





ABOUT eGauge SYSTEMS

Founded in 2006, eGauge Systems LLC has been developing the most comprehensive and advanced multi-circuit energy meters in the market.

Our goal is to empower our customers with real time, high-accuracy data, enabling them to take actionable steps in their energy optimization journey, whether it is at home, or their business, all the way to large scale residential or industrial facilities. Our compact solution is designed to capture, log, and provide access to the energy data regardless if you are online or not, and it is purposely engineered to minimize the required space and investment so customers can focus on the actions to achieve their efficiency goals.

Today, eGauge Systems has a footprint in 114 countries, working with facility managers, BMS developers, manufacturing consultants, engineering companies, energy efficiency integrators, electrical distributors, and directly with institutions, businesses, and homeowners.



*Scan to learn
more about
eGauge Systems*

YOUR ENERGY DATA



The eGauge combines an energy meter, data logger, and a web server. This powerful combination lets you measure, store, and retrieve data directly from the device or from a remote location. Not only does it calculate power (V, A, VAR, kWh, etc), but also records data from optional sensors that assess flow rate, temperature, wind speed, and more.

You can view historical and live data for up to 30 years with the unit's convenient user interface (UI). The UI can be accessed on a local network or via the internet from a computer, tablet, or smartphone. Once connected, you have access to real-time values, long-term reports, an interactive graphical interface, and many other tools. The best part is that you pay nothing for the user interface or the data because you retrieve it directly from your own eGauge hardware, not a cloud or 3rd party host.

Most users will access data on an eGauge meter via the embedded user interface whether online or on a local area network. These interfaces are designed for ease of use and accessibility.

Advanced users have the option to read data from (or into) the eGauge meter taking full advantage of the data logging and web server capabilities.

eGauge meters feature a variety of communications options such as Modbus TCP/RTU, BACnet IP and MS/TP, XML and JSON API. These can be used to read data from third party devices into the meter or make data available for third party BMS or devices to read from the meter.

SUBMETERING APPLICATIONS

- › Facility Energy Management
- › Industrial Efficiency Management
- › Home Energy Management
- › Renewable Energy Performance
- › Multi-Tenant Utility Billing
- › Institutional Energy Efficiency Management
- › EV Charging Billing Services
- › Load Type Benchmarking (LEED/ASHRAE/IECC)



*Scan for more
information on our
data import and
export capabilities*

HOW IT WORKS

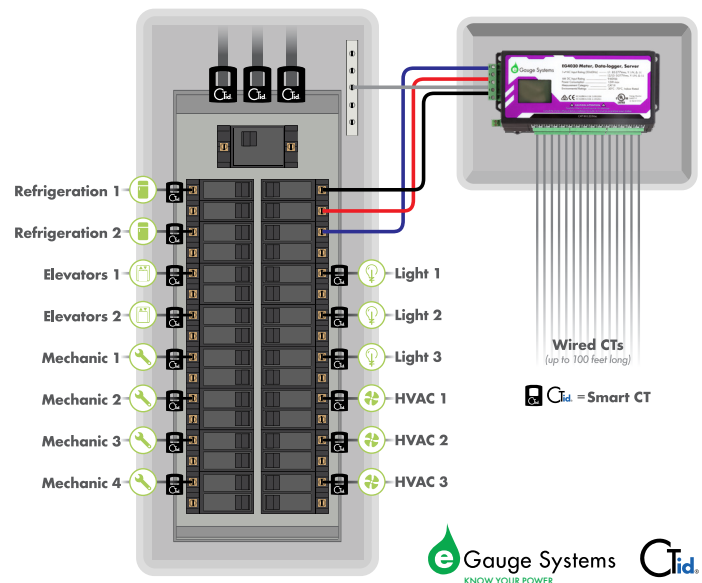
Up to 30 sensors, called current transformers (CTs), are placed on circuits in your breaker panel. These sensors measure the current flowing through the wires connected to each circuit breaker. The eGauge reads current transformers, calculates power, stores that data, and creates a user interface to display the information. The user interface is a webpage, so there's no additional software to install or download.

The eGauge Meter reads the sensor data thousands of times every second and logs that second-by-second data as the standard interval. See more details on page 8.

The CTid smart CTs are placed on every circuit you need to measure at the breaker panel level and wired into the meter. See more details on page 9.

