

University

PSS®SINCAL

For a modern education in power engineering universities need enhanced system planning software which provides state-of-the-art algorithms as well as features to simulate and evaluate the latest developments in the energy sector like smart grids and the integration of wind power.

Siemens PTI offers specialized packages which have been developed to particularly meet the requirements of universities and students of power engineering with regard to functionality and costs. PSS®SINCAL University packages cover the whole range from transmission to hot topics around micro grids in distribution networks with high model precision.

Key features:

- packages with 25 simultaneous network licenses for models with up to 50 nodes
- one in all software: No need for data transfer, but interfaces are available for data exchange
- network models can be fully unbalanced
- facile integration into other applications
- allows flexible customization, e.g. programming, background simulation in user written solutions
- easy access to network data
- intuitive user interface according to standard Microsoft® Windows® applications

Education

PSS®SINCAL University Education packages are available free of charge, only a handling fee has to be covered.

Package I: Transmission University

- Load flow (balanced, unbalanced)
- Load profile simulation
- Short circuit (1-, 2-,3-phase)
- Multiple faults
- Protection simulation
- Overcurrent time protection
- Distance protection setting
- Harmonics
- Stability (RMS)

Package II: Utility Optimization University

- Load flow (balanced, unbalanced)
- Load profile simulation
- Short circuit (1-, 2-,3-phase)
- Multiple faults
- Optimum branching
- Compensation optimization
- Load balancing
- Load development
- Load assignment/ Transformer tap detection
- Contingency analysis / Restoration of supply

Package Gas

- Gas steady-state
- Gas contingency analysis
- Gas profile (quasi dynamic)

Package Water

- Water steady-state incl. fire water
- Water contingency analysis
- Water tower filling
- Water profile (quasi dynamic)

Package District Heating / Cooling

- Heating and cooling steady-state
- Heating and cooling contingency analysis
- Heating and cooling profile (quasi dynamic)

Research

For research we offer full network licenses with unlimited node numbers in special university configurations for a price that fits into university budgets:

Package I: Transmission University

- Load flow (balanced, unbalanced)
- Load profile simulation
- Short circuit (1-, 2-,3-phase)
- Multiple faults
- Protection simulation
- Overcurrent time protection
- Distance protection setting
- Harmonics
- Stability (RMS)
- Probabilistic reliability

Package II: Utility Optimization University

- Load flow (balanced, unbalanced)
- Load profile simulation
- Short circuit (1-, 2-,3-phase)
- Multiple faults
- Optimum branching
- Compensation optimization
- Load balancing
- Load development
- Load assignment/ Transformer tap detection
- Contingency analysis / Restoration of supply

Special topic: wind

Due to an increasing demand in network studies related to the integration of wind power, a model package specializing on dynamic and wind simulation is also available as special offer for universities.

Package III: Dynamic + Wind University

- Load flow (balanced, unbalanced)
- Short circuit (1-, 2-,3-phase)
- Stability (RMS)
- Electromagnetic transients (EMT)
- Model builder (NETCAD incl. GMB)
- Generic wind models

Further model packages available

Besides the university packages listed above any other configuration of modules and license types from the price list is available. Siemens PTI is pleased to offer a price deduction of 80% for software used for education and research purposes only:

Also note that universities do not pay for maintenance and support and receive all updates (2 per year) free of charge.

Please contact us!

For more information please contact us at sincal.energy@siemens.com.

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Energy Management Division
Freyeslebenstrasse 1
91058 Erlangen, Germany

For more information, please contact
power-technologies.energy@siemens.com

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