Fronius

SHIFTING THE LIMITS

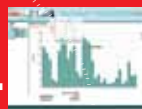# FRONIUS DATCOM

/ Configuration guide

## SYSTEM MONITORING:
## A CONSTANT EYE ON FUNCTION AND YIELD.

/ The Fronius DATCOM is the solution for recording, processing and storing system data. It is very user-friendly: hardware components can be installed quickly and easily and the software is intuitive in operation. Modular design means that the Fronius DATCOM can be upgraded at any time – for monitoring solutions for basic equipment right through to total remote system control. Only complete system monitoring can guarantee problem-free function of any PV system.

### ADDITIONAL COMPONENTS

/ PV system basics and add-ons.

### VISUALI-SATION

/ Hardware and software for the acquisition, analysis and visualisation of system data.

### DATA LOGGING

/ Function and yield controls: recording and storing of a PV system

### FRONIUS DATCOM

/ The complete solution for data: recording, processing, storing, displaying and analysing.

### OPEN INTERFACES

/ Process data easily: integrate third-party components without any problems.

### SENSORS

/ Reliable measurement of additional values: irradiation, ambient temperature, wind speed, and much more.
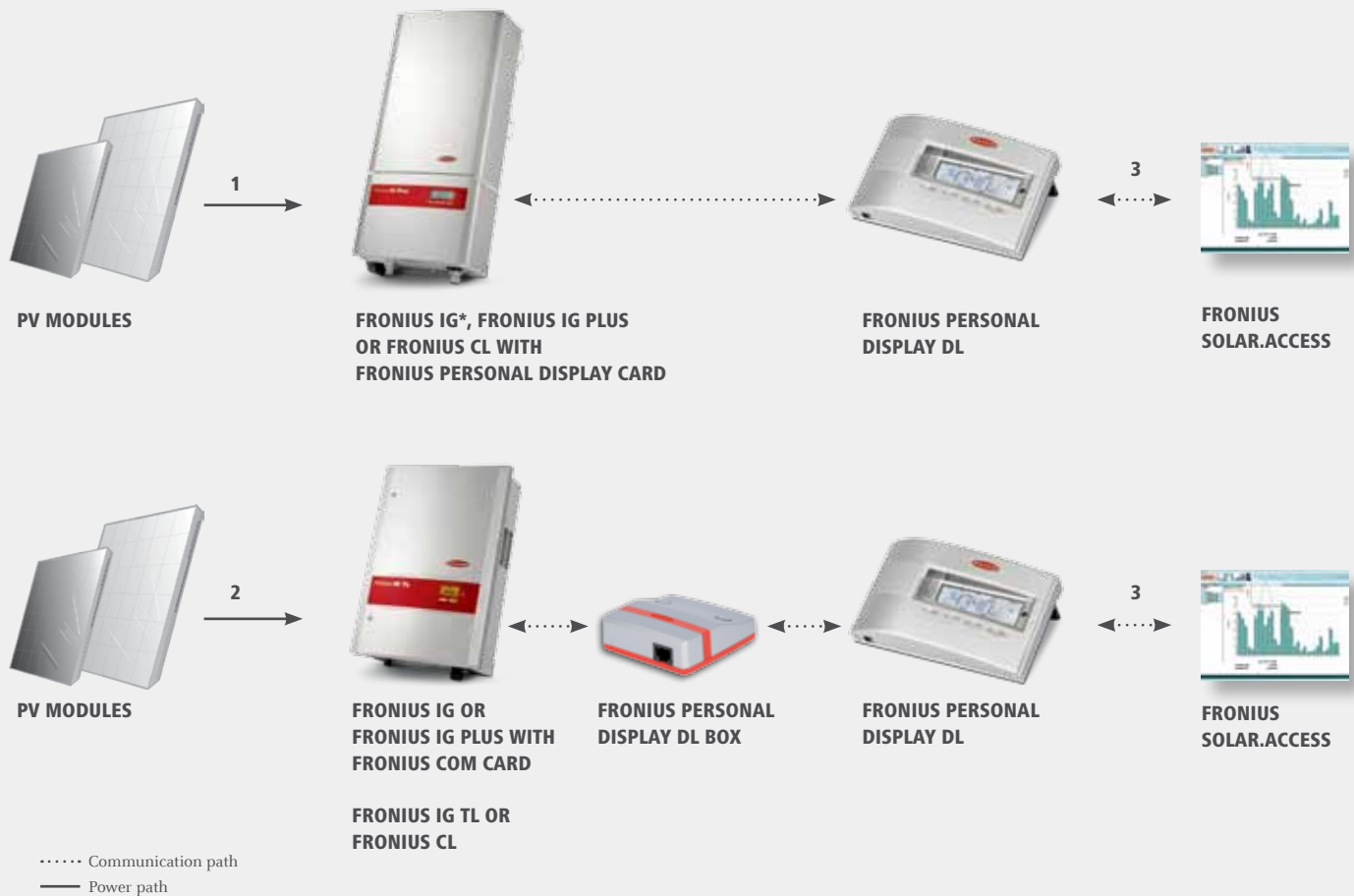
# FRONIUS TL WITH USB SYSTEM MONITORING

