



# Merus Power Dynamics Oy Energy Storage System MES150

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[www.meruspowers.com](http://www.meruspowers.com)

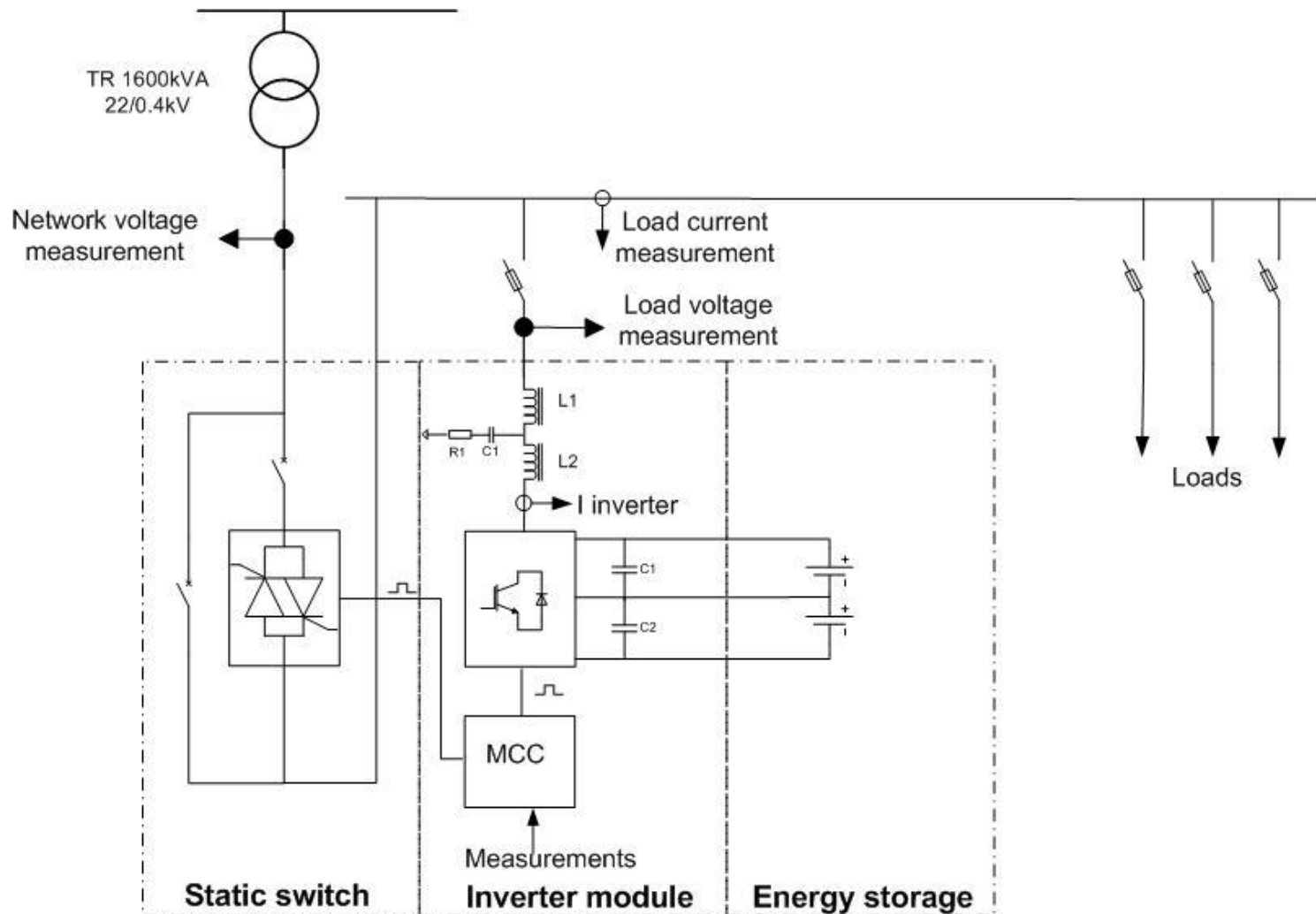


- Normal active filters can provide only reactive power
- UPS-systems are not meant for PQ improvement
- MES150 is a combined solution
  - Harmonic mitigation
  - Dynamic reactive power compensation
  - Load balancing
  - UPS-operation



