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.

**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
Stevens-Connect is an easy to use 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.

Cloud-based logging and processing
FTP
HTTP / HTTPS
Data visualization, analysis and control
Alarm conditions / notifications
Custom data formats and export feed

3 steps to set up your station in minutes.
1. Set up eTracker on Stevens-Connect*
2. Connect sensors
3. Connect power source

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data storage</td>
<td>Removable 2 GB SD memory card (FAT 32)</td>
</tr>
<tr>
<td>Logging interval</td>
<td>1 seconds to 12 hours (sensor dependent)</td>
</tr>
<tr>
<td>Reporting interval</td>
<td>2 minutes to 12 hours</td>
</tr>
<tr>
<td>Cellular antenna</td>
<td>External SMA</td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input voltage</td>
<td>10 to 18 VDC (reverse polarity protection)</td>
</tr>
</tbody>
</table>

### 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
- **Continuity or TTL**: 0 V to 2.2 V - 5 V
- **Maximum rate**: 10 pulses per second

#### SDI-12 input

- **Number of sensors**: up to 62
- **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

### PHYSICAL

<table>
<thead>
<tr>
<th>Feature</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>1 3/8&quot; (3.5 cm) x 5 1/8&quot; (13 cm) x 3 3/4&quot; (9.7 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>10.78 oz (305.6 g)</td>
</tr>
</tbody>
</table>

### PORTS

- **Cellular antenna**: SMA
- **Sensor module interface**: 30-pin connector

### INCLUDED

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

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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.