**PV MODULES**

**FRONIUS
SOLAR.ACCESS**

**FRONIUS IG TL WITH
USB DATA TRANSFER**

**1. VISUALISE THE PERFORMANCE OF YOUR PV SYSTEM
WITH PC DATA TRANSFER VIA USB; A STANDARD
FEATURE OF THE FRONIUS IG TL SERIES.**

/ A commercially-available USB stick that can be inserted
into the inverter collects data during operation. System
information can then be moved to a PC at any time and
then analysed and archived using Fronius Solar.access
software. Time-consuming cabling is no longer required.
Simply pull out the DATCOM slot, remove the USB stick
and load the data onto your PC.

# WIRELESS SYSTEM MONITORING
# VIA FRONIUS PERSONAL DISPLAY DL

**1** →

**PV MODULES**

**FRONIUS IG\*, FRONIUS IG PLUS OR FRONIUS CL WITH FRONIUS PERSONAL DISPLAY CARD**

**FRONIUS PERSONAL DISPLAY DL**

**3**

**FRONIUS SOLAR.ACCESS**

**2** →

**PV MODULES**

**FRONIUS IG OR FRONIUS IG PLUS WITH FRONIUS COM CARD**

**FRONIUS IG TL OR FRONIUS CL**

**FRONIUS PERSONAL DISPLAY DL BOX**

**FRONIUS PERSONAL DISPLAY DL**

**3**

**FRONIUS SOLAR.ACCESS**

······ Communication path
—— Power path

**1. USING THE FRONIUS PERSONAL DISPLAY DL WITH THE FRONIUS PERSONAL DISPLAY CARD**
/ The Fronius Personal Display Card must be fitted in the inverter in order to use the Fronius Personal Display DL. The PV system data is transferred to the display via a wireless connection. This variant can be used with the Fronius IG\*, Fronius IG Plus and Fronius CL series.

