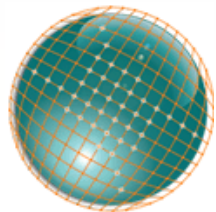


Fronius Inverter Communication

Interaction of Fronius Inverters with 3rd Party Devices and Utilities

Martin Beran
Application Engineer
beran.martin@fronius.com



4th International Conference on
**Integration of
Renewable and Distributed
Energy Resources**
December 6-10, 2010
Albuquerque, NM, USA

Conference Sponsors



Associate Sponsors



Content of Presentation

- About Fronius
- Fronius Power Control Box
- Fronius Interface Protocol
- IFP Example - Solar Power Plant

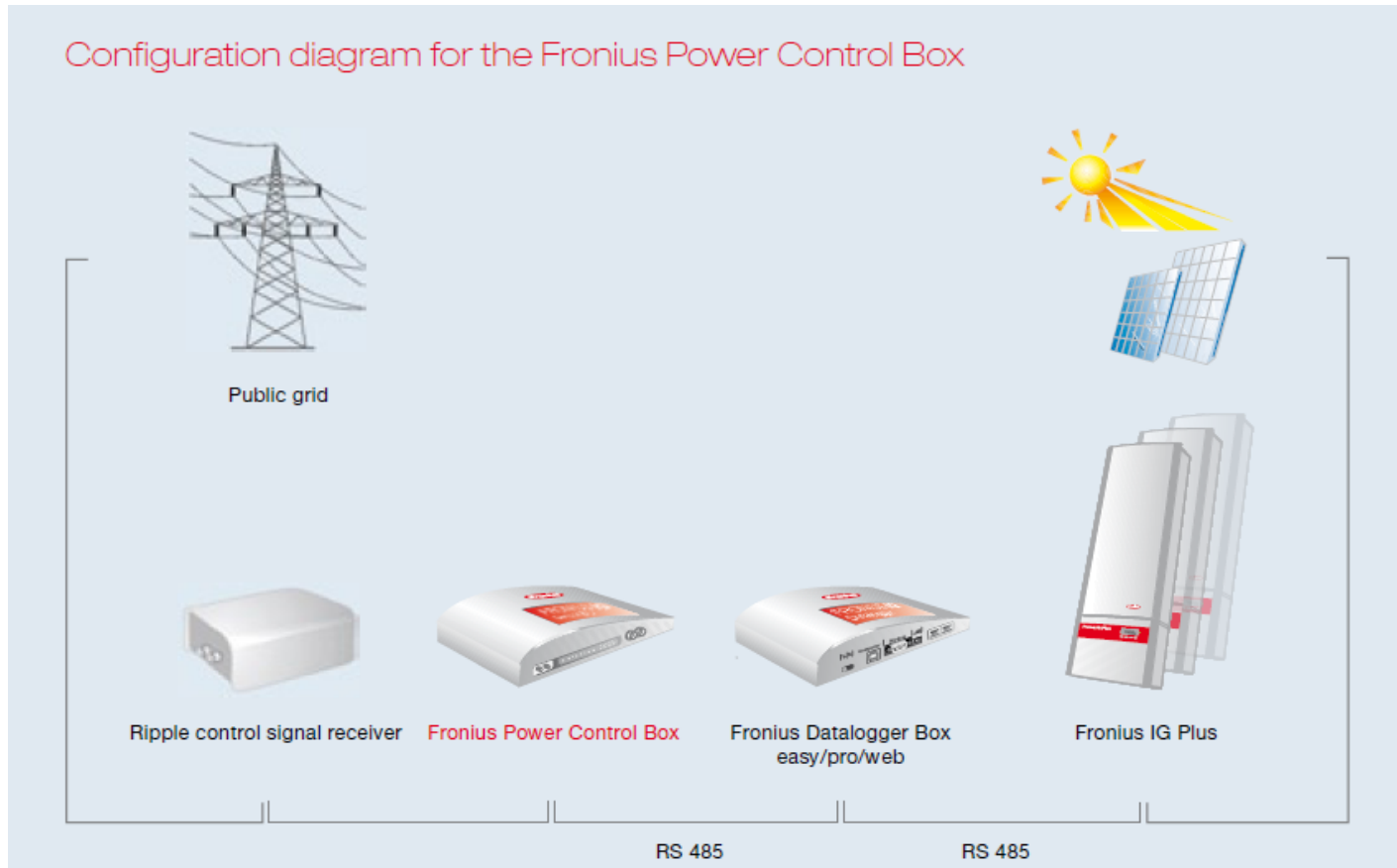
About Fronius

- Founded in 1946, Austria
- Over 2800 employees worldwide
- Converting energy
- Solar Electronics, Welding, Battery Charging



