

Asset Tracking & Logistics Hardware Catalog

Fleet / Trailer / Container / Cold Chain / Video / Gateways

Tracking, condition monitoring and data transport for moving and unpowered assets

Tracking hardware for powered vehicles, trailers, containers, equipment and temperature-controlled cargo. The range includes wired and battery trackers, asset tags, condition loggers, fleet video and the gateways that carry the data.



Waterproof trailer & equipment tracker



Long-standby battery asset tracker



Waterproof temperature logger



Fleet video & active-safety recorder

Representative family visual; exact housing may vary by configuration.

Asset class	Hardware range
Vehicles and fleet	Vehicle-bus terminals, wired trackers and OBD-II units
Trailers and unpowered assets	Waterproof, battery, magnetic and solar trackers
Tags and cold chain	LoRaWAN / Bluetooth tags and condition loggers
Video and transport	Fleet recorders, routers, gateways, serial terminals and antennas

SCOPE

Use the SG code when requesting a quotation. The quotation states the selected interface, radio profile, enclosure and power configuration.

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Industrial IoT hardware - remote monitoring & data acquisition | andy@sungeneiot.com | sungeneiot.com

Range overview and contents

SunGene supplies tracking and logistics hardware under permanent SG codes. Selection starts with the asset's power source, installation method, reporting interval, interface and destination network.

Family	Products	Data path
Fleet	Vehicle-bus, wired and OBD-II terminals	Cellular IP transport and vehicle interfaces
Unpowered assets	Battery, magnetic and solar trackers	Cellular or LPWAN by product
Tags	LoRaWAN and Bluetooth tags	Gateway or hub-node backhaul
Cold chain	Temperature, humidity, door, shock and carbon-dioxide nodes	LoRaWAN, LTE-M or NB-IoT by product
Video	Fleet recorders and active-safety terminals	Cellular live view and local storage
Backhaul	Routers, gateways, serial terminals and antennas	Ethernet, Wi-Fi, cellular and serial interfaces

SELECTION INPUTS

- Asset type and available power
- Installation and enclosure requirement
- Reporting interval and coverage
- Vehicle, sensor or gateway interface

RANGE LOGIC

- Powered assets - choose by bus and I/O
- Unpowered assets - choose by report interval and mounting
- Tags and loggers - choose by radio and sensing function

How the hardware fits your tracking platform

Cellular trackers report directly to the customer's platform. LoRaWAN and Bluetooth devices report through a gateway or hub node. Routers and edge gateways connect serial, CAN and Ethernet equipment.

Asset layer	Connect layer	Customer layer
Vehicle and equipment trackers	Direct cellular reporting	Tracking and alert platform
LoRaWAN tags and loggers	LoRaWAN gateway	Network server and MQTT broker
Bluetooth tags	BLE-to-LoRaWAN hub node	Asset register and geofence engine
Fleet video recorders	Cellular router or integral modem	Video storage and review
Serial and CAN equipment	Router or edge gateway	Device management and historian

WIRELESS

- Cellular tiers by product
- LoRaWAN regional profiles
- Bluetooth and Wi-Fi by product

NORTHBOUND

- UDP/IP, TCP/IP and MQTT
- LoRaWAN gateway transport
- Video and vehicle protocols by product

Vehicle-bus telematics terminal with driver I/O

Hardwired fleet terminal for vehicles that require engine data, driver identification and multiple sensor inputs.



Vehicle-bus telematics terminal

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TRK-101	Vehicle-bus telematics terminal	Cellular tier, vehicle protocol, digital / analogue I/O, accessory bus and backup power

KEY FEATURES

- Vehicle-bus and driver-I/O integration
- Digital, analogue and 1-Wire channels
- Store-and-forward cellular reporting

APPLICATIONS

- Commercial fleets
- Heavy vehicles and plant
- Driver-ID and temperature sensing

Compact wired vehicle trackers and OBD-II unit

Compact wired trackers for powered vehicles, plus an OBD-II unit for fast installation. Select by supply range, input / output requirement and radio profile.