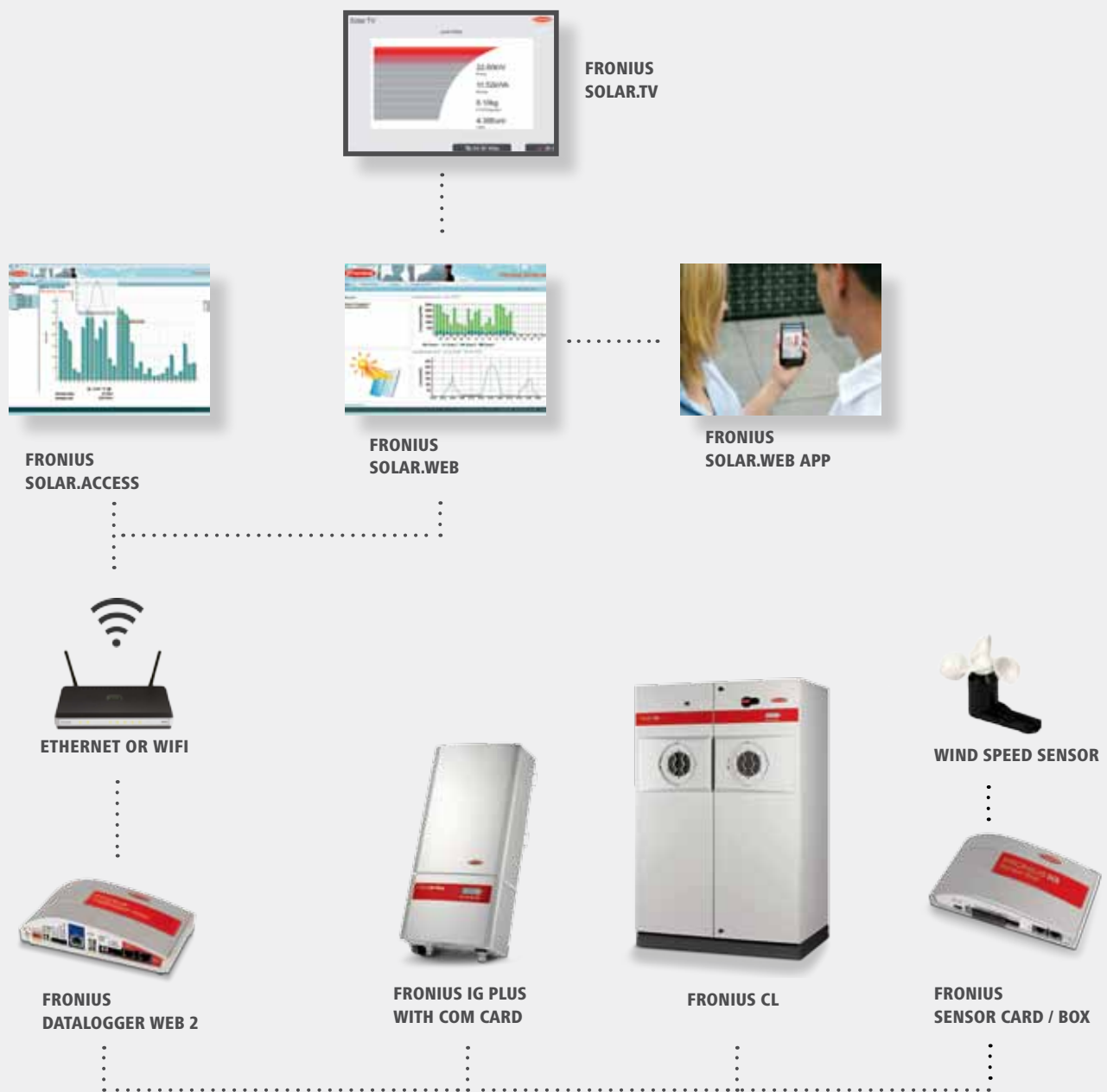**2. USING THE FRONIUS PERSONAL DISPLAY DL WITH THE FRONIUS PERSONAL DISPLAY DL BOX**
/ The Fronius Personal Display DL Box can be used as an alternative to the Fronius Personal Display Card. The box is connected to the inverter and transfers the data to the display via a wireless interface. In addition, the Fronius Personal Display DL Box has a cache memory, where data is stored even if the connection fails. The box is compatible with Fronius IG, Fronius IG Plus, Fronius IG TL and Fronius CL inverters.

**3. USING FRONIUS SOLAR.ACCESS**
/ The Fronius Personal Display DL connects to the Fronius Solar.access software via a USB interface. Simply connect the display to the PC and the logged data will be archived, analysed and shown on the screen. Fronius Solar.access supports the visualisation of PV system data from Fronius IG\*, Fronius IG Plus, Fronius IG TL and Fronius CL inverters.

\* If the Fronius Personal Display Card is fitted in a Fronius IG inverter, no datalogging function is possible via the Fronius Personal Display DL.

# COMPREHENSIVE REMOTE MONITORING SOLUTIONS

**FRONIUS SOLAR.TV**

**FRONIUS SOLAR.ACCESS**

**FRONIUS SOLAR.WEB**

**FRONIUS SOLAR.WEB APP**

**ETHERNET OR WIFI**

**WIND SPEED SENSOR**

**FRONIUS DATALOGGER WEB 2**

**FRONIUS IG PLUS WITH COM CARD**

**FRONIUS CL**

**FRONIUS SENSOR CARD / BOX**

**1. REMOTELY MONITOR YOUR SYSTEM FROM SMARTPHONE AND PC VIA THE DATALOGGER WEB AND ASSOCIATED DATCOM COMPONENTS.**
/ Fronius DATCOM is a user-friendly data communications system for individual PV system monitoring.

