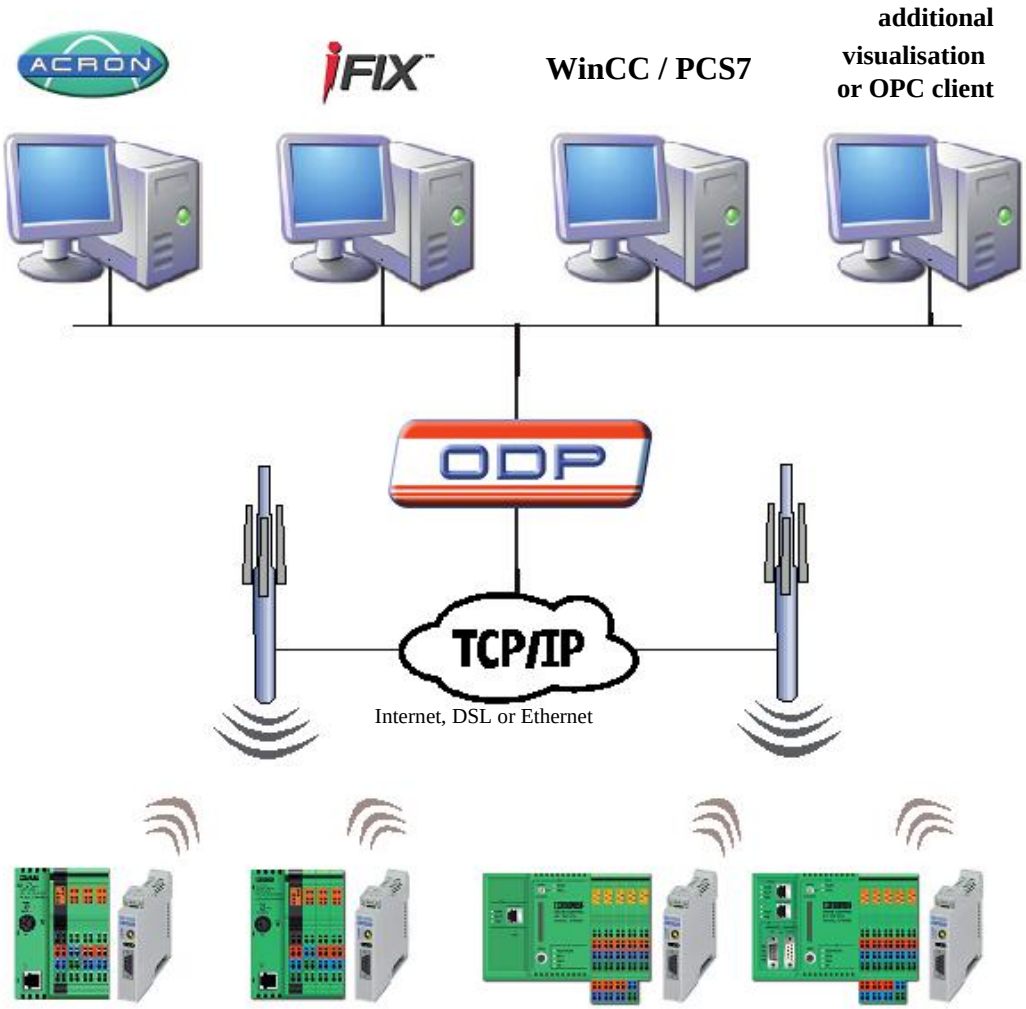
Phoenix Contact Serial Connection with ODP

Measured values, messages, alarms, and commands should be exchanged between the control centre and the substations. Along with the online-connection, the data will be buffered in the substation, if a connection failure occurs. After the reconnection of the communication line, these data will be saved by ODP into the control centre's factory data capture in chronological order. Along with the online data exchange (ODP part 1) and the historical data exchange (ODP part 2), the active sending by the substation will also be supported in the case of an alarm (ODP part 3). It is optional to programme the SPS from the centre.

Design



Configuration per substation: Control system with serial interface of the type ILC or RFC from Phoenix Contact and S1 modem from Dr.Neuhaus

Benefits

Design	No head-SPS required, therefore, simple and fast configuration.
	Usage of Phoenix Contact technology, programming and telecontrol configuration in IEC 61131
	Just only a few defined interfaces, no separated communication processor required
Safety	Broad network of integrators
	High availability due to data buffering in the SPS in cases of connection failures. (The memory depth depends on the recording cycle and SPS data storage).
	High availability, unproblematic procurement of spare parts
Costs	Low connection costs and complete cost control
	Protocol with very small overhead

Required Components

Substations	Hardware / Software
	• Phoenix Contact ILC 1xx ETH, ILC 3xx ETH/PN, RFC 4xx ETH • Serial Interface IB IL RS232-PRO-PAC, Item number: 28 78 722 • ODP example programme for PCWORX from V. 5.2 onwards • Telecontrol licence ReSy-Data-A-LIC, item number: 28 76 847
	Required SPS memory
	• 3 KB per historical measured value (recording interval 1 minute, duration of recording 1 day)
Substation Modem	Dr. Neuhaus modem
	• GMOD-S1 • GMOD-S2 for remote programming of the ILC 370
Control Centre	Internet, DSL or Ethernet
	• ODP software package • Visualisation i.e. iFIX, InTouch, WinCC / PCS7 • Factroy data capture ACRON • All OPC client compatible programmes for further data processing
ODP Level of Integration	All functions of the ODP specification are met
	• Part 1 (online data) • Part 2 (historical data) • Part 3 (disturbances, alarms, and messages)
System Requirements Computer	• Processor 2 GHz, 1 GB working memory • Operating system: Windows XP, 2003/2008 Server, Vista

For more information visit **www.videc.de** or send an e-mail to **info@videc.de**
Specifications for the connection of automation devices, starter kits, as well as system descriptions, and demo versions available upon request.