SYRUS 3G

Intelligent hub specially designed for actionable telematics, multiple sensors integration and IoT interoperability. The SYRUS 3G has all the features and even more ports compared to previous models plus a wide range of new intelligent metrics and built-in counters for Actionable Telematics, API interaction, Advanced Fleet Management, Security, Automation and agile customized development.

PART NUMBER
S3G-2480

Syrus³ᴳ

- 2-WAY AUDIO
- MULTI-ACCESSORY COMPATIBILITY
- JAMMING DETECTION
- API INTERACTION
- BACKUP SATELLITE COMMUNICATION CAPABILITY
- BUILT-IN REMOTE DIAGNOSTICS

KEY FEATURES

High speed data transfer
3G - UMTS/HSPA: Dual band 850/1900MHz

Advanced Configurable Accelerometer
The 3-Axis Internal Digital+-16G accelerometer allows for a turn over signal with instant acceleration monitoring as well as back log for crash condition history report.

Backup Satellite Communication Capability
IRIDIUM network compatible with SATCOM accessory sold separately. Configuration and app available in the Pegasus Gateway - SYRUSMART.

Advanced OTA Configuration Management
Specialized Over-The-Air configurations available for multiple business models and applications via the Pegasus Gateway.

Water Resistant IP65
Now suitable for all kinds of vehicles and mobile assets exposed to harsh weather conditions.

Tamper Detection
Anti-tamper functionality accurately detects when the device's case has been opened.

ECU Monitor Compatible
Easy CAN / OBD integration with external ECU Monitor accessory that can be managed via the Pegasus Gateway — REST APIs.

Back & Forward Log
Retrieve back or forward log messages to provide valuable data after a critical incident with photo capturing functionalities.

Large Store & Forward Buffer
Save up to 30,000 events when no GPRS or GSM network is available.

Built-in Remote Diagnostics
Advanced functions to monitor the health of hardware components as well as efficiency of communication.

DCT
ACTIONABLE TELEMATICS

KEY FEATURES

Intelligent Geofencing Capability
Embedded integration of up to 100 circular and 50 polygonal user defined geofences.

Low Energy Consumption
Ultra low power consumption during sleep mode (1mA).

Supported by DCT High-level Ecosystem
Advanced development tools and resources to deploy successful smart connected solutions.

Advanced Interaction through APIs
Create and deploy IoT/M2M solutions quickly with PEGASUS Gateway/REST APIs. Eliminate the complexity of data abstraction and interact without the hassle of learning hardware protocols.

Intelligent Counters Computed on the Edge
Outstanding embedded intelligence with user-defined thresholds and actions computed on the edge.

Accelerations Backlog
Retrieve logs with instant accelerations for valuable data before and after critical incidents.

Multi-sensor/Accessories Compatibility
Different ports with outstanding actionable intelligence for actionable telematics with multiple sensors and accessories.

Enhanced Remote Interaction
Through REST APIs supported by Pegasus Gateway, it can transform device data to structured reports with simple API calls.

TECHNICAL SPECIFICATIONS

PART NUMBER	
S3G-2480	
S3G-2480A	With external GPS Antenna Connector

PROGRAMMING/REPORTING	
Communication Protocol	Modified TAIP (Trimble ASCII Interface Protocol

PHYSICAL	
Unit Dimensions (inches)	3.89 x 3.63 x 1.20
Weight	220 gm
Material	Polycarbonate 94v-0 for higher temperatures
Water-resistant casing	IP-65 Sealed

ENVIRONMENTAL	
Operating Temperature	-20°C to 70°C
Storage Temperature	-30°C to 85°C
Operating Humidity	Up to 95% non-condensing
Storage Humidity	10% to 90% non-condensing

BACKUP BATTERY SPECS	
Capacity	250 mA
Operating Voltage	3.7V
Technology	Polymer Li-Ion
Weight	17g
Protection	Internal PCM Circuit
Temperature Ranges	Charge: 0°C to 45°C
	Discharge: -20°C to 60°C

CONNECTORS	
GPS Antenna	Optional
SIM Access	Yes (SIM Holder)
	Supports Embedded Simcard

POWER SUPPLY PROTECTIONS	
Overvoltage	Yes
Over-current	Yes
Reverse Polarity	Yes
Internal Resettable Fuse	Yes

ELECTRICAL	
Operating Voltage	8 - 32VDC
Power Consumption	
Deep Sleep Mode	1mA @ 12V
Active Tracking	70mA @ 12V

CERTIFICATIONS
FCC
IC (Industry Canada)
CE
PTCRB (pending)
AT&T (pending)

