

# Energy Storage with Super Caps for Capacities up to 26 MJ / 5 MVA



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IDS Energy Storage with Super Caps (IESC) is modular system which can be connected to a system which already has main converter with DC Bus. Energy Storage is used in installations where for a short period of time, large amount of energy is needed and then for longer period almost no energy is consumed. In this way Energy Storage reduces the needed grid energy capabilities and gives possibility with lower power grid connection to supply a higher pulsed power consumer.

IESC base module is 500 kVA and it includes:

- Super Caps Pack (Super Caps and monitoring electronics for each capacitor)
- DC/DC or DC/AC converter for 500 kVA
- Control

The DC/DC converter includes a closed loop control system and offers the following features:

- Limitation of output current
- Closed loop control of output voltage
- Limitation of the power during charging period

By parallel arrangement of 10 modules output power of up to 5 MVA can be provided.

## Base Unit: 500kVA

- Bidirectional DC/DC converter: 500kVA
- DC Link Voltage: 1000V/1100V
- Voltage in Super Caps: 900V/1000V
- Available energy: 2580 kJ
- Max. Load 500A
- Typical efficiency: 98.4%
- Integrated control unit
- Monitoring of each Super Cap



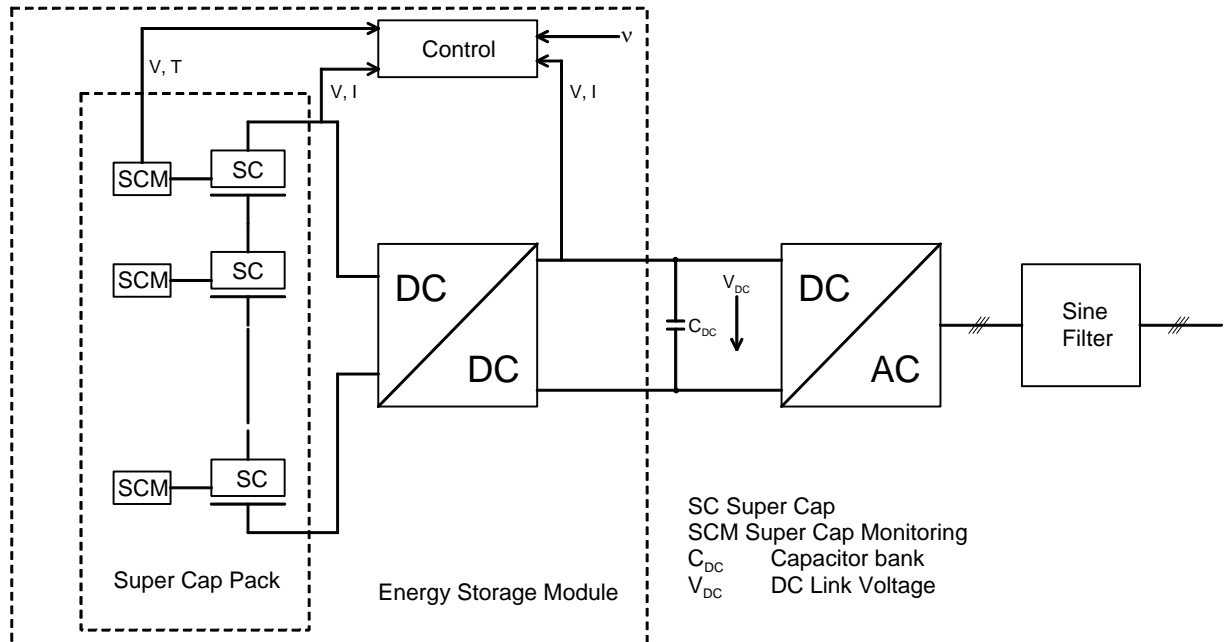
2 x 500 kVA Energy Storage System

Rated Power MVA	0.5	1	2	3	4	5
Dimensions m: (WxHxD)	1.2x2.0x0.8	2.4x2.0x0.8	2.4x2.0x1.6	3.6x2.0x1.6	4.8x2.0x1.6	6.0x2.0x1.6
Current A:	500	1000	2000	3000	4000	5000
Energy Available kJ:	2580	5160	10320	15480	20640	25800

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## Single Line Diagram IESC



Subject to change, August 2008

## Ordering Information

For technical or commercial information please contact the IDS sales office.

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