# Fronius **DATCOM**

Data communication system for
PV system monitoring

**Fronius**

**POWERING YOUR FUTURE**

# Constant monitoring for maximum earnings

During the development of PV inverters, Fronius rethought existing technologies, strived for innovative and unique solutions, and finally came up with completely new answers. The combination of technologies such as the automatic transformer switching function, the Module Manager and the MIX™ concept makes it possible to get the maximum earnings out of each ray of sunlight.

Complete system monitoring and analysis is important for maintaining earnings performance at maximum levels so that status changes are detected promptly. Professional system monitoring, in this case, is literally worth its weight in gold.

Fronius DATCOM is an easy-to-operate data communications system that provides precise data for PV system monitoring and analysis. Fronius DATCOM also offers various PV system monitoring options: From the control of systems using simple audio-visual warnings, professional analysis and data viewing, to remote system monitoring via the Internet.

**Everything at a glance.** With Fronius DATCOM, you can quickly react to anything that could adversely affect system performance. Early detection and automatic notification options enable you to take the appropriate action.

Fronius Personal Display

## FRONIUS DATCOM SYSTEM COMPONENTS

| | |
|---|---|
| Fronius Personal Display (+ Card) | ● |
| Fronius Com Card | |
| Fronius Datalogger easy / pro | |
| Fronius Datalogger Web | |

## FRONIUS DATCOM SOFTWARE

| |
|---|
| Fronius Solar.access |
| Fronius Datalogger Web |
| Fronius Solar.web |

## FRONIUS DATCOM ADDITIONAL COMPONENTS

| | |
|---|---|
| Fronius Sensor Card / Box: | Used to connect sensors for measuring additional values such as irradiance, temperature, wind speed, |
| Fronius Interface Card / Box: | Used for individual processing of system data via an open data protocol. This requires a Fronius Datalo |
| Fronius Interface Card easy: | Used for individual processing of system data via an open data protocol. This requires neither a Fronius |
| Fronius Datalogger & Interface Box: | Combining a Fronius Datalogger pro and a Fronius Interface Card into one housing saves installation tim |

The right to make technical modifications is reserved.

Fronius Solar.access

Fronius Datalogger Website
(Browser)

Fronius Solar.web

USB
RS 232
Modem

MODEM

Fronius Datalogger
easy / pro

LAN /
WLAN

LAN /
WLAN

ROUTER / MODEM

**WWW**

Fronius Solar.web
Server

Fronius Datalogger Web

| | | | | | | |
|---|---|---|---|---|---|---|
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| | | | | | ● | |

etc.

gger and Fronius Com Card.

Com Card nor a Fronius Datalogger.

e and costs.

● Is required
◐ Is required (either/or)

## The system

Fronius DATCOM is a user-friendly data communications system for individual PV system monitoring. The hardware components are quick and easy to install, the software easy to operate. Because of its modular design, Fronius DATCOM can be upgraded at any time. Customized monitoring solutions, from basic equipment to complete system management, can be installed quickly and without problem.
Because every PV system operator wants to know how their investment in the system is doing.

**Modular.** Each PV system is tailored to the individual requirements of the operator and customized to the system environment. Fronius DATCOM components can be assembled into a complete system that corresponds exactly to these requirements.

**Fast and easy to install.** You're not a specialist in computer network technology? No problem. The installation of Fronius DATCOM components is very easy: Just connect components and you are finished. Plug & play makes this possible. The full compatibility of Fronius DATCOM with all Fronius inverters ensures that communication between components is highly efficient and completely without loss.

**User-friendly.** The software is user-friendly and intuitive to operate. With just a few clicks, you can quickly and easily navigate your way through all Fronius DATCOM software programs.

# The easiest way to monitor

The easiest and most cost-effective method for system monitoring. Ideal for anyone who wants to know about their system performance with minimal effort.

**System monitoring made easy.**
The Fronius DATCOM system is
very easy to install and operate.
The components are compatible
with all Fronius inverters. For
perfect data communication.

