

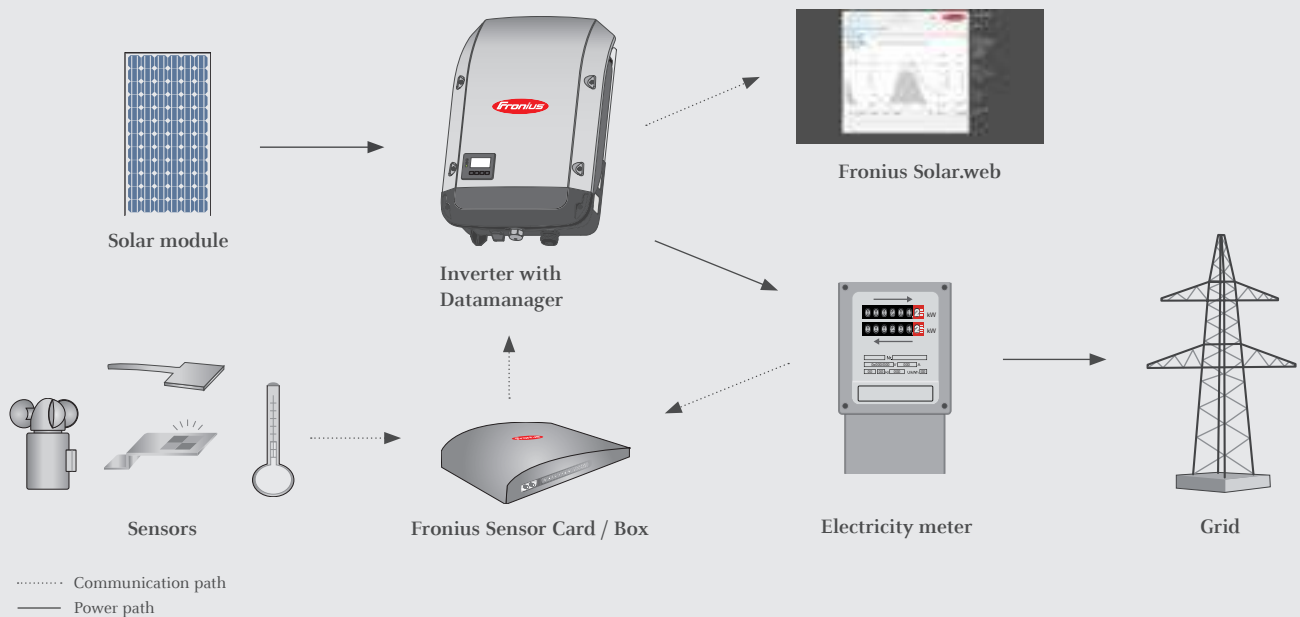
# FRONIUS SENSOR CARD / BOX

/ Measuring additional values



/ With the Fronius Sensor Card / Box, up to six sensors for measuring insolation, ambient temperature, module temperature, wind speed, etc. can be integrated into the Fronius DATCOM system. Using the insolation and module temperature data, you are able to check your PV system and quickly identify anomalies in the system output to keep performance at a consistently high level. You can choose between a box and a card.

## OVERVIEW OF THE MEASURING SIGNAL INPUTS



The Fronius Sensor Card / Box offers inputs for up to six measuring signals.

- / Two analogue inputs for two temperature sensors
- / One analogue input for evaluating a voltage signal (e.g. an insolation sensor)
- / Two digital inputs, e.g. for an energy meter and a wind speed sensor
- / One analogue input for evaluating a current signal (0 to 20 mA, 4 to 20 mA)

In addition to the Fronius Sensor Card / Box, a Fronius Datamanager is required for evaluating the data. This is either fitted as standard in the inverter or can be easily retrofitted.

## FRONIUS SENSOR CARD / BOX TECHNICAL DATA

| TECHNICAL DATA  |  |  |   |                               |
|---|--|--|---|-------------------------------|
| Supply voltage  | 12 V DC  | Degree of protection (Box)   | IP 20   |                               |
| Energy consumption<br>– Fronius Sensor Card<br>– Fronius Sensor Box             | 1.1 W<br>1.3 W   | Interfaces (Fronius Sensor Box only)<br>– RS422 (Fronius Solar Net)<br>– RS422 (Fronius Solar Net)   | Socket:<br>RJ45<br>RJ45                               | Designation:<br>»IN«<br>»OUT« |
| T1, T2 channels<br>– Sensors<br>– Measuring range<br>– Accuracy<br>– Resolution | PT1000<br>–25 – +75°C<br>0.5°C<br>1°C                        | D1, D2 channels<br>– Max. voltage level<br>– Max. frequency<br>– Min. pulse duration<br>– Operating point »OFF« (»LOW«)<br>– Operating point »ON« (»HIGH«) | 5.5 V<br>2,500 Hz<br>250 µs<br>0 - 0.5 V<br>3 - 5.5 V |                               |
| Insolation channel<br>– Measuring ranges<br>– Accuracy                          | 0 - 100 mV<br>0 - 200 mV<br>0 - 1 V<br>3% from meter reading | Current input channel<br>– Measuring ranges<br>– Accuracy  | 0 - 20 mA<br>4 - 20 mA<br>5% from meter reading       |                               |
| Dimensions (length x width x height)<br>– Fronius Sensor Card                   | 140 x 100 x 26 mm  | Dimensions (length x width x height)<br>– Fronius Sensor Box   | 197 x 110 x 57 mm                                     |                               |

## FRONIUS SENSORS

Fronius provides ready-made sensors for measuring insolation, ambient temperature, module temperature and wind speed. These, combined with the Fronius Sensor Card / Box and Fronius Solar.web, allow for a target/actual comparison of the system output. Up to six sensors can be connected to each Fronius Sensor Card / Box and integrated into the Fronius DATCOM system.



### FRONIUS INSOLATION SENSOR

/ For measuring the radiated energy.



### FRONIUS MODULE TEMPERATURE SENSOR

/ For measuring the module temperature.



### FRONIUS AMBIENT TEMPERATURE SENSOR

/ For measuring the ambient temperature.



### FRONIUS WIND SPEED SENSOR

/ For measuring the wind speed.

/ Perfect Welding / Solar Energy / Perfect Charging

## WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,000 employees worldwide, we shift the limits of what's possible - our record of over 1,000 granted patents is testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)

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