Compact wired tracker, 9-90 V

Wired tracker with relay cut-off

Wired tracker with light sensor

IP67 compact wired tracker

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TRK-111	Compact sealed wired tracker	Supply, ignition / SOS inputs, enclosure and SIM
SG-TRK-112	Wide-voltage wired tracker with driver accessory support	Supply, positioning, Bluetooth and driver input
SG-TRK-113	Wide-voltage wired tracker with relay output	Supply, ignition input, relay and positioning
SG-TRK-114	Compact light-sensing wired tracker	Supply, GSM profile, removal sensing and size
SG-TRK-109	OBD-II tracking unit	Vehicle port, engine data, alerts and sleep current

KEY FEATURES

- Wide-voltage and OBD-II formats
- Ignition, relay and alert options
- Compact concealed installation

APPLICATIONS

- Passenger and light commercial vehicles
- Rental and finance fleets
- Fast-install tracking

Waterproof trailer and equipment trackers (IP67)

Sealed tracker platform for trailers, equipment and e-mobility. Interface and regional radio builds are separate selection fields under permanent SG codes.



IP67 waterproof tracker with moulded harness

EMEA / APAC radio build

Global radio build

North America radio build

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TRK-102	Waterproof tracker platform	Interface build, backup battery and regional radio profile
SG-TRK-124	Regional cellular build	Destination network and CAN / serial / digital-input option
SG-TRK-131	Global Cat.M build	Destination network and interface option
SG-TRK-132	North America Cat.M build	Carrier network and interface option

KEY FEATURES

- Sealed powered-asset platform
- CAN, serial or digital-input configurations
- Wide supply range for vehicle and equipment duty

APPLICATIONS

- Trailers and swap bodies
- Construction and hire equipment
- Electric and conventional vehicles

Long-standby battery tracker for unpowered assets

Self-contained AA-cell tracker for containers, trailers, generator sets and equipment with no external power. Service interval is sized from the actual reporting cadence and coverage condition.



Long-standby AA-cell asset tracker

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TRK-103	Long-standby battery asset tracker	Regional radio profile, reporting interval, mounting and battery service plan

KEY FEATURES
• No external power connection • GNSS with Wi-Fi-assisted indoor location • Outdoor mounting and deep-sleep operation

APPLICATIONS
• Containers and generator sets • Unpowered trailers • Long-term outdoor storage

Portable, magnetic and solar no-install trackers

Portable, magnetic and solar-assisted trackers for loads that cannot be wired. Select by mounting, internal battery, charging method and required sensing functions.

			
Magnetic portable tracker, multiple capacities	Concealed long-standby magnetic tracker	Sealed IP67 portable tracker, 10,000 mAh	Carry-with-load portable tracker

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TRK-117	Magnetic rechargeable tracker	Battery capacity, working mode and SOS / audio functions
SG-TRK-118	Concealed magnetic tracker	Battery pack, dormant current and tamper sensing
SG-TRK-119	Sealed portable tracker	Charging, enclosure, climate sensing and working modes
SG-TRK-120 / SG-TRK-121	Solar-assisted cargo trackers	Panel, battery, water / rollover sensing and mounting
SG-TRK-154	Charge-and-carry consignment tracker	Trip duration, charging and handover workflow

KEY FEATURES

- No vehicle wiring
- Magnetic, carry and solar formats
- Tamper, water and rollover functions by product

APPLICATIONS

- Open-deck and marine cargo
- Temporary consignment tracking
- Portable high-value assets

LoRaWAN and Bluetooth asset tags

LoRaWAN and Bluetooth tags for site, depot and yard assets. Select by radio, enclosure, positioning method, battery and gateway arrangement.