- **Static switch**
  - Separates system from faulty network
- **Inverter module**
  - Produces output currents and voltages
- **Control system**
  - Controls the Inverter module
  - Detects faults in the network
- **Energy storage**
  - Provides active power when needed
  - Batteries or super capacitors

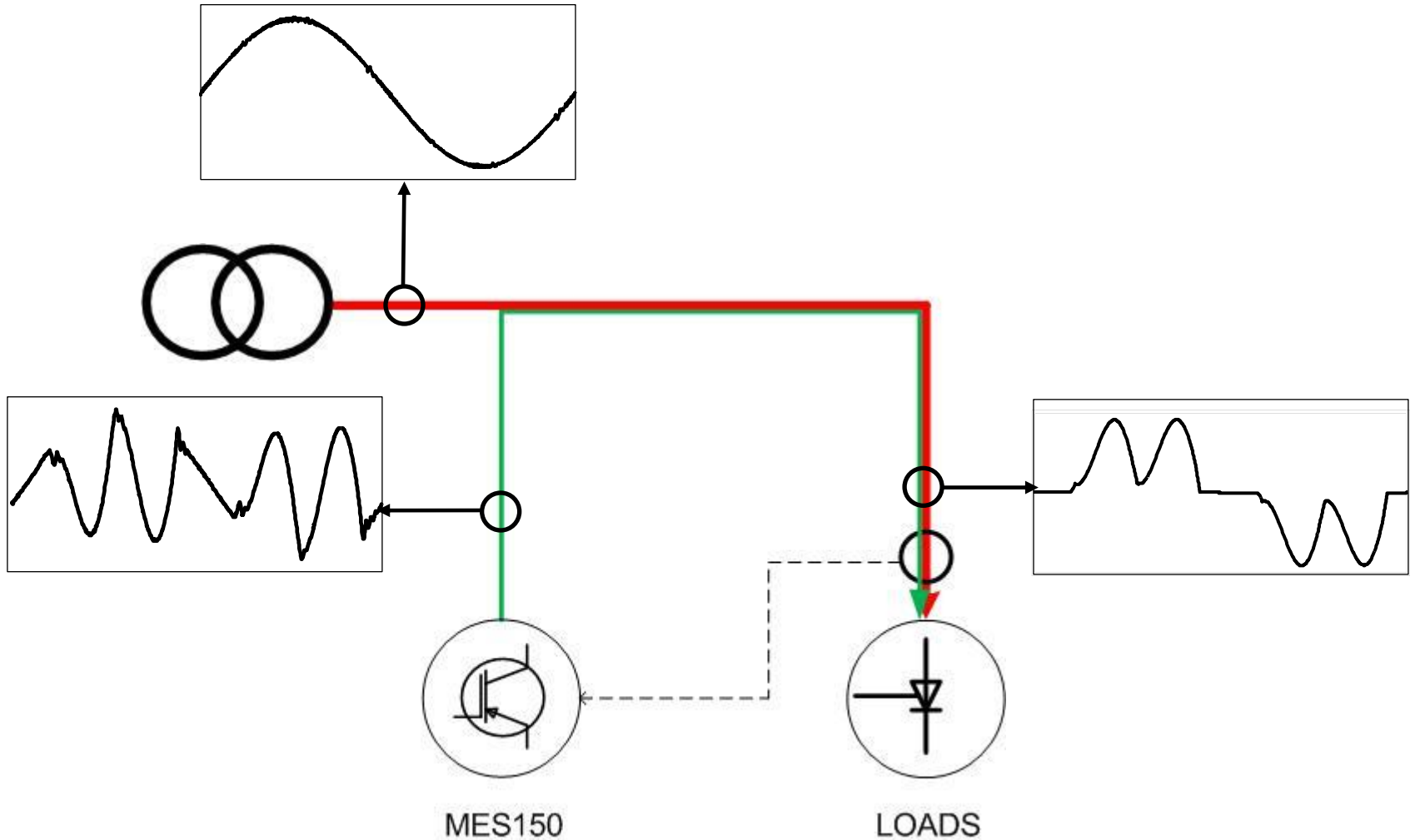
