

Specifications

Trimble SNM940 Connected Site Gateway (GSM)



General Description

The Trimble SNM940 Connected Site Gateway and VisionLink make it possible to gather all of the following data and more as quickly and as frequently as you need

Standard Features

- VisionLink Ready
- Durable construction for use on all types of assets
- Quad Band GSM/GPRS/EDGE, Tri Band UMTS cellular data communications
 - Public J1939 communications with alerts
 - Precise Run Time sensing
- Supports serial sensor data
 - Relay driver Output
 - 3 Digital inputs
 - 1 Analog input
- Integrated motion sensor
- Multiple local area communications media including Wi-Fi, RS-232, CANbus, and Ethernet
 - Provides vital real-time alerts
 - Collects asset health history
- Provides rapid notification of unauthorized operation
- Provides data communications for grade control and steering systems including RTK correctors and design file transfers
 - Onboard webserver for simple configuration
 - Maintenance Free

Product Specifications

Physical Characteristics

Enclosure Material:	Cast Aluminum
Size:	
Length:	230 mm
Width:	136.3 mm
Height:	40 mm
Weight:	1.09 kg
Mounting hole pattern:	215.4 mm x 60 mm
Connectors:	
Multi	34 Pin Male positive locking
GPS Antenna	SMA Jack
Cellular Antenna	TNC Jack
Wi-Fi	RP TNC Jack

Environmental Characteristics

Temperature:	
Operating:	-40°C to +70°C
Storage:	-40°C to +85°C
Humidity:	SAEJ1455
Shock:	SAEJ1455
Vibration - Operating:	SAE J1455

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Technical Specifications

Input Voltage:	7.0 to 32.0 VDC
	Unit will tolerate an 80V jump start transient for at least 2 minutes. Meets ISO7637-2 cold cranking waveform specifications for both 12V and 24V systems
Current Consumption (typical):	
Transmitting cellular data:	233 mA typical, 8 mA sleep (1.5 A peak) at 12 VDC
Inputs & Outputs:	
Analog Input	voltage sensing
Relay Driver Output	200mA maximum sinking current
Serial Port	Three wire RS-232
R-terminal Input	Ready for direct connection to alternator to detect engine running
Enhanced Communications	
1 Channel CANbus	support for Public J1939 communications up to 250kb/s
Ethernet Port	10/100 Base-T
Wi-Fi	Infrastructure client, ad hoc ; communicate with other assets or the Internet Supported Protocols - 802.11b/g

Motion Sensing

Frequency	3 to 62.5 Hz
Adjustable Threshold	0.1 ips increments

Regulatory Compliance

FCC Class B Part 15, CE / R&TTE / E-mark, A-tick mark; WEEE; RSS-210
Industry Canada; RoHS ; SAE J1113-12; ; ISO 7637-2;

Cellular Communications

GSM Quad Band Modem	
Data Overlay	HSDPA/GPRS/EGPRS
Bands	
Tri Band	UMTS/HSDPA (WCDMA/FDD) 850/1900/2100 MHz
Quad Band	GSM/GPRS/EDGE 850/900/1800/1900 MHz

Positioning

GPS Receiver:	
Type:	12 channel; L1 C/A Code, Continuous Tracking
SBAS Support	WAAS, EGNOS
Horizontal Accuracy	<2.5m (50% CEP)
Maximum Update Rate	1Hz
Tracking Sensitivity	-160 dBm
Acquisition Sensitivity	-146dBm
Time to Position (typical):	
Cold Start	41 Seconds
Warm Start	35 Seconds
After 15 Second Signal Blockage	<9 Seconds

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Configurable Parameters

Geofence areas for worksites	Over-the-Air, 50 sides, 100 stored onboard
Stop Reports	Enable, speed, and duration limits
Mileage	Set the initial odometer reading
Engine Runtime	Set the initial hours reading
Data Logging	Supports message and event storage for up to 4000 records while out of cellular network coverage
Digital Inputs	Assign Machine-specific functions
Relay Driver Output	Assign Machine-specific functions
Serial Port Operations	Assign sophisticated sensor communications throughput
Public J1939 CANbus Operations	Create automatic alerts and scheduled reports
Motion Sensing	Set alert threshold levels

Subscription Plan Support

VisionLink Ready supporting:
Essentials
Health
Maintenance
Rapid Reporting
Connected Data
Connected RTK

Status Indicators

External LEDs	
Amber	Power and General Status
Green	Wireless Communications Status

Footnotes:

* external radios may include 450MHz, 900MHz, Trunking data radios, Mesh modems, and Satellite modems.

Specifications subject to change without notice.

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Trimble Heavy and Highway Division

10355 Westmoor Drive, Suite 100
Westminster, CO 80021
USA
800-538-7800 (Toll Free)
+1-937-245-5154 Phone
+1-937-233-9441 Fax
www.trimble.com

Trimble Authorized Distribution Partner