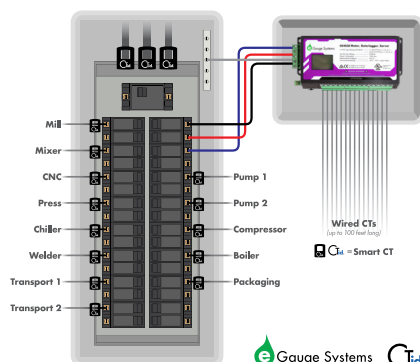
The embedded Web Server gives access to the data via the Ethernet Port.

Load Type Benchmarking (LEED/ASHRAE/IECC)

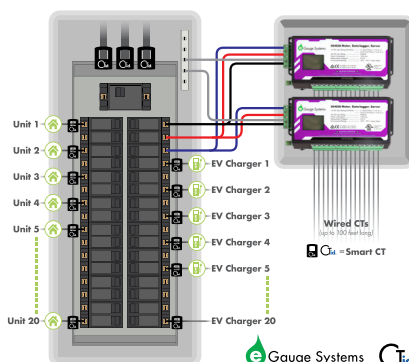


Scan to learn more
about installation
examples

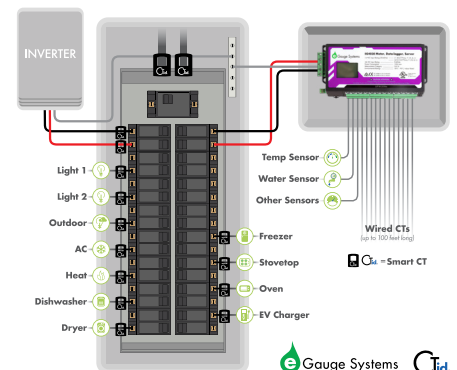
Industrial Sub-Metering



Revenue Grade Sub-Metering



Residential Sub-Metering



ADVANCED ENERGY MONITORING WITH PRECISION DATA AT NO ADDITIONAL COST

eGauge Systems empowers users across many sectors to take control of their energy efficiency and make data-driven decisions for energy and resource optimization.

COMMERCIAL AND INSTITUTIONAL:

- Provide load-type energy data for advanced benchmarking purposes.
- Manage energy loads by identifying peak demand periods and shifting non-essential operations to off-peak times.
- Provide high-accuracy energy consumption data for individual tenants, enabling fair and transparent billing based on each occupant's consumption.

RENEWABLE:

- Track energy imported from and exported to the grid, making it easier for owners to understand their net metering, credits and savings, and bankability.
- Optimize the investment by analyzing usage behaviors prior to the implementation of renewable energy or battery systems.
- Real-time visibility of renewable system performance, at any scale, and early issue detection of individual components (e.g. at array or inverter level - DC or AC).

RESIDENTIAL (SINGLE OR MULTI-FAMILY):

- Circuit level monitoring for energy efficiency optimization.
- Revenue grade (high accuracy) metering for multi-tenant billing applications.
- Embedded User Interface will provide remote access to real-time data via a web browser or mobile app.

INDUSTRIAL:

- Real-time monitoring of energy usage across various pieces of equipment, machinery, and processes to detect anomalies, and inefficiencies and minimize downtime.
- Log and access data from other devices (vibration, temperature, etc.) via additional analog and digital sensors and protocols, such as Pulse, 4-20 mA, 0-5 A, and Modbus.
- Send data via BACnet, Modbus, or API to industrial efficiency BAS/BMS platforms.

eGauge MULTI-CIRCUIT METERS



Model Number		EG4015	EG4030	EG4215	EG4230
Measurement	Applications	Residential/Commercial/Industrial			
	Sensor Ports	15	30	15	30
	AC Voltage	L1, L2, L3, N (≤ 277 Vrms L-N, ≤ 480 Vrms L-L)			
	DC Voltage	Input Power: 9 Vdc – 60 Vdc, Measurement: ± 60 Vdc			
	Data Logger	64 Data Points, Lifetime			
Data & Networking	Accuracy	ANSI C12.20 – 0.5% Compliant			
	Local Network and Internet accessible	Yes			
	LCD Screen	Yes			
	USB	2x USB 2.0 ports			
	Ethernet	Yes	Yes	Yes	Yes
	WiFi	No	No	Yes	Yes
	Cellular	Optional with external modem			
	Communication (in)	Modbus RTU*, Modbus TCP			
General	Communication (out)	Modbus RTU*, Modbus TCP, BACnet IP, BACnet MS/TP*, CSV, JSON, XML			
	Dimensions	17 cm x 8 cm x 4.6 cm (6.7 in x 3.15 in x 1.81 in)			
	Weight	261 g (0.57 lbs.)	278 g (0.61 lbs.)	293 g (0.64 lbs.)	309 g (0.68 lbs.)
	Country of Origin	United States of America			
	Safety and Regulatory	UL: IEC/UL 61010-1 Ed. 3.0, CE: IEC 61000-6-1 Ed. 3.0 B:2016 and IEC 61000-6-3 Ed. 2.1 B:2011			

