		
<b>Carriers</b>	Vodafone AT&T T-Mobile	Vodafone AT&T T-Mobile	Verizon
<b>Technology</b>			
Band Data Rates	4G LTE Cat 1/ 3G	4G LTE Cat 1/ 3G/2G	4G LTE Cat 1
LTE Bands	2, 4, 5, 12	2, 4, 5, 12	4,13
UMTS/HSPA [MHz]	850, 900, 1900, 2100	850, 1900	
<b>Positioning</b>			
Indoor Positioning	Hybrid Positioning and CellLocate®		Depending on FW version
GNSS Chipset	72-channel u-blox® UBX-M8 multi-GNSS receiver (or similar)		
GNSS Systems	GPS, Galileo, GLONASS, BeiDou (concurrent 3 out of 4); SBAS (WAAS, EGNOS, QZSS)		
GNSS Tracking Sensitivity	-167 dBm (manufacturer's spec)		
Accuracy	< 2.5m CEP (manufacturer's spec)		
<b>Features</b>			
FOTA	Modem firmware update over the air		
Update Rate	Every 10 minutes when in motion (default); configurable from 1/sec to 1/day * Only Applicable with Tracking FW		
Operating Temperature	-40 ° C to +85 ° C		
Dimensions	< 80x45x12 mm3 (smaller than a credit card)		
Connectors	Atmel ICE (6 pin); Micro USB		
Accelerometer	3 Axis 8G		
<b>Environments</b>			
AT Commands	Currently Available		
FreeRTOS	Will be available with FW update		
<b>Certifications</b>			
SynTRAC PL1-200	FCC, ISED, RED, PTCRB (in process), AT&T (in process), T-Mobile (in process), Rogers (in process),		
SynTRAC PL1-202	FCC, ISED, PTCRB, AT&T (in process), T-Mobile (in process), Rogers (in process),		
SynTRAC PL1-204	GCF, FCC, ISED, PTCRB (in process), Verizon (in process)		

## ABOUT SYNDESY

Syndesy Technologies, Inc. provides IoT solutions to meet the needs of every customer. From initial design to final quality assurance processes, we make sure our goods are reliable and exceptional. We are proud to design and manufacture in the U.S.A.

## CONTACT INFORMATION



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