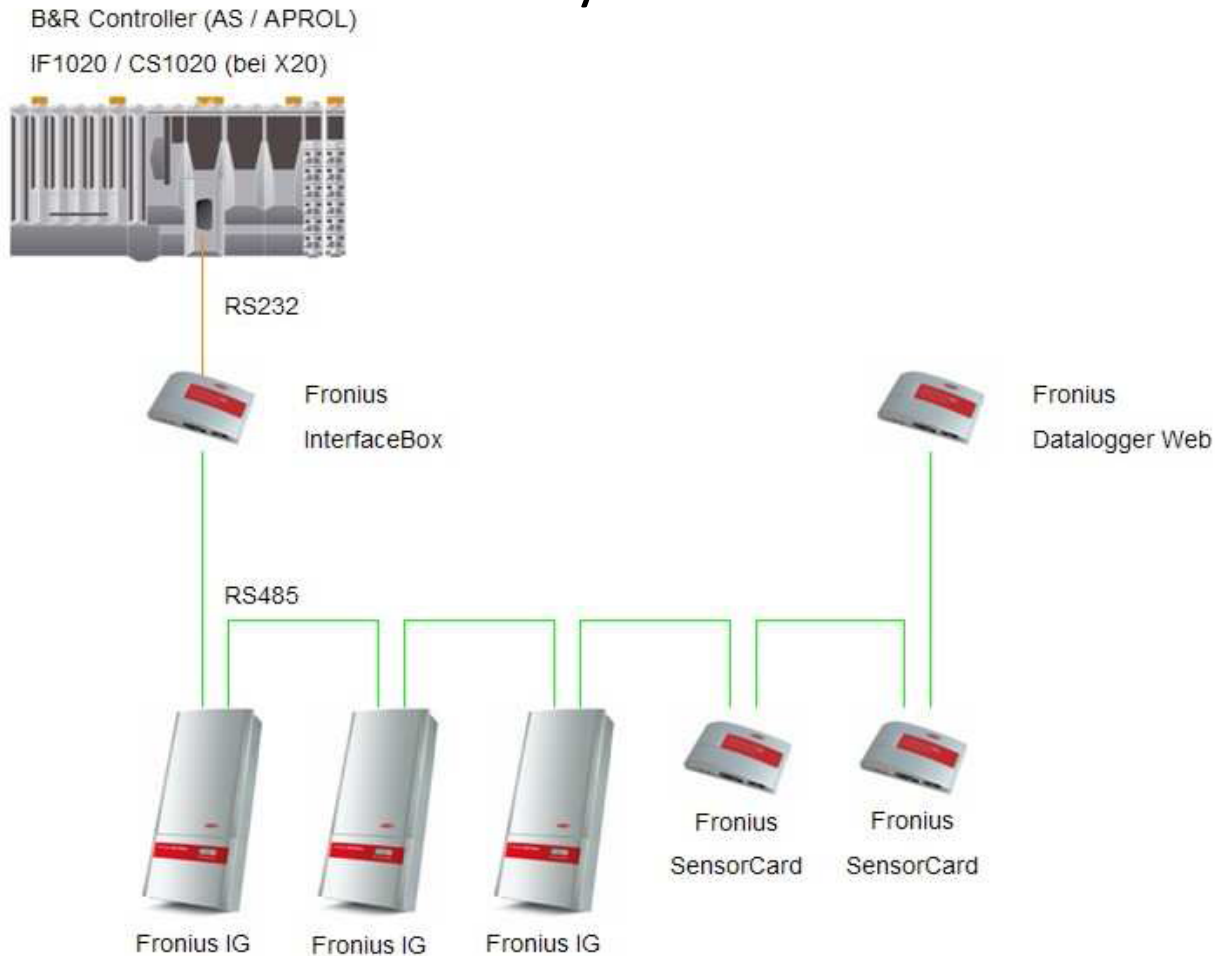
Fronius Power Control Box

- Allows utilities to reduce the power of PV systems remotely
- Designed for a four-stage ripple control signal receiver



Fronius Interface Protocol

- Open protocol
- Communication with 3rd Party devices



Fronius Interface Protocol - Example

- Solar Power Plant – Eberstallzell, Upper Austria
- 1 MW Solar Power



Photo: EnergieAG