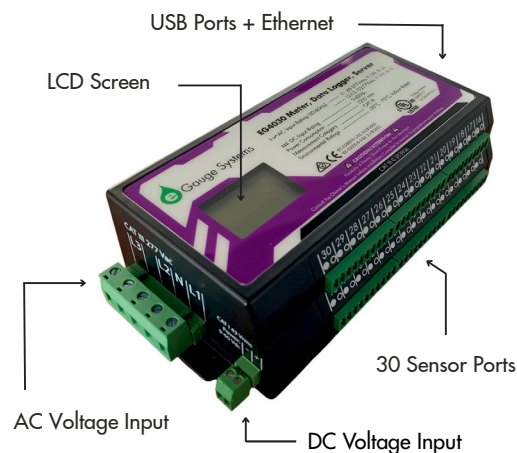
* Requires USB485 serial converter

The eGauge Meters represent the pinnacle of energy monitoring technology, integrating three functionalities into one sleek device: metering, data logging, and a web server. Tailored for high accuracy, it boasts 15 or 30 channels for multi-circuit energy monitoring applications.

All eGauge models are compatible with up to 277/480 VAC as standard, with optional voltage sensors available to extend monitoring capabilities up to 700 VAC.

eGauge Multi-Circuit Smart Meters are available in four models: the eGauge Core (EG4015) and eGauge Pro (EG4030) and their respective Wi-Fi enabled versions (EG4215 and EG4230). All have the same metering, data logging, and web server capabilities. Their only difference is the number of sensor ports, 15 on the Core and 30 on the Pro.

Meters are self powered using the AC or DC Voltage Line inputs and can be configured locally or remotely via ethernet, access point, wifi, or cellular network (with optional cellular kit).



The Wi-Fi version comes with a convenient access point functionality, allowing the configuration of the device wirelessly from a laptop, tablet, or mobile phone.



Scan for more
information on
eGauge meters

eGauge CURRENT SENSORS



	ECS36	ECS20	ECS09
Amperage Ratings	400 A, 600 A	100 A, 200 A, 300 A	50 A, 80 A
Window Size	36 mm (1.42 in.)	20 mm (0.79 in.)	9 mm (0.35 in.)
Accuracy	1 % (ECSxx-yyy) or 0.5% (ECSxx-yyy-R)		
Frequency	50 Hz or 60 Hz		
Wire Lead	2.4 m (8 ft.) black/white twisted wire, AWG18 (UL1015 600V)		
Over voltage Category	600 Vac, CAT IV		250 Vac, CAT III
Operating Temperature	-40 °C to 60 °C	-40 °C to 75 °C	
Conditions	Indoor use, Pollution Degree 2, Altitude up to 3000 m		
Output	333 mVrms at rated amperage		
Certifications	UL listed (UL2808, XOMA file #E515923), RoHS, CE pending		
	UL61010-1, CAN/CSA STD C22.2 NO. 61010-1		

Split Core High Accuracy CTs with CTid Technology

The eGauge ECS series CTs are split-core current transducers (CTs) with 36mm, 20mm, and 9mm openings. CTs are installed around current carrying conductors to measure amperage as part of a power metering solution. Thanks to the split-core design, they are easily retrofitted to existing power systems and do not require the metered conductors to be disconnected. A 333mV output means no shunting blocks are required. All ECS CTs are UL2808 certified. eGauge CTs use CTid technology for auto-detection and have an onboard LED which can be used to identify which CT is connected to a given sensor port. This is useful, for example if the CT leads cannot be traced.

