

## VALCAP<sup>®</sup> Load Management



### Description

Thermal monitoring of power cables to prevent overheating, detect upcoming faults as well as to optimize transmission capacity.

### Application range

Submarine cables, land cables, overhead lines

### Load management system for submarine cables

Load restrictions of submarine cables due to thermal limits are a significant problem if the required energy cannot be transported. Especially wind farms with high load variation due to varying wind situations require the flexible usage of the available cable capacity. If wind-mills have to be shut down significant cost is involved due to lost revenues. On the other hand the damage of submarine cable due to overheating also leads to huge cost for cable replacement.

The VALCAP Load Management System is a combination of hardware and software that uses temperature information of power cables acquired by fiber optic temperature measurement together with current load information to utilize the full capacity of submarine cables. Automatic warnings are created if a cable could be at risk of being damaged due to high load situations.

### Key functionalities

### Customer benefits

Supervision of real cable temperature including real time cable conductor temperature calculation	More safety in cable operations
Detection and localization of critical cable areas	More efficient usage of cable capacities
Real time ampacity evaluation	Effective and efficient decision making using real time data
Complete documentation and storage of records	Easy and fast support for operating and maintaining power cables