

# High Accuracy, High Precision Current and Voltage Sensors

Leading the Industry in Power Quality, Monitoring, Protection, and Measurement



# Highly Precise and Accurate Current and Voltage Sensors for Better Grid Control

The grid and power industry is rapidly evolving with initiatives like distributed energy resources (DERs), microgrids, optimizing energy efficiency and resiliency, and more. G&W Electric's patented current and voltage sensor technologies lead the industry in customizable, high precision, high accuracy sensors to manage the grid of today and tomorrow.

G&W Electric's patented sensor technology helps customers control power quality, monitoring, protection and measurement with accurate, real-time current and voltage intelligence for optimizing grid power delivery and reliability.

Our sensing technology utilizes Rogowski coils and capacitive dividers that can measure a wide range of current and voltage analytics with high precision, from dynamic system loads to fault currents.



#### **Features and Benefits:**

- Voltage sensing up to 38 kV
- Versatility with one sensor for metering and protection applications
- High accuracy up to 0.5 class over a wide temperature range
- High frequency measurement bandwidth
- Safety with low energy outputs and galvanic isolation from primary
- Lightweight, compact size for easy installation and retrofits
- Reliability with no ferroresonance

#### **APPLICATIONS**

### Power Quality and Monitoring

#### **Precision Power Quality and Monitoring Is More Important Than Ever**

G&W Electric's high accuracy, high precision current and voltage sensors assess various electrical parameters to ensure power supplied meets today's stringent standards for reliability and efficiency.

#### Features and Benefits:

- Real-time data measurement and rapid detection of power quality issues
- Advanced data analysis techniques to identify trends
- Remote monitoring capabilities for enhanced efficiency

#### **Sensors for Recloser Platforms**

Our high accuracy, high precision current and voltage sensors are designed as a lightweight addition to our Viper®-ST distribution recloser platforms and immediately deliver superior data, monitoring, and power quality

#### Sensors for Indoor/Underground Platforms

Whether your distribution switchgear is designed for indoor or underground use, our high-precision sensors make fault measurement and protection both simple

and cost effective when installed on indoor or underground platforms. They are designed to work with:

- Switchgear using SF6 and alternative insulation gases
- Trident® solid dielectric switchgear

Underground platform with product installed (VS-27-UG)

#### **Sensors for Third-Party Platforms**

Even if you don't use G&W Electric equipment, our current and voltage sensors can still measure power quality with exceptional accuracy and precision across a wide range of systems.

- Power transformers
- Switchgear
- Original Equipment Manufacturer (OEM) applications

#### **Power Quality Packages**

G&W Electric provides a diverse range of power quality packages, including standalone current and voltage sensor solutions for new distribution systems and upgrade kits for capacitor banks.



Stand alone Accusense® Voltage Metering System

# **Sensor Applications Chart**

Explore all our innovative sensors to discover how G&W Electric can help you achieve better grid control and reliability. Contact us to see which sensor is right for your situation.

		Power Quality and Monitoring						
		Recloser	Indoor/ Underground	Power Quality Package	Third-Party Platforms			
VS-27-0		X		X				
VS-38-0		X		X				
CVS-27-0		X		X				
CVS-24-I			Х	Х	Х			
CVS-P-24-0	-	X		X				
CVS-P-24-SB01			X	X	Х			
VS-24-I			Х	Х	Х			
VS-P-24-BP-C			X	Х	Х			

#### **APPLICATIONS**

### Protection and Measurement

#### **Proactive Grid Management Begins with Protection and Measurement Sensors**

Voltage and power factor values can fluctuate much more frequently as the distribution grid integrates more distributed energy resources (DERs). G&W Electric's accurate and precise sensors enable crucial continuous measurement of local voltage levels and phase angles to help detect potential grid instabilities or disturbances. Our advanced sensor technology, using Rogowski coils and capacitive dividers, offers:

- · Early warning systems
- Compliance monitoring
- Volt-VAR optimization
- Fault detection and fault location
- Overall grid and relay protection
- Monitoring and control

#### **Sensors for Recloser Platforms**

G&W Electric's sensors are engineered as a lightweight enhancement to our Viper®-ST distribution recloser platforms, which automatically interrupt and then restore power after temporary faults. Together they provide exceptional current and voltage monitoring, measurement, and protection against faults and instabilities.

#### Sensors for Indoor/Underground Platforms

Whether your distribution switchgear is designed for indoor or underground use, our high-precision sensors make fault measurement and protection both simple and cost effective when installed on indoor or underground platforms. They are designed to work with:

- Switchgear with SF6 and alternative insulation gases
- Trident® solid dielectric switchgear



Protection and Metering: Overhead platforms install on G&W Electric Viper®-ST Recloser (VS-27-0)



24kV Voltage Sensor installed in switchgear application



Voltage Sensor (VS-24-I – top) & Current Voltage Sensor (CVS-24-I – bottom) installed in switchgear application

## **Sensor Applications Chart**

Explore all our innovative sensors to discover how G&W Electric can help you achieve better grid control and reliability. Contact us to see which sensor is right for your situation.

		Protection and Measurement									
		Recloser	Indoor/ Underground	Indoor	Outdoor	IEEE	IEC	Active	Passive		
VS-27-0		X			Χ	Χ		X			
VS-38-0		X			X	X		X			
CVS-27-0		Х			X	X		Х			
CVS-24-I			X	Х			Х	Х			
CVS-P-24-0	400	X			X		X		X		
CVS-P-24-SB01			X	X			X		X		
VS-24-I			X	X			X	X			
VS-P-24-BP-C			X	X			X		X		

### Contact us today

+1.708.388.5010 or info@gwelectric.com



Engineered to order. Built to last.®

Since 1905, G&W Electric has been a leading provider of innovative power grid solutions including the latest in load and fault interrupting switches; reclosers; sensors; system protection equipment; power grid automation; transmission and distribution cable terminations; and joints and other cable accessories. G&W Electric is headquartered in Bolingbrook, Illinois, U.S.A., with manufacturing facilities and sales support in more than 100 countries, including Canada, Italy, China, Mexico, Brazil, India, and Singapore. We help our customers meet their challenges and gain a competitive edge through a suite of advanced products and technical services.