			
LoRaWAN tracking tag, flexible type	LoRaWAN tracking tag, rugged IP69K type	Compact LoRaWAN tag with on-board climate sensing	BLE-to-LoRaWAN hub node, solar assisted

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TRK-147 / SG-TRK-107	Rugged LoRaWAN tracking tags	Regional band, enclosure, status indication and battery
SG-TRK-104 / SG-TRK-105	LoRaWAN tags with positioning	GNSS / BLE / Wi-Fi location, battery and solar option
SG-TRK-108	Bluetooth asset tag	Phone-network dependency, battery and refresh interval
SG-NODE-102	BLE-to-LoRaWAN hub node	BLE collection range, solar power and LoRaWAN profile
SG-SBC-103	USB LoRaWAN adapter	Regional band, point-to-point mode and commissioning use

KEY FEATURES

- LoRaWAN and Bluetooth device groups
- Gateway or hub-node backhaul
- Rugged and compact tag formats

APPLICATIONS

- Depots and yards
- Returnable assets
- Tool and equipment tracking

Cold-chain temperature, humidity and condition loggers

Temperature, humidity, door, shock and CO2 devices for cold stores and in-transit cargo. Select by measured parameter, probe format, accuracy class, logger and radio.

			
IP68 waterproof temperature logger	Indoor climate node	CO2, climate and pressure node	Class A PT100 handheld with LCD readout

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-TMP-125 / SG-THS-135	Waterproof and wireless temperature / humidity loggers	Range, accuracy, local storage, enclosure and radio
SG-THS-116 / SG-THS-115	Climate nodes with built-in or external probe	Temperature / humidity range, probe and battery
SG-TMP-120 / SG-TMP-122	Food and resistance-temperature probe thermometers	Probe range, accuracy class, display and battery
SG-DOR-104 / SG-VIB-101	Door-state and shock condition nodes	Contact or accelerometer probe, climate channel and radio
SG-THS-112	Carbon-dioxide and climate node	Gas-sensing method, climate channels, display and cellular tier

KEY FEATURES

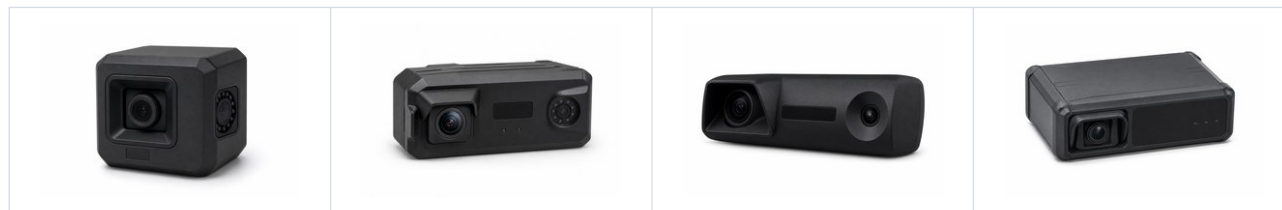
- Built-in and external-probe formats
- Temperature, humidity and condition channels
- Local logging and wireless transport by product

APPLICATIONS

- Cold stores and refrigerated vehicles
- Food and pharmaceutical handling
- Door and shock event monitoring

Fleet video and active-safety recorders

Fleet video terminals from dash cameras to multi-channel recorders. Select by channel count, resolution, active-safety function, local storage and vehicle interface.



IP67 dual-channel recorder with RS232 and I/O

Four-channel recorder with active-safety options

Active-safety recorder with dual-IP reporting

Four-channel fleet recorder

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-DVR-101 / SG-DVR-102	Dual-channel fleet recorders	Resolution, cellular live view, storage and supply
SG-DVR-103 / SG-DVR-104	Dual-channel active-safety recorders	ADAS / BSD function, display and storage
SG-DVR-105 / SG-DVR-106	Multi-channel fleet terminals	Channel count, ADAS / DMS / BSD, serial I/O and storage
SG-DVR-107 / SG-DVR-108	Three-channel and sealed dual-channel recorders	Cabin / rear view, active safety, vehicle I/O and transport
SG-DVR-109	Four-channel SD-card recorder	Camera resolution, alarms, storage and vehicle protocol

KEY FEATURES

- One- to four-channel product groups
- Active-safety options by recorder
- Cellular live view and local event storage

APPLICATIONS

- Driver safety and incident review
- Commercial fleet video
- Vehicle and equipment monitoring

Routers, gateways, serial terminals and antennas

Routers, gateways, serial terminals and antennas connect tracking devices and equipment to the customer's platform. Select by field interface, uplink, power and mounting.



Serial terminal with RS485 and GNSS positioning

Representative family visual; exact housing may vary by configuration.

