



SnG Features & Specifications

SnG, is a system that supports individuals and agencies requiring and ultra light highly portable high reliability real time tracking system. The system "Slap-n-Go" is exactly as it is name implies. A totally integrated self contained solution is a small unobtrusive hi-impact plastic package. The device is based on the latest technology and includes a list of standard features and capabilities. The system is intended for both exterior and interior installation, all circuitry are conformally coated against moisture, and the enclosure is weatherproof.

Together with MATCO's multi-use over the web application formulates a well rounded out tool for any discerning requirement.

The system utilizes low cost GPRS data technology to move information back and forth from the module to the back end system and vice versa. The system installs in less then 20 seconds. The system is an "Event" (Alerts) driven system while running all data is in real time. Specific features can be programmed over the air while the system is active.

The system is a "Passive On" technology that takes advantage of a true automotive OEM designed systems. Standby power is the lowest in the industry for "Passive On" technology. Full time system monitoring and transmit on "Event" conserves maximum life of the onboard battery. The unit is easily charged by the desktop charger system that includes USB support for easy setup and connection to any standard desktop personal computer system.

MATCO offer wireless plans for all of our products, from minimum usage users per month to high volume usage users MATCO supplies it all.

Summary of Features

- Automotive compliance, meets or exceeds relevant SAE specifications.
- GSM/GPRS dual-band and optional quad band for true world application.
- True "Event", (Alerts) driven system.
- Full "Alerts" notification sent to user's E-mail, Handphone, Pager and/or optional secure communication to user's own monitoring alarm service.
- Motion detection activated turn "On and Off".
- Full time diagnostics, full reporting capabilities.
- Power miser circuitry, module automatically reduces power to absolute minimum leaving essential passive powering only while stationary, (no motion detected).
- Intelligent battery charging system maximizes life of onboard battery.
- Long life integrated battery power system.
- Operation of up to seven days* from a fully charged battery.
- Full featured user command set over the air;
 - Set notification contact(s) priority for "Events" Alerts,
 - Always On Report Time Interval,
 - High Speed Report time Interval,
 - Motion Detection Activation,
 - Vehicle Status on Command, (when activated by Motion Sensor),
 - Module Reset.

*Based on a three hour per daily tracking, reporting set to 5 records every 30 minutes.

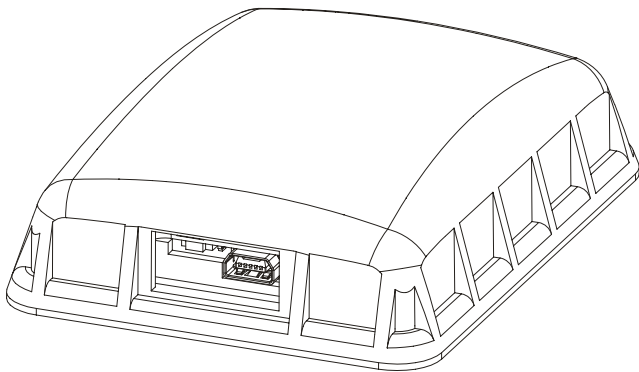


Figure 1, SnG Module, depicting user port and switch.

Specifications

Environmental & Electrical,

Parameter	Minimum	Typical	Maximum	Unit
Supply Voltage, J4, Pin 1, (+V _{BATT})	4.0		4.6	V _{DC}
Operational Current, (I _{OPER})	40		1,800 _(PEAK)	mA _{DC}
Quiescent Current, (I _{Q TYP})	0.1		0.2	mA _{DC}
Operating Temperature Range, (T _{OPER})	-20		+60	°C
Storage Temperature range, (T _{STORAGE})	-30		+80	°C
Environmental, Humidity, Non-condensing at +40 °C, (RH _{NC})			95	%

RF Modem,

Parameter	Comment
Wavecom WISMO Quik 2400 Series, type Q2426†	North America usage,
Dual Band EGSM/GPRS module (EGSM 850/1800 MHz).	Designed for M2M Automotive
Compliant with ETSI GSM Phase 2+ Standard	
Class 4, 2W @ 850 MHz,	
Class 1, 1W @ 1800 MHz,	
Environmental,	See above

† Wavecom model Q2604 is used for South East Asia, UK & Europe.

GPS Receiver,

Parameter	Minimum	Typical	Maximum	Unit
Channels, Parallel Tracking, (All in View Tracking)			16	Each
Operational Frequency, L1		1575		MHz
Position Accuracy				
Stand alone, (CEP, SA off)		7		Metres
Differential ¹		N/A		Metre
Time To First Fix				
Obscuration Recovery ²		1		Seconds
Hot Start ³		< 12		Seconds
Warm Start ⁴		< 38		Seconds
Autonomous/Cold ⁵		< 60		Seconds
Power-off start ⁶		varying		Seconds
Antenna Supply, I _{max} =50mADC		N/A		V _{DC}
Antenna Current Monitor, I _{Ant}		N/A		mA _{DC}

- Assumes a benign multi-path environment and differential corrections once per second.
- The receiver's calibrated clock is not stopped, thus it knows precise time to the uSec level.
- The receiver has estimates of time/date/position and valid almanac and ephemeris data.
- The receiver has estimates of time/date/position and almanac.
- The receiver has no estimates of time/date/position and no recent almanac.
- Receiver is powered "Off", clock stops. Start-up depends on time to power-on and power-on location.

Electrical Input and Output Signals,

J4, Pin No.	Type	Assertion	Min	Max	Unit
1	Input	Positive Supply, <i>Input Positive</i>	4.0	4.6	V _{DC}
2	Output	RS232 Communication Signal, <i>Output Tx</i>	2.8	3.3	V _{DC}
3	Input	RS232 Communication Signal, <i>Input Rx</i>	2.8	3.3	V _{DC}
4	N/C	Reserved			V _{DC}
5	Input	Negative Supply, <i>Input Ground</i>			GND

- RS232 is connected to microprocessor, USB conversion is through desktop charger unit.

Mechanical,

Parameter	Specifics	Unit
Module Dimensions, (LxWxD)	80 x 64 x 17.5, (Automotive grade peel and stick mounting)	mm
Module Weight	< 150	grams
Module Housing, Engineered Plastic Blend	Custom designed and manufactured to MATCO Spec.	

Miscellaneous,

- Antenna(s), Cellular and GPS are incorporated to the unit.
- Motion detection is based on single point element all directions.
- Unit shipped with mounting kit and instruction warranty booklet and installed SIM card.
- Consult MATCO for all other possible configurations and pricing.

§ All information contained herein is subject to change without prior notification, please consult factory to verify latest information. Additionally all information was reviewed and correct at time of publication.

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