The Fronius Personal Display shows real time data
from up to 15 inverters.

## Fronius Personal Display

**The wireless display for your living space.** The
Fronius Personal Display is used by those who want to
stay informed of their system performance data from
the comfort of their own living room. It is very easy to
install in any room of the house and provides real time
data from up to 15 inverters. At night, it displays the
collected data from the day.
Installation is simple: Just insert the Fronius Personal
Display Card in the inverter, attach the antenna to or
near the inverter, set up the Fronius Personal Display in
the house and you're all set. The wireless connection
makes it all possible.

# Comprehensive analysis and viewing options

The professional solution for PV system monitoring for those who want to analyze and view detailed system data onsite from their PC.

The Fronius Datalogger is the connection between inverters and the PC and records all system details. The Fronius Datalogger Web has a USB port for the connection of an optional WLAN stick. This makes integration into an existing network structure very simple.

The Fronius Solar.access software enables you to view and process data as well as monitor your system directly from your PC.

## Fronius Solar.access: Data viewing made easy

Fronius Solar.access is intelligent software for recording, archiving and analyzing system data on the PC. It is used for the comprehensive analysis and display of system performance data using clear diagrams and graphs. You can configure the software parameters of all inverter system components as well as Fronius DATCOM components using Fronius Solar.access.

Fronius Solar.access is included free with the Datalogger. The latest version can be downloaded online at www.fronius-usa.com from the Solar Electronics / Downloads section.

## Function overview

**Extensive.** Up to 100 inverters can be managed in one system.

**Clear.** Real-time and archived data are displayed in easy-to-understand diagrams and graphs (line and bar charts, zoom function).
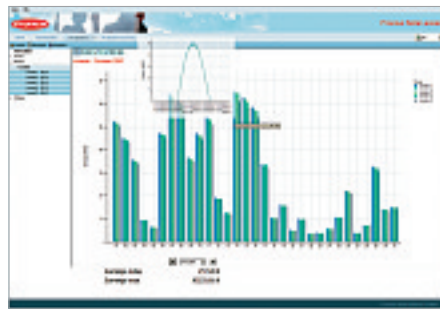
**Comparison.** Daily, monthly or yearly information can be set up and compared to each other.

**Notification function.** Service messages or energy reports are sent via e-mail.

**Automatic data download.** The system data saved in the Datalogger are automatically transmitted to the software at regular intervals.

**User-friendly program.**
A well-thought-out interactive program structure makes Fronius DATCOM software easy to operate. In addition, all Fronius software applications have a uniform design. This gets you up and running as quickly as possible.

## Direct onsite system control

The Fronius DATCOM basic system for analyzing and viewing system data consists of three components: A Fronius Datalogger, one Fronius Com Card per inverter and the free Fronius Solar.access software.

The Fronius Com Card is a network card that each inverter requires for data communication. Among other things, it supplies power to the entire Fronius DATCOM system.

**Clear.** PV system performance data are displayed by Fronius Solar.access in easy-to-understand diagrams and graphs.



**Energy comparison.** You can easily compare the earnings from several inverters using Fronius Solar.access.



**Informative.** Fronius Datalogger Web's own website provides a quick look at essential system data.

## Fronius Datalogger Easy / Pro: The heart of the Fronius DATCOM system

The Fronius Datalogger is the connection between inverters and the PC. Here the data are bundled and processed for Fronius Solar.access software. The Datalogger is simple to connect to the inverter using the plug & play principle. Available as a card or box, it saves every system detail over a period of up to 3 years. The Datalogger can also be used for remote monitoring when used in combination with a modem.

The Fronius Datalogger easy is designed for use with systems with one inverter. Systems with several inverters require the Fronius Datalogger pro, Datalogger Web, or Datalogger Interface Box.

