

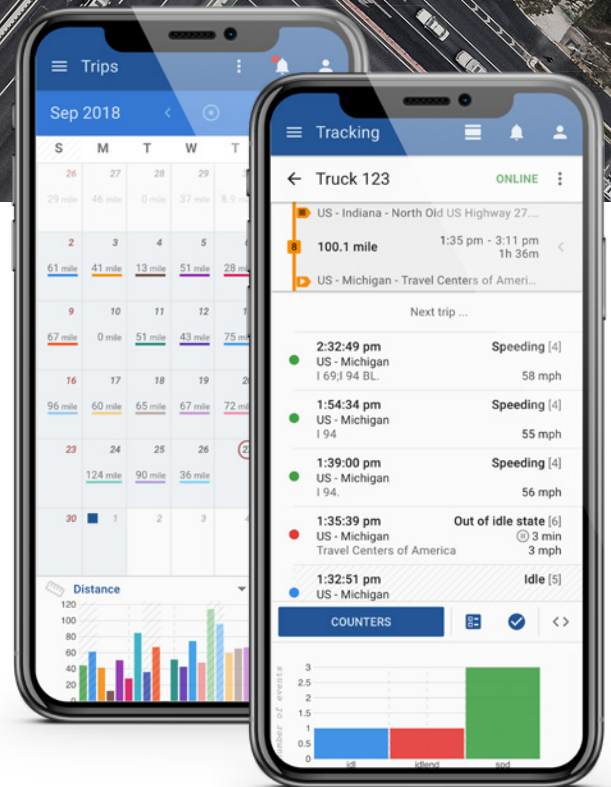
PLUGGED INTELLIGENCE FOR CONNECTED CAR APPLICATIONS

INSTANT OBDII TELEMATICS WITH EXPANDED INTEROPERABILITY

Syrus S03G-1809 offers an easy to install plug and play dongle for OBDII vehicles. Optimized for a diverse range of applications it provides insights to vehicle diagnostics including fuel monitor, actual odometer, engine RPMs, VIN information and additional engine temperature information. Includes a 3-axis accelerometer for motion sensing technology to keep an eye on aggressive driving. Ideal solution for passenger and light-duty vehicles.



PART NUMBER: S03G-1809 – A (AMERICAS NETWORK)
S03G-1809 – G (GLOBAL NETWORK)



FEATURES

- Superior 3G cellular connectivity
- Fast GPS acquisition & performance
- Optimized for easy plug & play installation
- Accurate engine diagnostics

TECHNICAL SPECIFICATIONS

General

Communication Mode (US)	GSM/GPRS/EDGE: Dual band GSM 850/1900MHz UMTS/HSPA+: Dual band UMTS 850/1900MHz
Communication Mode (EU)	GSM/GPRS/EDGE: Dual band GSM 900/1800MHz UMTS/HSPA+: Dual band UMTS 900/2100MHz
Location Technology	50+ channel GPS (with SBAS)
Messages	20,000 buffered messages

GPS

Location Technology	GPS
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-148 dBm
Location Accuracy	2.0m
AGPS capable	

Cellular Modem Specifications

Frequency Bands (US)	GSM/GPRS/EDGE: Dual band GSM 850/1900MHz UMTS/HSPA+: Dual band UMTS 850/1900MHz
Frequency Bands (EU)	GSM/GPRS/EDGE: Dual band GSM 900/1800MHz UMTS/HSPA+: Dual band UMTS 900/2100MHz
Data Transmission	HSPA: DL 7.2 Mbps, UL 5.7 Mbps UMTS: DL 384 kbps, UL 384 kbps (PS) DL 64 kbps, UL 64 kbps (CS) EDGE: DL 237 kbps, UL 237 kbps GPRS: DL 85.6kbps, UL 85.6kbps

Certifications

Fully certified FCC, CE, IC, PTCRB, Applicable Carriers

Mounting

Via built-in OBD-II connector

Self-adhesive mounting with OBD-II extender cable



Connectors, SIM Access

Built-in OBD-II/E0BD-II interface via J1962 compliant connector

Comprehensive I/O

OBD-II Interface	OBD-II interface: J1850 PWM, J1850 VPW, ISO-9141-2, ISO-14230, KWP 2000, ISO-15765 CAN
Outputs	None
Communications Status	LED's: OBD, Cellular and GPS
Bluetooth	Bluetooth 4.0 Dual Mode (optional) Available for model: S03GBT-1809