# MES150 - SLD

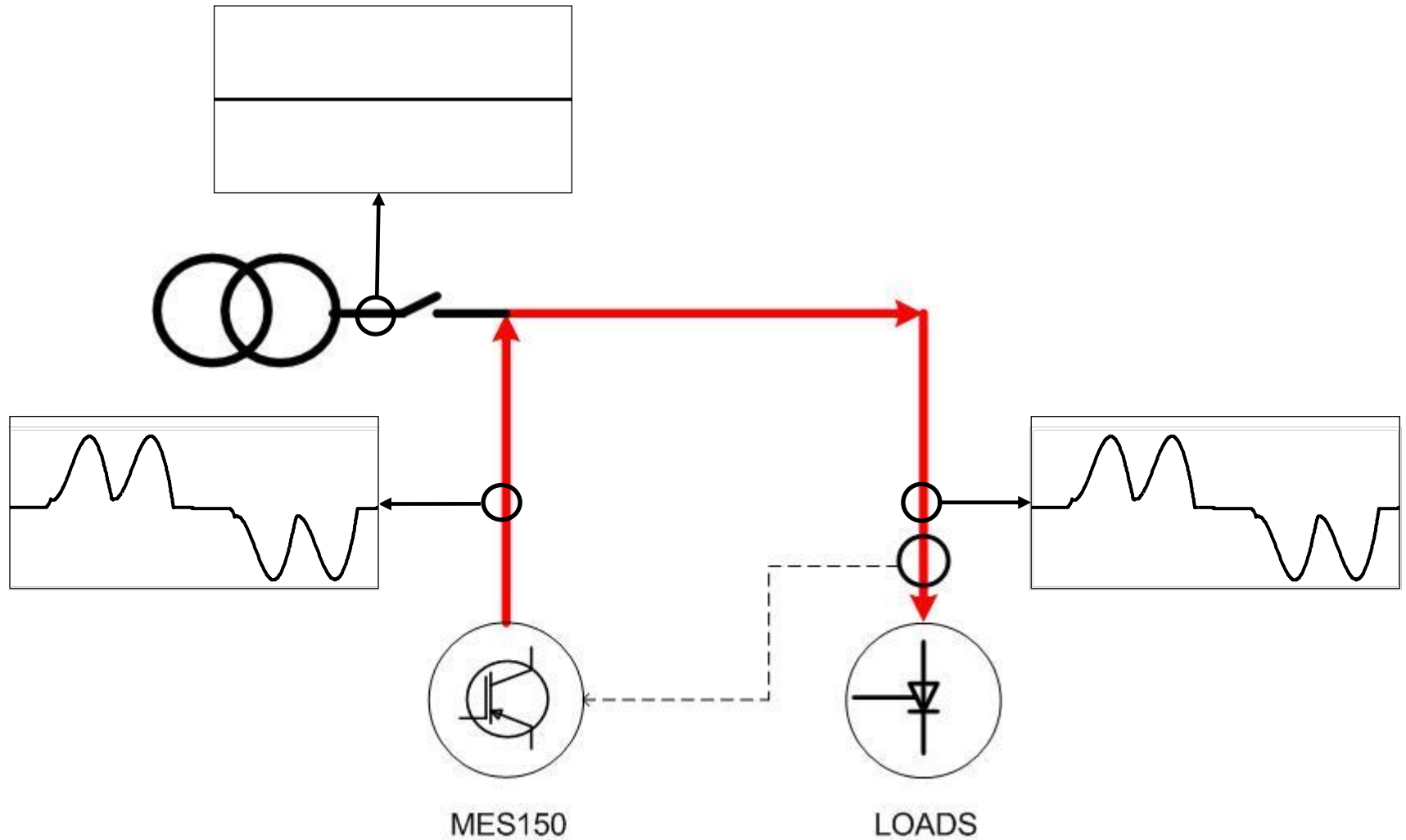


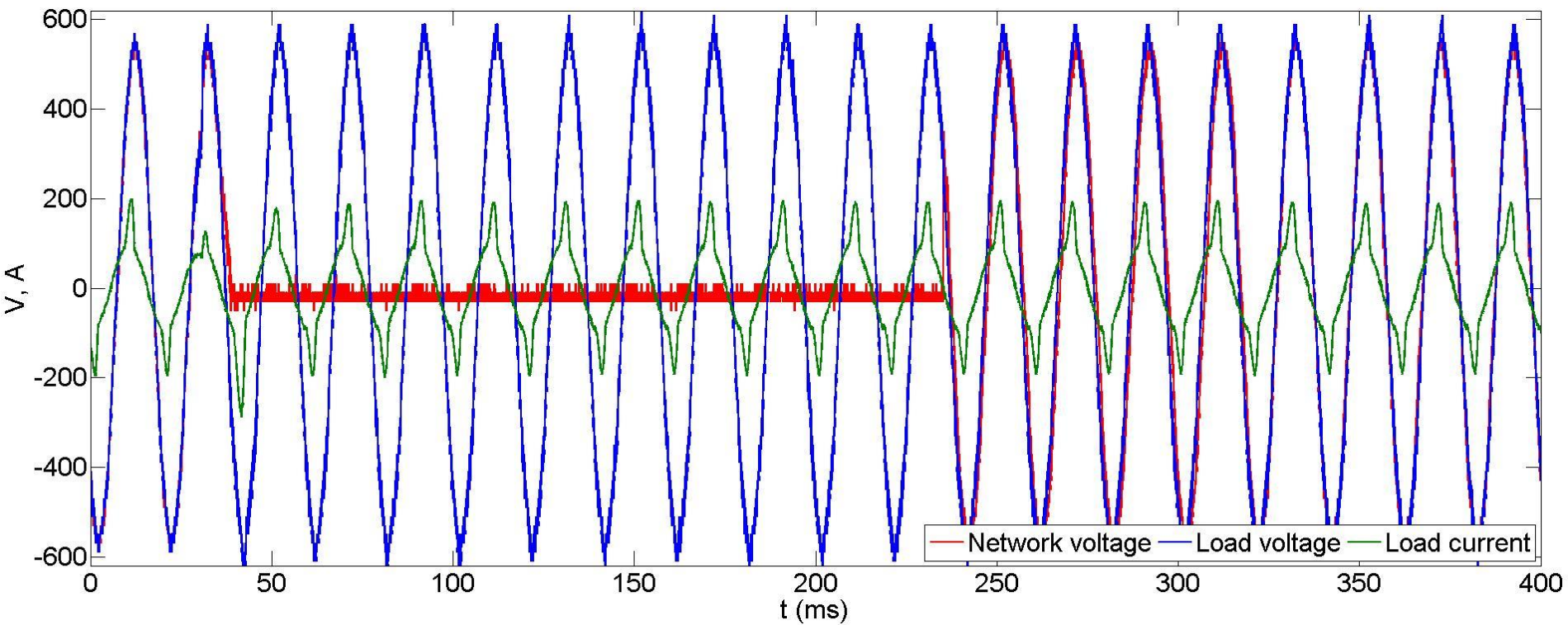


- Active filtering mode
  - Eliminates harmonic currents in real time
  - Reactive power compensation in real time
  - Elimination of voltage fluctuations and flicker
  - Load balancing
- Voltage source mode
  - Real Active and reactive power source
  - Voltage control

# MES150 - Active filtering mode











- Locations which have frequent short interruptions
  - Voltage sags in transmission or distribution system
  - Power interruptions of transmission or distribution system
  - Auto reclose operations in transmission or distribution system
- Loads which have high cost for short interruption
  - Continuous manufacturing processes
  - Sensitive equipment