Rogowski Coils (Flexible Rope CTs) with CTid Technology

The RCT-XXX-XXXX Rope CTs contain CTid for auto-detection and have an onboard LED that can be used to identify which CT is connected to a given sensor port, which can be useful if the CT leads cannot be traced from the meter to the conductors being monitored.



The CTid-enabled Ropes can measure a maximum of 6935 amps and is available in 106mm, 178mm, and 271mm window sizes.

	RCT106	RCT178	RCT271
Window Size	106 mm (4.17 in.)	178 mm (7.01 in.)	271 mm (10.67 in.)
Amperage Options	1385A or 2775 A	2775 A or 6935 A	6935 A
Frequency Range	50 Hz or 60 Hz		
Operating Temperature	-20 °C to 70 °C (-4 °F to 158 °F)		
Overvoltage Category	1000 Vac CAT III, 600 Vac CAT IV		
Positional Error	Better than 4%		
Linearity	Better than 1%		
Material	Orange thermoplastic rubber; flame retardant UL 94 V-0 rated		
Cable	1000 V UL style 20940; External diameter 5 mm; Wires 2x 26AWG		
Raw output	2 mV per 1000 A per Hz (2775 A) or 40 mV per 1000 A per Hz (6935 A)		



Scan for
more
information
on eGauge
sensors

eGauge CURRENT SENSORS

eGauge CTid Technology

CTid is a patented, cutting-edge technology developed by eGauge Systems to enhance the installation process and user experience of eGauge energy meters. It enables the meter to automatically detect and store key details about a connected current transformer (CT) or sensor, including its model, manufacturer, serial number, amperage rating, and more. This information is embedded in a chip within the CT or sensor and is exclusively compatible with eGauge Core (EG4xxx) and eGauge Pro models.

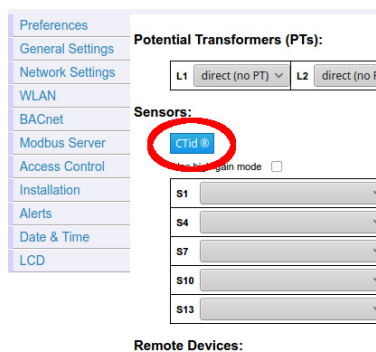
HOW DOES CTid WORK?

➤ Automated Sensor Recognition:

When a CTid-enabled sensor is connected, the eGauge meter automatically scans and configures the input, eliminating the need for manual selection through traditional drop-down menus. This streamlines the setup process, reducing errors and saving time.

➤ Locator LED Functionality:

Each CTid-enabled sensor features a built-in locator LED that can be activated via the eGauge configuration interface. This allows users to quickly identify which sensor is connected to which port, making it easier to troubleshoot connection issues, such as swapped or untraceable leads.



BENEFITS

- **Streamlined Installation** – Reduces setup time and minimizes errors, making it ideal for multi-circuit advanced energy monitoring applications.
- **Improved Accuracy** – Automated configuration ensures sensors are correctly identified, eliminating errors from manual selection.
- **Simplified Troubleshooting** – The locator LED allows technicians to quickly identify and troubleshoot issues, reducing downtime and maintenance costs.

Why Choose CTid Technology?

Installing a multi-circuit meter from other brands can be time-consuming and labor-intensive. The eGauge Systems CTid technology significantly reduces setup time and complexity by automating sensor recognition and configuration. This eliminates manual selection errors, ensures accurate readings, and simplifies troubleshooting with its built-in locator LED. Whether you're managing a commercial, industrial, or multi-residential setup, CTid enhances efficiency, minimizes installation costs, and streamlines ongoing troubleshooting—making it the smart choice for reliable advanced energy monitoring.

NEED TO LOG DATA FROM OTHER METERING DEVICES?

We've engineered a diverse range of sensors to capture data from various metering devices. Whether you need to monitor high voltage, DC current, pulse signals, 4-20mA, 0-2V, or temperature, we have a solution for you. Explore our full sensor lineup on page 11.