Environmental

Temperature*	-30° to + 75° C (connected to primary power) -40° to + 85° C (storage) *Except Battery
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	SAE J1455
EMC/EMI	CE, GCF, eMark
RoHS Compliant	

Physical

Dimensions	1.5 x 2.5 x 0.98" (43 x 64 x 25mm)
Weight	1.83oz / 52g (with battery)
Enclosure	Rugged textured plastic enclosure

Electrical

Operating Voltage	9-16 VDC Vehicle Systems
Sleep Mode	4.9mA @ 13V (deep sleep) 83mA @ 13V (normal operation) 66mA @ 13V (SMS+UDP connection, GPS off) 114mA @ 13V (continuous transmit)

OBD Data Extraction

Detection	Automatic detection of vehicle interface services
Extraction	Transmission of standard OBD-II codes, plus manufacturer specific codes which are made available by the embedded OBD firmware stack

PRIMARY CONNECTOR

Pin	Signal Name	Description
1	Make/Model Specific	Vendor Option
2	Bus+ Line	SAE-J1850 PWM and SAE-1850 VPW
3	Make/Model Specific	Vendor Option
4	Chassis Ground	Ground
5	Signal Ground	Ground
6	Can High	ISO 15765-4 and SAE-J2284
7	K line	ISO 9141-2 and ISO 14230-4
8	Make/Model Specific	Vendor Option
10	Bus- Line	SAE-J1850 PWM and SAE-1850 VPW
11	Make/Model Specific	Vendor Option
14	Can Low	ISO 15765-4 and SAE-J2284
15	L line	ISO 9141-2 and ISO 14230-4
16	Battery Power	Power

Please note that only 13 of the 16 connector pins are actually populated on the connector.

INSTALLATION

1. Locate the vehicle's engine diagnostic port, typically found in the driver's area at or below knee level.
2. Before connecting the Syrus OBDII, make sure the vehicle is turned ON and the engine is running*.
3. Align the receiver end of the Syrus OBDII device with the engine diagnostic port, and simply push in place, ensuring that the device is well connected to the diagnostic port.
4. Leave the unit plugged in with the ignition ON for approximately 3 minutes.
5. Proper functioning of the device will be indicated by the LEDs,
 - Solid Green, indicates good GPS availability
 - Solid Orange, indicates good network communication
 - Solid Red, indicates reading data from the diagnostic port

*If you connected the Syrus OBDII while the ignition is OFF, you'll need to complete the detection process on the next ignition ON cycle in order to operate correctly.

LED DEFINITIONS

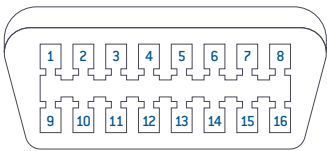
LED #1 (Comm LED - Orange)

Condition	LED 1
Modem Off	Off
Comm On - Searching	Slow Blinking
Network Available	Fast Blinking
Registered but no Inbound Acknowledgement	Alternates from Solid to Fast Blink every 1s
Registered and Received Inbound Acknowledgement	Solid

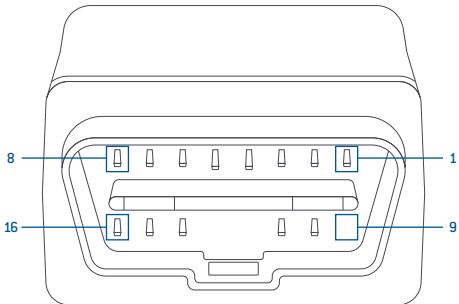
LED #2 (GPS LED - Green)

Condition	LED 2
GPS Off	Off
GPS On	Slow Blinking
GPS Time Sync	Fast Blinking
GPS Fix	Solid

When both LEDs are in SOLID the device is ready to operate.



CONNECTOR ON
VEHICLE SIDE



CONNECTOR ON
SYRUS OBDII SIDE