MODEL SELECTION - use the SG code in your enquiry

SG code	Product group	Selection focus
SG-RTR-116	Industrial cellular router	Cellular profile, dual SIM, Ethernet, serial I/O and power
SG-GW-144	Indoor LoRaWAN gateway	Regional band, upstream transport and local network-server option
SG-GW-187 / SG-GW-188	Industrial edge gateways	Serial, CAN, I/O, power and Ethernet / Wi-Fi / cellular uplink
SG-DTU-103 / SG-DTU-111	Serial telemetry terminals	Serial bus, positioning or LoRaWAN bridge function
SG-ANT-108	Combination cellular and Wi-Fi antenna	Frequency range, connector set, cable and mounting

KEY FEATURES

- Router, LoRaWAN and edge-gateway layers
- Serial and CAN equipment integration
- External antenna option for metal-bodied assets

APPLICATIONS

- Depots and mobile sites
- Equipment and serial-device backhaul
- Tag and logger concentration

Protocols, radio bands and interfaces

Radio and interface choices are hardware selection fields. The quoted configuration states the regional radio profile, cellular tier and wired interface for the selected SG code.

Layer	Available groups	Selection input
Cellular	Regional cellular tiers by product	Country, carrier and coverage
LoRaWAN	Regional profiles and Class A / C by product	Country, network server and site plan
Bluetooth and Wi-Fi	Tag collection, setup and indoor-location functions	Range, gateway and phone-network dependency
Positioning	GPS / GLONASS or GPS / BDS by product	Open-sky view and required accuracy
Vehicle	CAN and common light / heavy vehicle protocols	Vehicle type and required data
Wired field	Serial interfaces, Modbus, accessory bus, digital / analogue I/O and CAN	Equipment interface and point count
Northbound	UDP/IP, TCP/IP, MQTT and video transport by product	Customer platform and security design

RADIO PROFILE

- State destination country and carrier
- Choose the cellular tier supported by the network
- Choose the LoRaWAN regional profile used by the site

POWER PLAN

- Use deep-sleep current for parked vehicles
- Use the real report interval for battery devices
- Include coverage retries and low-temperature operation

Matching hardware to the asset

Choose the product family from the asset's power source, installation method, reporting interval and data requirement before selecting the radio.

Asset situation	Recommended family	Selection priority
Powered vehicle with engine data	Vehicle-bus telematics	Bus protocol, I/O and driver functions
Powered vehicle with basic tracking	Compact wired or OBD-II tracker	Installation time, supply and immobilisation
Trailer or powered equipment	Sealed equipment tracker	Interface build, enclosure and radio profile
Container or equipment without power	Long-standby or solar tracker	Report interval, mounting and service plan
Returnable site asset	LoRaWAN or Bluetooth tag	Gateway coverage and enclosure
Temperature-controlled cargo	Cold-chain logger and condition node	Probe, accuracy, logging and radio
Driver safety and incident evidence	Fleet video recorder	Channels, safety functions, storage and uplink
Depot or mobile-site connectivity	Router, gateway or serial terminal	Field protocol, uplink and power

FLEET

- Vehicle and driver data
- Trailer and equipment tracking
- Active-safety video

UNPOWERED ASSETS

- Battery service interval
- Magnetic or solar mounting
- Coverage and store-and-forward

COLD CHAIN

- Probe and accuracy class
- Door and shock correlation
- Logger and radio path

From enquiry to supply

Start with the asset class, available power, installation method and destination network. The shortlist then uses permanent SG codes through quotation and repeat order.

SEQUENCE

- Requirements - asset, power, report interval and destination
- Selection - SG code, interface and radio profile
- Evaluation - customer platform and real-asset trial
- Supply - selected SG code and quoted configuration

DOCUMENT SET

- Payload or protocol information where applicable
- Configuration and mounting information
- Stable SG code for repeat ordering

SELECTION DISCIPLINE

- No supplier identity or factory model appears in the customer catalog
- Unresolved ratings and compliance claims are omitted
- Battery service interval is based on the real duty cycle

NOTE

SunGene Co., Ltd. | andy@sungeneiot.com | sungeneiot.com