Back to Settings Scan Checked Sensors

<input type="checkbox"/>	Sensor	Model	Last Scanned	Blink LED
<input checked="" type="checkbox"/>	1	n/a		<input type="radio"/>
<input checked="" type="checkbox"/>	2	n/a		<input type="radio"/>
<input checked="" type="checkbox"/>	3	n/a		<input type="radio"/>
<input checked="" type="checkbox"/>	4	n/a		<input type="radio"/>
<input checked="" type="checkbox"/>	5	n/a		<input type="radio"/>
<input checked="" type="checkbox"/>	6	n/a		<input type="radio"/>
<input type="checkbox"/>	7	n/a		<input type="radio"/>

PRODUCT PORTFOLIO

Smart Multi-Circuit Meters						
Item Name	Description	Ethernet	WiFi	Cellular Data	Data Logger	Web Server (gateway)
EG4015	eGauge Core Energy Meter – 15 Sensor Ports	✓	Optional	Optional	✓	✓
EG4030	eGauge Pro Energy Meter – 30 Sensor Ports	✓	Optional	Optional	✓	✓
EG4215	eGauge Core Energy Meter w/Wifi – 15 Sensor Ports	✓	✓	Optional	✓	✓
EG4230	eGauge Pro Energy Meter w/Wifi – 30 Sensor Ports	✓	✓	Optional	✓	✓

CTid - Current Transformers (AC) - Standard Accuracy						
Item Name	Description	Window Size	Rating	System Accuracy	CTid Auto Config	LED
ECSXX 9mm 50A	Split-core CT with CTid 9mm 50A	9mm	50A	1%	✓	✓
ECSXX 9mm 80A	Split-core CT with CTid 9mm 80A	9mm	80A	1%	✓	✓
ECSXX 20mm 100A	Split-core CT with CTid 20mm 100A	20mm	100A	1%	✓	✓
ECSXX 20mm 200A	Split-core CT with CTid 20mm 200A	20mm	200A	1%	✓	✓
ECSXX 20mm 300A	Split-core CT with CTid 20mm 300A	20mm	300A	1%	✓	✓
ECSXX 36mm 400A	Split-core CT with CTid 36mm 400A	36mm	400A	1%	✓	✓
ECSXX 36mm 600A	Split-core CT with CTid 36mm 600A	36mm	600A	1%	✓	✓
ECSXX 90mm 1000A	Split-core CT with CTid 90mm 1000A	90mm	1000A	1%	✓	✓
ECSXX 90mm 1500A	Split-core CT with CTid 90mm 1500A	90mm	1500A	1%	✓	✓

CTid - Current Transformers (AC) - High Accuracy / Revenue Grade						
Item Name	Description	Window Size	Rating	System Accuracy	CTid Auto Config	LED
ECSXX-R 9mm 50A	High Accuracy CT with CTid – 9mm 50A	9mm	50A	0.5%	✓	✓
ECSXX-R 9mm 80A	High Accuracy CT with CTid – 9mm 80A	9mm	80A	0.5%	✓	✓
ECSXX-R 20mm 100A	High Accuracy CT with CTid – 20mm 100A	20mm	100A	0.5%	✓	✓
ECSXX-R 20mm 200A	High Accuracy CT with CTid – 20mm 200A	20mm	200A	0.5%	✓	✓
ECSXX-R 20mm 300A	High Accuracy CT with CTid – 20mm 300A	20mm	300A	0.5%	✓	✓
ECSXX-R 36mm 400A	High Accuracy CT with CTid – 36mm 400A	36mm	400A	0.5%	✓	✓
ECSXX-R 36mm 600A	High Accuracy CT with CTid – 36mm 600A	36mm	600A	0.5%	✓	✓
ECSXX-R 90mm 1000A	High Accuracy CT with CTid – 90mm 1000A	90mm	1000A	0.5%	✓	✓
ECSXX-R 90mm 1500A	High Accuracy CT with CTid – 90mm 1500A	90mm	1500A	0.5%	✓	✓

CTid - Rogowski Coils (Flexible Rope CTs)						
Item Name	Description	Internal Diameter	Rating	System Accuracy	CTid Auto Config	LED
RCT CTid:106mm 1385A	Rope CT – 106mm 1385A with CTid Technology	106mm	1385A	1%	✓	✓
RCT CTid:106mm 2775A	Rope CT – 106mm 2775A with CTid Technology	106mm	2775A	1%	✓	✓
RCT CTid:178mm 2775A	Rope CT – 178mm 2775A with CTid Technology	178mm	2775A	1%	✓	✓
RCT CTid:178mm 6935A	Rope CT – 178mm 6935A with CTid Technology	178mm	6935A	1%	✓	✓
RCT CTid:271mm 6935A	Rope CT – 271mm 6935A with CTid Technology	271mm	6935A	1%	✓	✓

