

eTracker

True cloud-based sensor configuration, logging, reporting and data analysis all-in-one.







- Direct Internet compliant data stream using HTTP.
- Sensor measurements stored on easily-accessible SD card.
- Cloud logging: all sensor data is forwarded to the cloud for processing, logging, retrieval and resulting action.
- Optional sensor interface with ports: 4 analog, 4 pulse, SDI-12 (up to 62 SDI-12 sensors).
- Intelligent data management, data buffering, and network verification to ensure successful transmission of critical data.

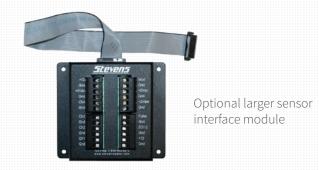
eTracker is the gateway between sensors and the cloud. Data communication and IT infrastructure are merged under one user interface experience. eTracker was designed from the ground up to embrace the current and future trends of cloud-based remote data acquisition and the "Internet of Things" (IoT) revolution. This paradigm shift centralizes all the historically isolated processes of remote configuration, programming, logging, and telemetry. Configuration, logging, data processing and analysis is now done in the cloud, eliminating time and cost in programming and maintaining expensive, complex data loggers and communication devices at each remote location.



Power connector Cellular antenna Power and cell activity LEDs

Unique Features

- **Link sensors to the cloud**: Sensor data is linked directly to the cloud-based Amazon service via the cellular network using HTTP.
- Unified data interface experience: Sensor configuration, data storage, custom algebraic equations, custom data formats and forwarding, control, analysis, alarm notifications (email, SMS), reporting and actions all done with one simple cloud-based user interface.
- **Easy configuration**: Configure with any device connected to the Internet via the cloud-based Stevens-Connect. No custom programming or scripts required.
- **Security**: Three user access levels for configuration, data management interface and visualization. Data is saved on SD card and in highly secure cloud data centers.
- Connection verification: eTracker verifies connection with cell network and server connection before data is sent. If no connection is available or if data reception is not confirmed, data is saved and sent the next scheduled transmission.
- True cloud data service experience: Your data is sent directly and securely to the Amazon cloud-based service. No back-end database hosting or web server controlled by Stevens in which data flow takes a detour to the cloud.
- **Data format flexibility**: Optionally forward data in various formats for third party software platforms.
- Power control: Power cycle commands automatically initiated with the Stevens' SOLO power management system.
- **Direct data access options**: Third-party programs can access data using REST API or HTTP post.



Turn Your Data into Useful Information with Stevens-Connect

Stevens-Connect provides web-based station management, data access and data processing.



Drag-and-Drop Customizable Dashboard

Configure what data to show and how with dashboard widgets. Place them where you want and stretch to resize. Choose high-visibility single data values, line graphs, bar charts, fuel-gauge style graphs, or 360° directional graphs, for any parameter.



Forward Data to 3rd-Party Software

and easily accessible reporting and analysis tool for visualizing your data. However, if you prefer to use other software, data can be automatically formatted and forwarded to an external destination.

Remotely Configure etracker

Configure all aspects of the station including logging and reporting intervals and all analog, pulse and SD-12 sensors. Make changes at any time, from any device.



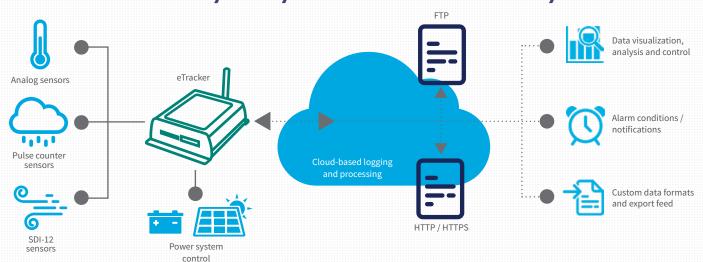
Custom Calculations and Data Transformations

Use the visual formula builder to create simple to complex math functions using any sensor data as variables. Create a "virtual sensor" from this data to create new graphs or serve as inputs to other calculations.



Simple stations.

Interact with your system and data from anywhere.



3 steps to set up your station in minutes.

1

Set up eTracker on Stevens-Connect*

*This step can be done anywhere, with any device.



Connect sensors

3

Connect power source

TECHNICAL SPECIFICATIONS

GENERAL

Data storage	Removable 2 GB SD memory card (FAT 32)
Logging interval	1 seconds to 12 hours (sensor dependent)
Reporting interval	2 minutes to 12 hours
Cellular antenna	External SMA
Cellular communications	80060-70A1 (Verizon CDMA) • CDMA band 800, 1900 MHz
	80060-70B1 (4G LTE) LTE bands 700 (B17), 850 (B5), 1700 (B4), 1900 (B2) MHz GSM Quad band 700, 850, 1700, 1900 MHz UMTS/HSPA+ band 850 (B5), 1900 (B2) MHz GSM GPRS EDGE bands 850, 1900 MHz

POWER

10 to 18 VDC (reverse polarity protection) Input voltage

SENSOR INPUT	
Analog input	Up to 4 analog channels, single-ended
	Input type: 2 wire, 0-2.5 V or 4-20 mA current loop (accessible DIP switch)
	Sensor power : 24 VDC switched (under firmware control)
	Analog to digital (0-2.5 VDC): 21-bit resolution
Pulse input	Up to 4 channels ¹
	Continuity or TTL: 0 V to 2.2 V - 5 V
	Maximum rate: 10 pulses per second
	Number of sensors: up to 62
SDI-12 input	Sensor power: 12 VDC switched, during
	measurement
ENVIRONMENTAL	

Operating temperature	-30°C to 60°C (-22°F to 140°F).
Storage temperature	-40°C to 85°C (SIM Card selection may limit this range for GSM version)
Lightning protection	AC transient voltage suppressor (TVS) on each sensor port input
DI IVOLGAL	

PHYSICAL

Dimensions	1 3/8" (3.5 cm) x 5 1/8" (13 cm) x 3 3/4" (9.7 cm)
Weight	10.78 oz (305.6 g)

PORTS	
Cellular antenna	SMA
Sensor module interface	30-pin connector

INCLUDED

Power cable with flying leads, dipole dual-band cellular antenna.

eTracker:

A cloud-based management experience

All configuration, data logging, data storage, custom algebraic equations, custom data formats and forwarding, control, analysis, alarm notifications, data visualization, and reporting is done in the cloud.

ORDERING INFORMATION

PART #	DESCRIPTION
80060-70B1	eTracker for 4G LTE
80060-70A1	eTracker for Verizon CDMA
80060-502	Mini sensor interface box
80060-505	Full sensor interface box
93777	Antenna, dual-band 900/1900 MHz, 5dB gain, Omni with N female
92824-002	Cable assembly, cell modem to bulkhead, N to SMA, 2 ft.
92845-010	LMR400, N-to-N, antenna cable length per 10 feet
93772	Antenna, 900 Mhz, 70 MHz BW, 11DB, Yagi with N female
93950-108	Antenna, 700-2500 MHz wideband, high gain, log periodic with N female

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¹ Sensor capacity is driven by the power model for your system. Sensor power consumption profile in combination with high transmission and logging intervals may require larger solar panels.