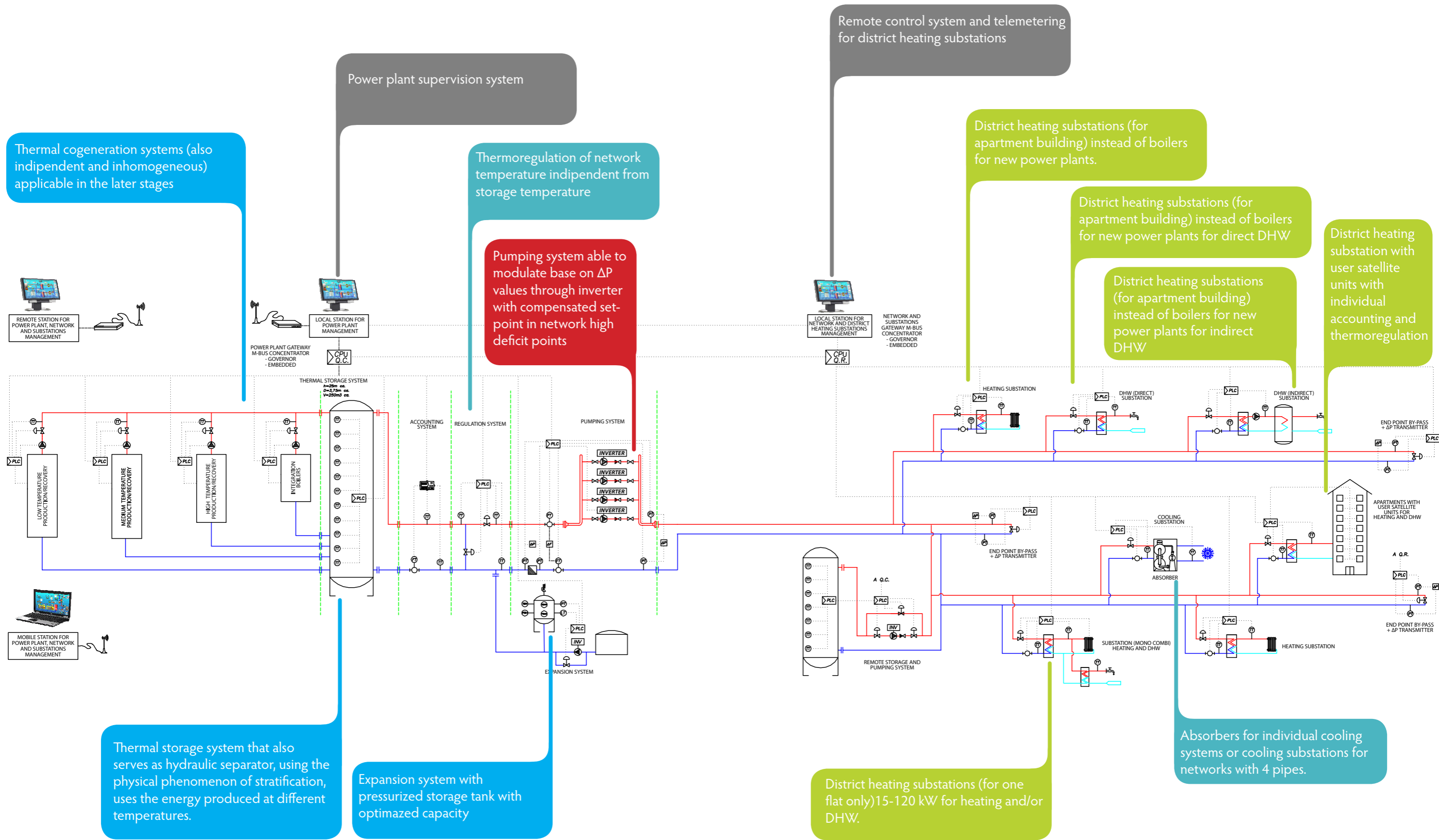


# FUNCTIONAL DIAGRAM OF A DISTRICT HEATING SYSTEM



Thermal cogeneration systems (also independent and inhomogeneous) applicable in the later stages

Power plant supervision system

Thermoregulation of network temperature independent from storage temperature

Pumping system able to modulate base on  $\Delta P$  values through inverter with compensated set-point in network high deficit points

Remote control system and telemetering for district heating substations

District heating substations (for apartment building) instead of boilers for new power plants.

District heating substations (for apartment building) instead of boilers for new power plants for direct DHW

District heating substations (for apartment building) instead of boilers for new power plants for indirect DHW

District heating substation with user satellite units with individual accounting and thermoregulation

Thermal storage system that also serves as hydraulic separator, using the physical phenomenon of stratification, uses the energy produced at different temperatures.

Expansion system with pressurized storage tank with optimized capacity

District heating substations (for one flat only) 15-120 kW for heating and/or DHW.

Absorbers for individual cooling systems or cooling substations for networks with 4 pipes.