



## Sense Gate

### Industrial IoT Gateway

#### FLEXIBILITY IN CONNECTIVITY



**The Sense Gate is an LTE/4G-based industrial gateway for the Internet of Things (IoT).**

For transformer monitoring and especially cloud-based applications that require complete wireless and Ethernet communication solutions, the Sense Gate industrial communication gateway is the ideal solution.

The gateway receives data from sensors through Modbus-RTU/TCP protocols to be sent to the cloud using the MQTT protocol. Communication is carried out remotely via a cellular module (3G/4G). It also features local Ethernet and RS485 communication interfaces, in addition to digital inputs.

The Sense Gate is part of the transformer monitoring package. HV Assets offers flexible solutions, enabling the monitoring of virtually your entire fleet of transformers.

## Application

The Sense Gate is used in conjunction with sensors and the HV Assets Care asset management platform, enabling IoT connectivity in a substation environment.

Suitable for a wide temperature range, the gateway is installed directly in the transformer's control box and can withstand the most severe industrial applications.

## Key Features

- Dual-Core Xtensa LX6, 240MHz with 4MB RAM
- Support for web service for remote online monitoring
- Firmware update via online update
- 16MB data storage
- LTE CAT-M1/NB-IoT/4G modem
- MQTT client support for cloud communication
- Wide operating temperature range: 0 ~ 70°C

Within the broad field of Industrial IoT, factories are seeking solutions that can help them utilize powerful data analytics to increase service levels and reduce operational costs. This means that the demand for an easy and reliable way to extract data from field applications is increasing. The Sense Gate improves service quality by facilitating infrastructure connectivity and equipment monitoring. This allows manufacturers to gain insights into asset usage behaviors and intelligence through big data analysis.

## Specifications

Environment	
Operating Temperature	0° C to +70° C
Storage Temperature	-40° C to +85° C
Umidade	10 to 9% RH
System	
CPU	Dual-Core Xtensa LX6, 240MHz
Memory	4MB
Storage	16MB
Communication	
Serial Port	2 x RS232/RS485
Ethernet Port	1 x 10/100 Base-T RJ-45 ports
Cellular	LTE CAT-M1/NB-IoT/4G modem
Wi-fi	Wi-Fi 802.11 b/g/n interface
Communication Protocols	Modbus TCP/RTU and MQTT
Digital Input	
Quantity	2 DI
Voltage	24 VCC
Isolation	2,000 VCC
General	
Power Supply	9-30 VCC
Installation	DIN-Rail
Certifications	Anatel

Dimensions (mm)	
A	212
B	22
C	110
D	115