MOUNTING	
Screw Mount	Yes
Tie-Wrap	Yes

ACTIONABLE TELEMATICS

TECHNICAL SPECIFICATIONS

GPS SPECIFICATIONS	
GPS Solution	MTK MT3339
Frequency	L1, 1575.42MHz
Sensitivity Acquisition	-148dBm, cold start
Reacquisition	-163dBm, hot start
Tracking	-165dBm
Tracking	66 Channels
TTFF Hot start	1 second typical
Warm start	33 seconds typical
Cold start	35 seconds typical
Altitude Maximum	18,000m (60,000 feet)
Velocity Maximum	515m/s (1000 knots)
Acceleration Maximum	+-4G, maximum 10Hz
Update Rate	1Hz (default), maximum 10Hz
DGPS	SBAS (defult) [WAAS, EGNOS,MSAS, GAGAN]
AGPS	Support
QZSS	Support (Ranging)
Protection	Internal PCM Circuit
Temperature Ranges	Charge: 0°C ~ +40°C
	Discharge: -20°C ~ +40°C

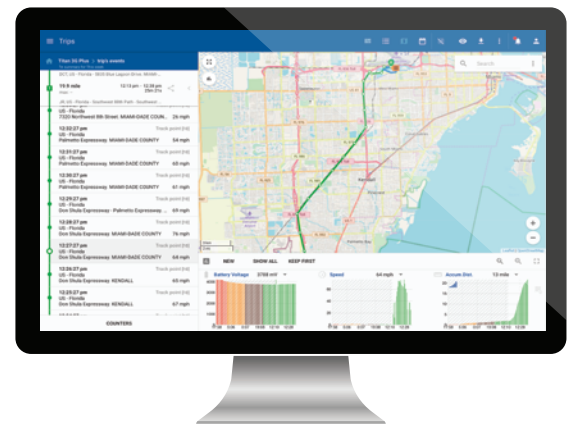| CELLULAR MODEM SPECIFICATIONS	
Frequency Bands	GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz UMTS/HSPA+: Penta band 800/850/900/1900/2100MHz
Data Transmission	HSPA: DL 7.2Mbps, UL 5.76Mbps UMTS: DL 384kbps, UL 384kbps (PS) DL 64kbps, UL 64kbps (CS) EDGE: DL 237kbps, UL 237kbps GPRS: DL 85.6kbps, UL 85.6kbps
Output Power	Class 4 (+33dBm ±2dB) for EGSM850 Class 4 (+33dBm ±2dB) for EGSM900 Class 1 (+30dBm ±2dB) for GSM1800 Class 1 (+30dBm ±2dB) for GSM1900 Class E2 (+27dBm ± 3dB) for GSM 850 8-PSK Class E2 (+27dBm ± 3dB) for GSM 900 8-PSK Class E2 (+26dBm +3 /-4dB) for GSM 1800 8-PSK Class E2 (+26dBm +3 /-4dB) for GSM 1900 8-PSK Class 3 (+24dBm +1/-3dB) for UMTS 2100, WCDMA FDD BdI Class 3 (+24dBm +1/-3dB) for UMTS 1900, WCDMA FDD BdII Class 3 (+24dBm +1/-3dB) for UMTS 900, WCDMA FDD BdVIII Class 3 (+24dBm +1/-3dB) for UMTS 850, WCDMA FDD BdV Class 3 (+24dBm +1/-3dB) for UMTS 800, WCDMA FDD BdVI

Low energy Consumption

Tamper Detection

Water Resistant IP65

ONLY AVAILABLE ON

Pegasus Gateway

DCT
ACTIONABLE TELEMATICS

TECHNICAL SPECIFICATIONS

CELULLAR MODEM SPECIFICATIONS

HSPA Features	3GPP Release 6, 7
	HSDPA Cat.8 / HSUPA Cat.6 data rates
	DL:max. 7.2 Mbps, UL: max. 5.7 Mbps
	Compressed mode (CM) supported
	according to 3GPP TS25.212
UMTS Features	3GPP Release 4
	PS data rate — 384 kbps DL / 384 kbps UL
	CS data rate — 64 kbps DL / 64 kbps UL
GPRS Features	HSDPA Cat.8 / HSUPA Cat.6 data rates
	DL: max. 7.2 Mbps, UL: max. 5.76 Mbps
	EDGE Class 12 data rates
	DL: max. 237 kbps, UL: max. 237 kbps
	GPRS Class 12 data rates
	DL: max. 85.6 kbps, UL: max. 85.6 kbps
EGPRS Features	Multislot Class 12
	Full PBCCH support
	Downlink Coding Schemes – CS 1-4, MCS 1-9
	Uplink Coding Schemes – CS 1-4, MCS 1-9

PERIPHERALS

Outputs	2 Open Drain Outputs
	Continuous Current Capacity: 1.6A
	Maximum Instantaneous Current (< 1 sec): 10A
	Maximum Switching Voltage: 32V
	Automatic Overvoltage
	Overcurrent Resettable Protection
Inputs	3 Auxiliary Discrete Inputs
	Voltages From 0V to 32V
	50k Ohm Impedance
	1 Ignition Input. 50k Ohm Impedance
	1 Analog Input (ADC)
	Voltages From 0V to 15V
	127k Ohm Impedance
Serial Communications	RS232 (Tx and Rx)
	One-Wire Bus For i-Button
Audio	2 Ways Audio

ADDITIONAL CHARACTERISTICS

Internal GSM and GPS antennas

Two status LEDs

3-axis ±16G Digital Accelerometer

DIMENSIONS

Inches [millimeters]