

### 3 Example Plant

#### 3.1 Example PV Power Plant Control

PPC: Gantner Q.reader Central

Grid Measurement: Janitza UMG 604

Inverter: Sungrow 60KTL

System Power: 1298 kWp

Example control shown in figure 18, 19.

Control test with following  $\cos(\phi)$  steps:

- 1
- 0,950 ind.
- 0,980 ind.
- 0,980  $\triangleq$  1,020 cap.
- 0,950  $\triangleq$  1,050 cap.
- 1

In all steps, a settling time of <10s and accuracy of better than 0.005 is reached.

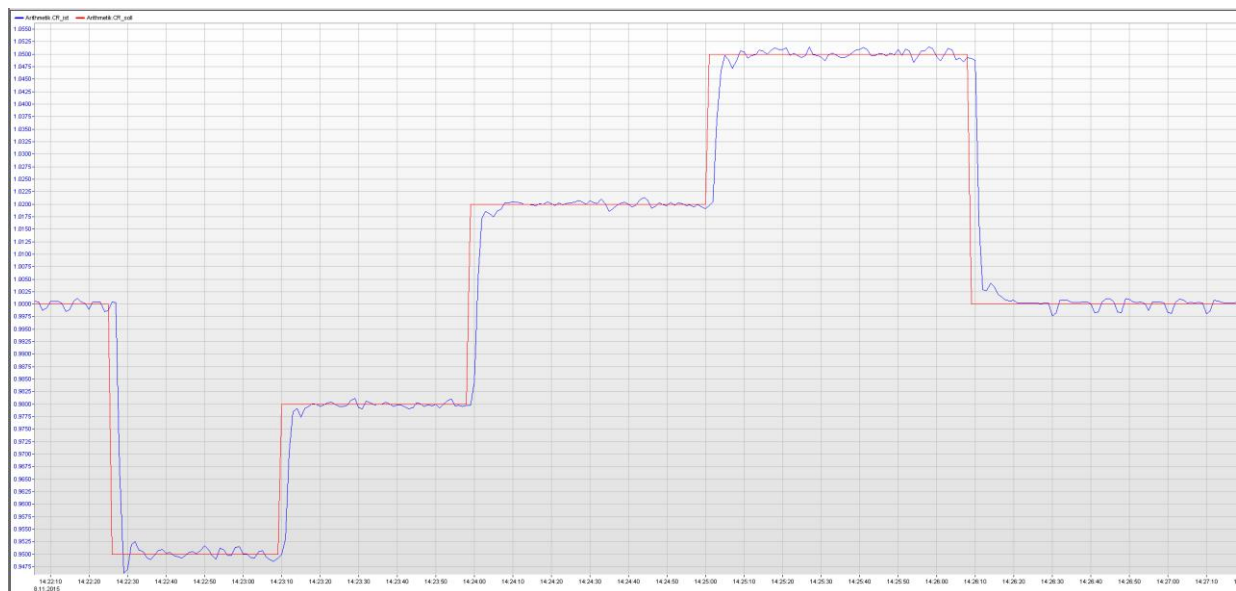


Figure 26:  $\cos(\phi)$  Control in Steps

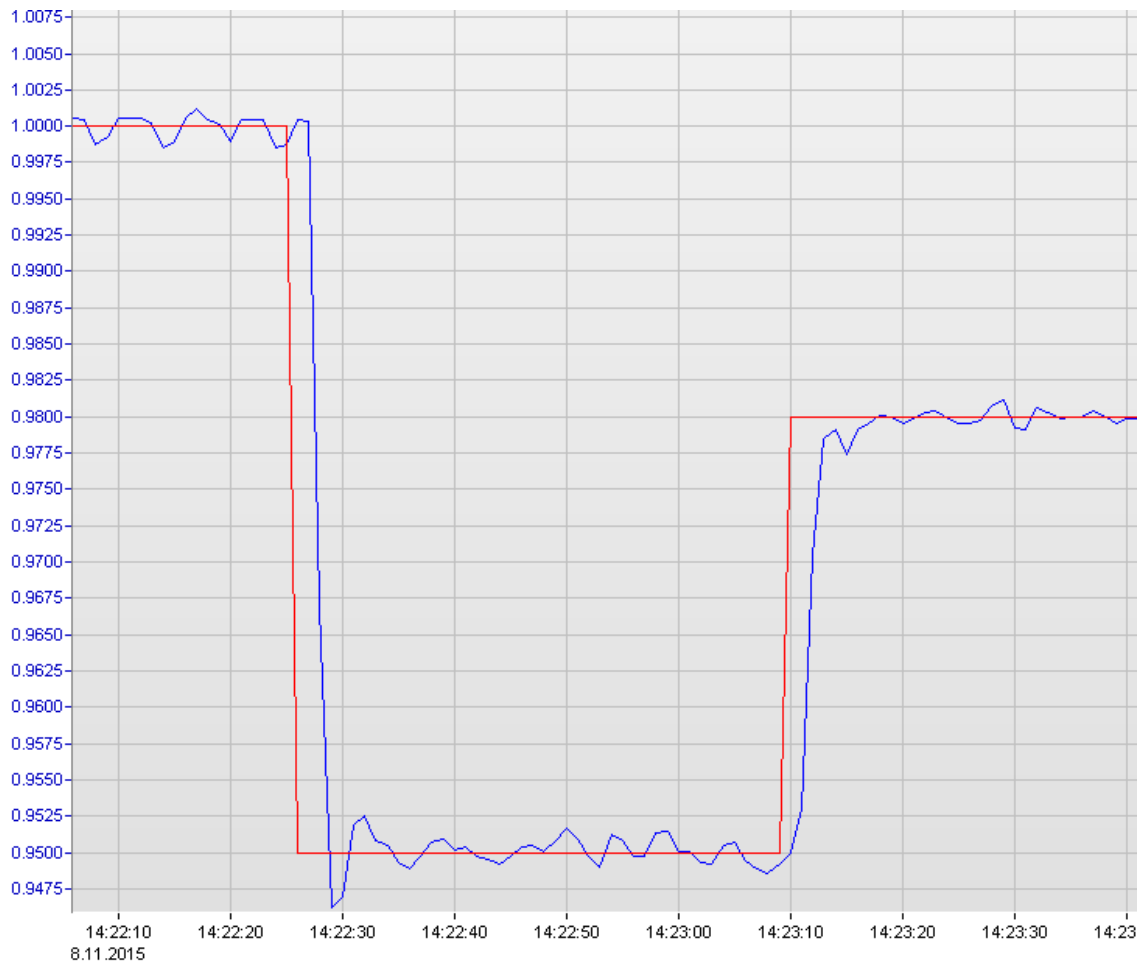


Figure 27:  $\cos(\phi)$  Control in Steps – Detail View

In figure 2, the basic control concept is visualized:

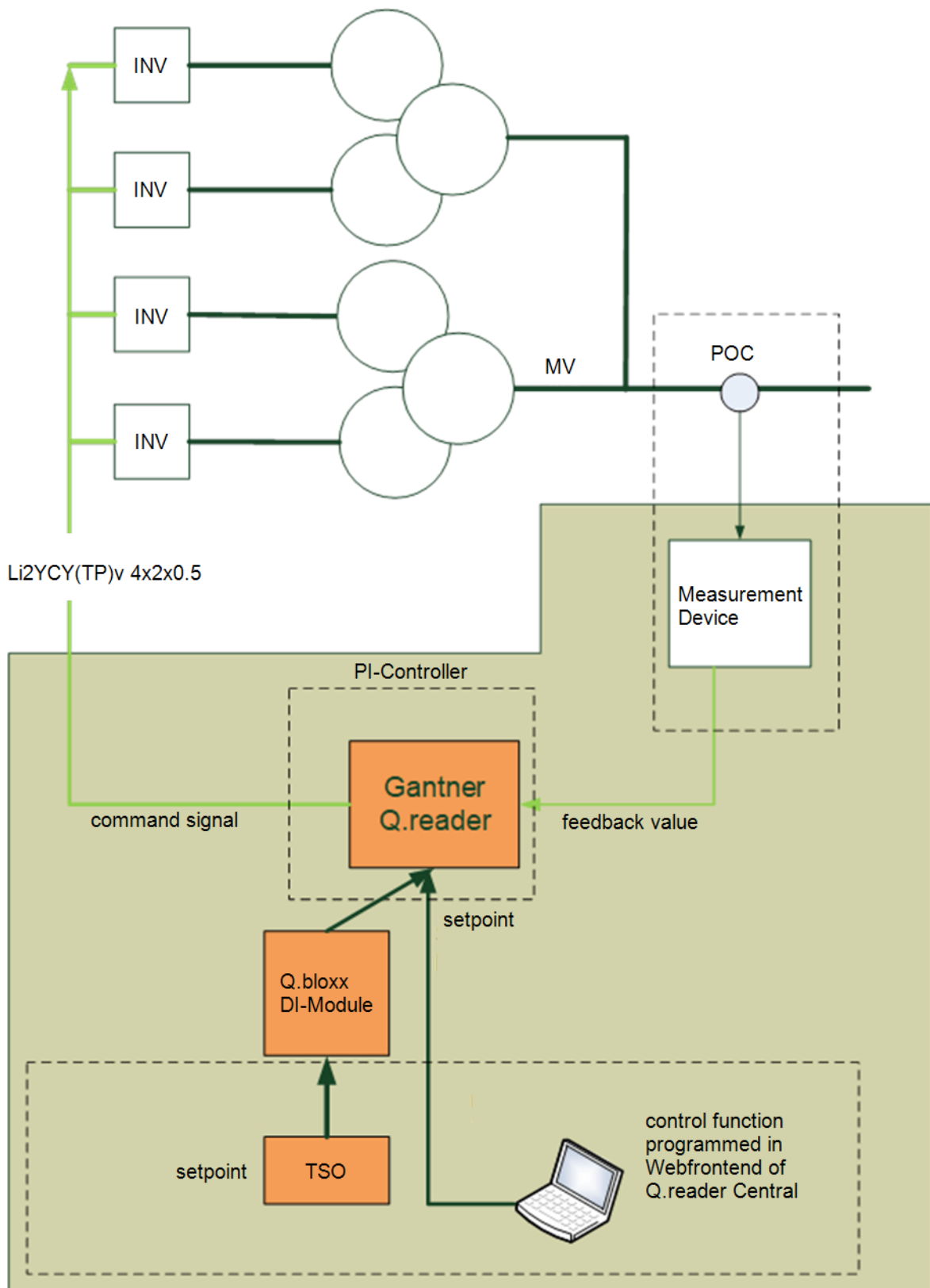


Figure 28: Basic Control Concept