## Fronius Datalogger Web: The core of new technology

Fronius Datalogger Web offers completely new options for PV system analysis and monitoring. It can be easily integrated into existing network structures via the Ethernet port or an optional WLAN stick. Fronius Datalogger Web 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 whenever you want.

Fronius Datalogger Web offers three data communication paths.

**Using Fronius Solar.access via a LAN or a WLAN stick.** Using Fronius Solar.access software, you can save, manage and analyze all system data locally on your PC. Fronius Solar.access can connect directly to Fronius Datalogger Web and enables you to set different software parameters, for example, for all system components in the network.

**Using a browser via a LAN or a WLAN stick to the Datalogger website.** Fronius Datalogger Web's own website provides a quick look at essential system data. You can access it using a browser without having to install additional software. This is optimal for providing several users with information in a local network. If the LAN can be accessed remotely over the internet, then users can access the Datalogger Web remotely as well.

**Using Fronius Solar.web via the Internet.** If desired, Fronius Datalogger Web can send data automatically to the Fronius Solar.web Internet platform. This enables you to access real time system data as well as archived data anytime, anywhere via the Internet.



Fronius Datalogger Web

# Fronius DATCOM
# additional components

The Fronius DATCOM system can be upgraded at any time with optional components to provide more functionality and simpler operation.

**Fronius Interface Card / Box**
**Fronius Interface Card Easy**
The Fronius Interface Card / Box is used for individual processing of system data via an open data protocol. The Fronius Interface Card easy is recommended for systems with only one inverter and does not require a Datalogger.

**Fronius Sensor Card / Box**
Using the Fronius Sensor Card / Box, you can integrate sensors into the Fronius DATCOM system for measuring irradiance, ambient temperature, module temperature, power consumption, etc.

**Fronius Datalogger & Interface Box**
Combining a Fronius Datalogger pro and a Fronius Interface Card into one housing saves installation time and costs.

**Fronius Converter RS232 Box / Card**
**Fronius Converter USB**
The Fronius converter enables the easy utilization of third party components for professional PV system monitoring. The Fronius converters transform the RS422 interface of the Fronius DATCOM system into a RS232 hardware interface or into a USB hardware interface. There is no need for conversion of the software protocol.



Fronius Converter USB

# Remote monitoring made easy

Fronius Solar.web is the free online service for remote system monitoring. You can easily monitor, analyze and compare PV systems from any PC connected to the Internet. Real time system data are available 24/7 and presented in a way that is easy to understand.

**Consolidated.** Key system data and system information are located on the Fronius Solar.web start page.

**The most important information at a glance.** The start page contains a monthly diagram, a three day power output diagram, key system data, important user information, and any warning messages or service codes that have been produced by the system. Recent system data are transmitted automatically to Fronius Solar.web at regular intervals.

**Multi-system management.** Multiple PV systems can be accessed via one login. This makes possible new analysis and viewing options such as a total view of all systems in one single diagram as well as a comparison of several systems together using optional DATCOM components.

**Interactive diagrams.** Interactive diagrams provide fast and easy navigation for the user. Simply move the mouse over the diagram to get a detailed view.

**Individual access rights.** You can select between "guest access" or "full access." Accounts created with full access privileges can make changes and delete accounts while guest accounts cannot and so can be given out publicly.

**Demo system.** Our model system at the Fronius location in Pettenbach, Upper Austria gives you an overview of the possibilities for viewing data using Fronius Solar.web. Available at http://solarweb.fronius.com. Choose "sample system."

**Easy registration.** Registration is carried out by entering your important system and owner data at http://solarweb.fronius.com.

**Customer service made easy.** Using Fronius Solar.web, you can show off your reference systems, monitor your customers' systems as well as collect know-how for future projects.

## Fronius Solar.web: Easy remote Internet monitoring

Fronius Solar.web is easy to operate, very user-friendly, and has comprehensive analysis options. Individual access rights and multi-system management features enable you to customize it to your needs - whether private user, large system owner, or installer.

Soligent

www.soligent.net

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