**2. FRONIUS DATALOGGER WEB**
Fronius Datalogger Web, which is based on Ethernet technology, offers completely new options for PV system analysis and monitoring. It functions like your own small web server that automatically converts system data into a website. The Fronius Datalogger website can be accessed by several users simultaneously via any common browser independent of the operating system. This enables you to get real time system information for up to 100 inverters in real-time whenever you want.

**3. USING THE FRONIUS SENSOR CARD / BOX, WITH DATCOM SENSORS YOU CAN MEASURE:**
Irradiance, Ambient temperature, Module temperature, Wind speed and Power Consumption from the grid.*
**4. PROFESSIONAL PRESENTATION OF SYSTEM DATA IN PUBLIC SPACES.**
The free Fronius Solar.TV online portal allows you to display key system values in a promotionally effective way on standard displays in public spaces. A series of well-presented graphics provides a quick overview of the PV system.

* additional 3rd party components may be required.

# COMPONENTS

## FRONIUS DATCOM SYSTEM COMPONENTS

| | |
|---|---|
| Fronius Signal Card | The Fronius Signal Card provides an audio-visual warning when there are status changes in the inverter. |
| Fronius Personal Display Card | Receiver for Fronius Personal Display DL. |
| Fronius Com Card | The network card of each individual inverter(s). A Plug-in card is required by every inverter (except the Fronius CL and Fronius IG TL) in a system using DATCOM in order to send data to the Datalogger. |
| Fronius Datalogger easy / pro | The Datalogger is the system's information collector. It is the interface between inverter (via Com Card) and PC. Here the data is bundled and pre-processed for the Fronius IG.access software. |
| Fronius Personal Display DL | Combines the easy display of PV system data with the function of a Datalogger. The Micro-USB port enables fast and easy data transfer from up to 15 inverters to a computer. |
| Fronius Personal Display DL Box | When the inverter already has a COM-card or DATCOM slot, the Fronius Personal Display DL Box is used as a receiver for the Fronius Personal Display DL. |

## FRONIUS DATCOM SOFTWARE

| | |
|---|---|
| Fronius Solar.access | Fronius Solar.access is intelligent software for recording, archiving and analysing system data on the PC. Download free at www.fronius.com.au |
| Fronius Fronius Solar.web | Fronius Solar.web is the free online service for remote system monitoring. You can easily monitor, analyse and compare PV systems from any PC connected to the Internet. |
| Fronius Fronius Solar.web app | Keep an eye on the energy yield of your PV system by installing the free Fronius Solar.web app. A mobile version of the online service, the Fronius Solar.web app is available for iPhone, iPod, iPad, or Android Smartphone. |
| Fronius Solar.TV | The free online portal enables numerous PV system values, such as energy yield and $CO_2$ savings to be transmitted and displayed in a promotionally effective way on standard displays in public spaces. |

## FRONIUS DATCOM ADDITIONAL COMPONENTS

| | |
|---|---|
| Fronius Sensor Card / Box | Used to connect sensors for measuring additional values such as irradiance, temperature, wind speed, etc. |
| Module Temperature Sensor | This sensor is generally used to measure surface temperature. The temperature of PV modules is essential for their performance. Monitoring the temperature enables you to draw conclusions about the behaviour of the output curve. |
| Wind Speed Sensor | The sensor measures the exact speed of wind. It is useful in combination to the other sensors and to complete the private weather station. |
| Fronius Public Display | Large display for an informative presentation in public areas of the most important PV system values. |
| Fronius Public Display (+ Card / Box) | Used to connect several large displays. The Public Display Card is integrated into the Fronius Public Display. |
| Fronius Interface Card / Box | Used for individual processing of system data via an open data protocol. This requires a Fronius Datalogger and Fronius Com Card. |
| Fronius Interface Card easy | Used for individual processing of system data via an open data protocol. This requires neither a Fronius Com Card nor a Fronius Datalogger. |
| Fronius Datalogger & Interface Box | Combining a Fronius Datalogger pro and a Fronius Interface Card into one housing saves installation time and costs. |

/ Battery Charging Systems / Welding Technology / Solar Electronics

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

/ Whether Battery Charging Systems, Welding Technology or Solar Electronics - our goal is clearly defined: to be the technology and quality leader. With around 3,000 employees worldwide, we shift the limits of what's possible - our more than 850 active patents are testimony to this. While others progress step by step, we innovate in leaps and bounds. Further information about all Fronius products and our global sales partners and representatives can be found at **www.fronius.com**

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