

# econ peak – dynamic **peak & load management**

Load peaks can be a decisive cost driver in the electricity supply. This doesn't have to be the case: with the highly flexible econ peak load management system, costs can be reduced sustainably.

The econ peak is one of the leading solutions in the field of peak and charging load management. Open interfaces and a constantly growing number of supported electricity meters, wallboxes and charging stations as well as energy generation and storage systems allow it to be used in almost every conceivable system configuration. In the process, econ peak load management grows with the customer's requirements - individual needs and special requirements are no obstacle. Software upgrades and additional substations allow the existing system to be expanded continuously by adding further load groups, additional self-generation systems or even electricity storage systems.

#### A product for:

Industrial and commercial customers of all sizes and from all sectors, as well as in the healthcare sector, hotels, retirement homes, agriculture,...

## Application areas of the econ peak

#### • Photovoltaics and other self-generators:

Preventing peak loads during feed-in, ensuring the stability of the grid connection and avoiding expensive penalty fees. You benefit from a sustainable reduction in energy costs and your CO2 emissions. By using self-generated energy in a targeted and economical manner, you also optimize the proportion of energy you consume yourself.

#### • E-Mobility:

Dynamic charging load management avoids load peaks and thereby helps to reduce energy costs sustainably while at the same time increasing security of supply. Benefit from different charging scenarios and the ability to charge any number of vehicles. By monitoring the supply directly from the producer (e.g. PV systems), the maximum charging power is available to you for as long as the capacities are available in the entire system. Optionally, you have the option of additional monitoring of the low-voltage sub-distribution boards for targeted dynamic control of charging stations depending on the upper load limit of the building in which they are installed.

#### • Ventilation systems:

Intelligent control of ventilation systems to reduce load peaks without compromising operational reliability.

#### • Industrial kitchens:

Switch-off controls for kitchen appliances (e.g. steam cookers or instantaneous water heaters) to avoid load peaks.

#### • Energy storage:

Storage solutions optimize the use of self-generated electricity, serve to absorb power peaks and ultimately reduce the load on the grid connection.

#### • Industry:

Switch-off controls for various load groups in the industrial sector (e.g. heating furnaces or compressed air units) to avoid load peaks.

With econ peak, automation is possible far beyond the area of pure load management.



#### Technical information about the device:



- Compliance with the power limit (target power) through trend calculation and an optimum switching strategy
- Expandable to up to 128 switching channels\* with expansion modules
- Parameterization of logical linking of load groups\*
- Management of up to 8 main meters and an extended kitchen module function\*
- Expandable for charging management for the performanceoriented integration of charging stations\*
  - \* type-dependant



### econ peak

### Versions, extension modules and accessories

Product	Description	item no.
	<ul> <li>econ peak slave</li> <li>Support for up to 32 charging points</li> <li>Network-capable substation for peak load optimization</li> </ul>	EC251257
	<ul> <li>econ peak ST16</li> <li>Maximum controller for peak and load management</li> <li>With 8 switching channels, expandable up to 16</li> </ul>	EC251254
	<ul> <li>econ peak BS128</li> <li>Maximum controller for peak and load management</li> <li>With 8 switching channels, expandable up to 128</li> <li>Switching commands to KNX/EIB</li> <li>Programmable as a substation</li> <li>Parameter switching</li> </ul>	EC251255
	<ul> <li>econ peak XP128</li> <li>Maximum controller for peak and load management</li> <li>With 8 switching channels, expandable up to 128</li> <li>Switching commands to KNX/EIB</li> <li>Programmable as a substation</li> <li>Parameter switching</li> <li>Logical linking of load groups</li> <li>8 main meter</li> <li>Kitchen module function</li> </ul>	EC251256
	<ul> <li>econ switch 84 IP</li> <li>• Extension module with 8 outputs and 4 inputs</li> <li>• Integrated Ethernet TCP/IP network interface</li> </ul>	EC251194
	<ul> <li>econ switch 4 IP</li> <li>Extension module with 4 outputs</li> <li>Integrated Ethernet TCP/IP network interface</li> <li>Software extension "ALS-ps4" by 4 load groups</li> </ul>	EC251186
	econ switch 4 Modbus RTU • Extension module with 4 outputs	EC251193

Product	Description	item no.
	<ul> <li>econ relais</li> <li>Relay board with 8 outputs</li> <li>Converts the 24VDC output signals of the econ peak into potential-free changeover contacts 12A, 230VAC</li> </ul>	EC250945
	<ul> <li>Digital frequency/analog converter</li> <li>Extension for the Maximum Controller BS/XP</li> <li>Support for up to 32 charging points</li> <li>Network-capable substation for peak load optimization</li> </ul>	EC251245
	<ul> <li>2 channel S0 pulse converter/doubler</li> <li>o Converts 2 S0 pulse signals into simple, potential-free contacts</li> </ul>	EC225421
e con peak E-Mobility	<ul> <li>Upgrade E-Mobility</li> <li>For integrating and controlling a charging station via Modbus/ Ethernet</li> <li>Expandable to up to 16 charging points with ST or 32 with BS/XP</li> </ul>	EC251060
e con peak ES01	<b>Upgrade ES01</b> • For connecting one electrical storage unit using Modbus/Ethernet	EC251082
e con peak Einspeisung	<b>Upgrade Feed-in management</b> • To enable the control of inverters	EC251218
e con peak PV	<ul> <li>Upgrade PV-telecontrol</li> <li>PV telecontrol connection for online data exchange with grid operator via IEC 60870-5-101</li> </ul>	EC251219