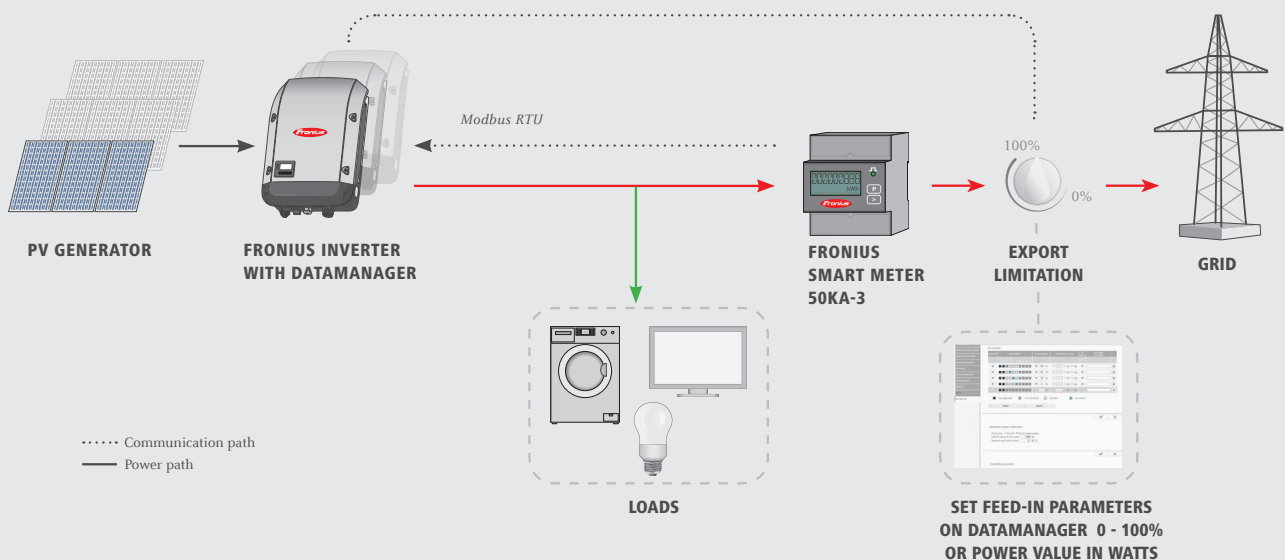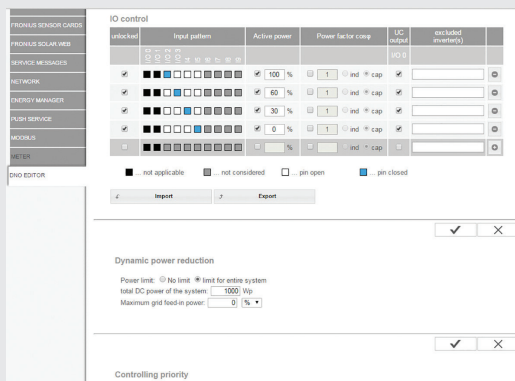**Fronius**

SHIFTING THE LIMITS

**0%**

**NOW CAPABLE OF ZERO EXPORTATION**

# EXPORT LIMITATION? NO PROBLEM.
## CHOOSE THE FRONIUS SOLUTION FOR LIMITED OR ZERO FEED-IN SITUATIONS

/ The Fronius Feed-in Limitation system is a simple and economical solution using the Fronius Smart Meter and Fronius Datamanager 2.0 and fully complies with the current UK DNO requirements.

/ The limitation is based on the inverter shifting its optimum operating point to adapt the output power to not exceed a predefined export value to the grid. This predefined value is set within a password protected area of the Fronius Datamanager Webinterface and is set in whole percentages from 0 - 100% or as a value in Watts.

