VENUS

OUR VOLTAGE SENSOR INNOVATION

POWER, PROTECTION, PERFORMANCE



NEW TECHNOLOGY

Incorporates the latest advances in power electronics and insulation, ensuring safety, reliability, and performance.

COMPACT SIZE FOR 2000V

Compact design from 50V to 2000V, making it easy to integrate into space constrained environments like inverters or embedded systems.



MAFELEC TEAM CREATING **TOGETHER** SMART AND SUSTAINABLE INTERFACES



ACCURACY

markets.

ALL MARKETS

COMPATIBILITY

Precision less than 0.5% adapted for harsh environment suitable to every markets.

Compliant with international

standards making the sensor

suitable for railway, industrial,

medical, and renewable energy

MODULAR PLATFORM

Secondary connectics interface easy customized with different possibilities (Souriau, UNC, Faston, Insert) and types (current or voltage outputs).



With 0.5% linearity drift, VenuS ensures reliable measurements across the full voltage range, with no signal distortion.

SUSTAINABLE

Smart design thinking and less potting in production.

MAFELEC

MAFELEC 471, Route de la Cuisinière | 38490 Chimilin | France T +33 4 763 207 33 | contact@mafelec.com www.mafelec.com

MEMBERS OF THE MAFELEC TEAM





FULL ELECTRONIC

www.stopcircuit.fr





PETERCEM SENSORS 11 bis; Avenue Gaspard Monge | 69720 Saint-Bonnet-de-Mûre | France www.petercem-sensors.com sales-sensors@petercem.fr

MAFELEC TEAM www.comtronic-schoenau.de

MAFELEC TEAM







POWER ELECTRONICS

CURRENT SENSORS, VOLTAGE SENSORS & VOLTAGE DETECTORS

.

HRS **OUR CURRENT SENSOR REFERENCE**

ACCURACY, RELIABILITY, FLEXIBILITY

IMPROVED TECHNOLOGY

Building upon 30 years of expertise and continuous feedback, the HRS series represent the evolution from our CS and ES models.

Featuring a linearity deviation of no more than 0.1%, HRS sensors ensure consistent and reliable measurements across the entire current range.

- SMALL SIZE SOLUTION

Engineered to handle currents up to 4.000A within a 2.000A-rated casing, the HRS sensors maintain a compact form factor.

CONTINUOUS IMPROVEMENT

Designed with eco-friendly materials to support environmental sustainability goals.



ALL APPLICATIONS

Designed in compliance with international standards, the HRS sensors are versatile solutions suitable for railway, industrial, medical and renewable energy markets.

ACCURACY

With a maximum error of only 0.25%, the HRS series delivers precise current measurements essential for critical applications.

EASY INSTALLATION

The HRS series feature a modular design that supports 360° installation, facilitating seamless integration into various electronic systems.

RAILWAY PRODUCTS

O CURRENT SENSORS



Closed loop CS series

300 A TO 2000 A ACCURACY 0.5%



Fully electronic NCS-T series

4000 A TO 20000 A ACCURACY 1%

O VOLTAGE SENSORS Electronic technology



VS series

50 V TO 1500 V SIZE 0



2000 V TO 4200 V SIZE 1

Closed loop

HRS-T series

1000 A TO 2500 A









VD 1500-48

1500 VDC SIZE 0



VD 3000-25

3000 VDC *SIZE 1*

RAILWAY



RAILWAY

ROLLING STOCK

Trams, metros, regional and long distance trains use auxiliary converters and electric traction systems requesting a high reliability. **PETERCEM SENSORS** measures current and voltage to ensure safe and reliable operations for railway systems.

SUBSTATIONS

Substations provide energy and will also store it in the future. Feeding the grid precisely is only possible with reliable measurements.







DRIVES

Electric drives are widely used in everyday life. Precise motion control and energy efficiency are crucial, current sensors play a role in achieving these goals.

UPS

UPS systems need to monitor charging, discharging, and output currents, which requires monitoring with current and voltage sensors.

WELDING

The quality of industrial welding relies heavily on the supply current. Sensors measure and ensure high reliability in industrial processes.

ENERGY

ENERGY STORAGE SYSTEM

Storing energy will be an important part of future power grids. PETERCEM SENSORS precise current and voltage measurements help monitoring the system.

WIND TURBINES

On and offshore wind turbines generate high power. To feed grids precisely, our sensors measure currents and voltages from wind turbines up to 15 MW.

SOLAR

PETERCEM SENSORS measures DC currents from solar farms with high precision and provide reliable monitoring.

INDUSTRIAL VEHICLES

Trend such as Mobility, Autonomous driving, Digitalization and Electrification (MADE) are causing fundamental shifts in both technology and business models for leading company in the industrial vehicle sector.

For electrification vehicles or infrastrucsture makers, our customers can build effective systems, based on PETERCEM SENSORS platform.

INDUSTRY PRODUCTS

CURRENT SENSORS





HRS-I series

1000 A TO 2500 A ACCURACY 0.25%

Open loop

RFCS series

1000 A TO 1500 A ACCURACY 1%



Closed loop

ES series

100 A TO 2000 A ACCURACY 0.5%

Fully electronic

NCS-I series

4000 A TO 40000 A ACCURACY 1%



VS series

2000 V TO 4200 V



50 V TO 1500 V



VenuS series

50 V TO 2000 V SIZE





Personal warning from dangerous voltage. Very good visibility thanks to red colored LEDs.





VD 1500-48

1500 VDC *SIZE 0*