CTid - Current Transformers (DC)						
Item Name	Description	Window Size	Rating	System Accuracy	CTid Auto Config	LED
16mm 50A DCT CTid	CTid enabled CT for DC applications – 16mm 50A	9mm	50A	1%	✓	✓
24mm 100A DCT CTid	CTid enabled CT for DC applications – 24mm 100A	24mm	100A	1%	✓	✓
36mm 300A DCT CTid	CTid enabled CT for DC applications – 36mm 300A	36mm	300A	1%	✓	✓

CTid - Input Sensors						
Item Name	Description	Key Specifications			CTid Auto Config	LED
EC420	eGauge 4-20mA Sensor w/CTid	4-20 mA current loop input			✓	✓
ELV2	eGauge Analog Input Sensor w/CTid	0-2 V Input - Signal pin: open 2 V; closed 0 V			✓	✓
EPS	eGauge Pulse Sensor w/CTid	Pulse Input @ 600 Hz max rate			✓	✓
ETLW	eGauge Ambient Temperature Sensor w/CTid	Temp Range -30 °C to 120 °C (-22 °F to 248 °F)			✓	✓
ETN100	eGauge Temp Probe Sensor w/CTid	Temp Range 0 °C to 100 °C (32 °F to 212 °F)			✓	✓
EV1000	eGauge High Voltage sensor w/CTid	Max 1000 Vdc or 707 Vac (0.5% accuracy)			✓	✓
ESH044	eGauge Sensor Hub w/CTid	For use w/Input Sensors, Up to 4 sensors per hub			✓	✓

Environmental Sensors - (Modbus)						
Item Name	Description	Key Specifications				
IRRUTE	Irradiance Sensor (Modbus RTU Standalone)	Irradiance: up to 1600 W/m ² , w/o panel temp compensation, 12 V Supply				
IRRPRO	Irradiance Sensor (Modbus RTU w/2 ports)	Irradiance: up to 1500 W/m ² , Solar cell (panel) temperature: -40 to 90°C, 12 V Supply				
WINSN	Wind Sensor (works w/IRRPRO)	Range: 0.9 to 40 m/s - Accuracy: 0.5 m/s or 5% of reading				
TEMAMB	Ambient Temperature Sensor (works w/IRRPRO)	Sensor element: -40 to +90°C, case: -40 to +80°C, 12V Supply				

Accessories						
Item Name	Description	Key Specifications				
PRM3	eGauge Power Relay Module 15A	Three 12-24 AWG relay contacts each rated for 240V/15A 50-60Hz (individual and synchronous control)				
PEK-120	Powered Enclosure Kit – 120 Vac version (12"x10"x6")	To be used when other equipment require additional power (ie: Cell Data Routers). INCLUDES: Polycarbonate Hinged Enclosure, Power Distribution Block, Wire Set, DIN-mount Receptacle and DIN Rails, eGauge Mounting Kit (Screws for DIN clip and eGauge, DIN Clip and L-Bracket)				
PEK-120-XL	Powered Enclosure Kit - 120 Vac version, (16"x14"x7")					
PEK-277	Powered Enclosure Kit - 277 Vac version (12"x10"x6")					
PEK-277-XL	Powered Enclosure Kit - 277 Vac version, (16"x14"x7")					

Communication						
Item Name	Description	Key Specifications				
USB485	eGauge USB to RS485 Converter	RS485 Data+, Data-, and Ground connections, Termination switch, TX and RX LEDs. Mini-USB powered				
CELROU	Compact industrial 4G LTE router	LTE CAT4 (LTE-FDD Band B2/B4/B5/B12/B13/B14/B66/B71), 2x LAN ports, Includes DIN rail clip				

KNOW YOUR POWER



At eGauge Systems, our aim is to enable our customers to reduce their energy usage and costs by providing highly accurate data and real-time visualization tools, which is great for both the environment and you.

Please get in contact with us and we will be happy to help you with your energy monitoring needs.

Thank you for being a valuable part of eGauge Systems.

Phone: **1.720.545.9767** | WhatsApp: **1.720.279.1173**

www.eGauge.net | **sales@eGauge.net**

4805 Sterling Drive, Boulder, CO 80301