Modbus RTU

100%

0%

**PV GENERATOR**

**FRONIUS INVERTER WITH DATAMANAGER**

**FRONIUS SMART METER 50KA-3**

**EXPORT LIMITATION**

**GRID**

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

**LOADS**

**SET FEED-IN PARAMETERS ON DATAMANAGER 0 - 100% OR POWER VALUE IN WATTS**

/ Datamanager 2.0 webinterface screen. Simply enter a whole percentage from 0 - 100%, or as a value in Watts, for maximum grid feed-in power

## / Dynamic Feed-in Control

If there are feed-in limits (i.e. max. 70% of the kWp or max. 50 kW) self-consumption should first be considered, before the inverters power is reduced. With the Fronius dynamic feed-in control it is possible to set an individual power limit and to connect the Fronius Smart Meter directly to the inverter. The setting can easily be done on the webinterface of the inverter or Fronius Datamanager.

## / What equipment do I need?

All you need is a Fronius Smart Meter and a Fronius Snapinverter (Fronius Symo, Fronius Primo, Fronius Galvo, Fronius Eco) with built in Datamanager 2.0 or external Datamanager 2.0 Box which must have the latest software version installed (for zero export requirements contact us directly). For large installations, only one Datamanager is required for up to 100 inverters[*].
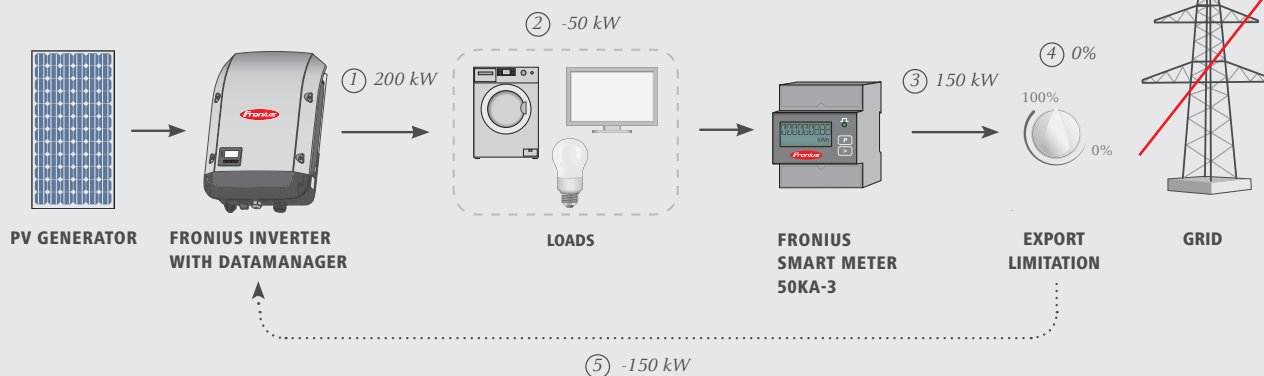
The Fronius Smart Meter is a bidirectional meter which optimises self-consumption and records the building's load curve. Thanks to highly accurate measurements and rapid communication via the Modbus RTU interface, dynamic feed-in control when feed-in limits are imposed is fast and accurate. Together with Fronius Datamanager 2.0, Feed-in limitation set-up is made easy.



/ Visualisation of energy flows on Solar.web

## / What are the DNO requirements?

The requirements, which are all met by the Fronius solution are as follows:
/ The system must be fail-safe
/ The system must not rely on wireless communication between the various components of the export limiter system
/ The system and the whole installation must meet all relevant power quality requirements
/ The system must react within one second
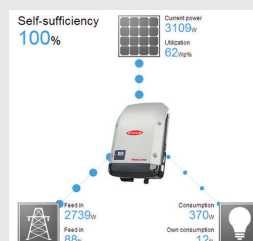/ The system must reduce output within 5 seconds

## / Example



| PV GENERATOR | FRONIUS INVERTER WITH DATAMANAGER | LOADS | FRONIUS SMART METER 50KA-3 | EXPORT LIMITATION | GRID |

① PV system produces 200 kW

② Self consumption of 50 kW

③ Possible export to grid 150 kW

④ Set export limit to 0% on Datamanager 2.0

⑤ Inverter reduces power output by 150 kW to meet 0% export limit

[*]Installation/inverter location/cable type/cable run length dependent.