

## FS223 Generator Shaft Voltage and Current Monitoring Module

- Wind turbine generators face risks such as high-frequency common-mode voltage interference and grounding carbon brush wear, which potentially cause failures compromising mechanical structural stability of the generator.
- FS223 shaft voltage and current module, providing real-time monitoring and acquisition of the generator's shaft voltage and current. Module will output a hardware alarm signal and simultaneously records data during the abnormal state, facilitating fault analysis and localization.



### ✧ Key Features

- ▶ Utilizes a 16-bit high-precision ADC acquisition chip for synchronous voltage and current sampling.
- ▶ Equipped with both hardware and software watchdogs to provide dual protection for the normal operation of modules.
- ▶ Features two-channel hardware interfaces, with an internal relay that can output hardware alarm signals.
- ▶ Includes data storage functionality for peak-to-peak values and RMS values.
- ▶ A customized host computer allows for flexible setting of alarm thresholds, data storage duration, and other parameters.
- ▶ Provides a  $\pm 12V$  power output interface to supply power to the current sensor.
- ▶ Equipped with reverse polarity protection, enhanced EMC designs for improving ability of anti-interference.

### ✧ Technical Data

Specifications	Parameters	Specifications	Parameters
Operating Power Supply	24V $\pm$ 20% DC	Voltage Alarm Threshold	$\pm 0.5V$
Module Power Consumption	4.5W Max	Current Alarm Threshold	$\pm 0.5A$
Voltage Measurement Range	$\pm 50V$	Communication Mode	RS485 (19200bps, 1, 8, N)
Current Measurement Range	$\pm 50A$	Protection Level	IP20
Measurement Error	$\leq 1\%FS$	Operating Temperature	-40°C to +70°C
Sampling Frequency	$\geq 20kHz$	Module Size	125mm $\times$ 122mm $\times$ 51mm
Relay Normal Level	$\geq 18Vdc$	Module Weight	0.7Kg
Relay Alarm Level	$\leq 3Vdc$		