

FUJITSU

shaping tomorrow with you

Cool-safe© Advanced Thermal Design



Why Cool-safe[©] Advanced Thermal Design?

Share of energy costs will further rise



Gartner „Energy costs will make up 50 % of IT costs in the near future“

Power and Cooling challenges

- Global perspective
 - All 33 million servers worldwide consume 1.5 % of the globally produced energy
 - Green house gas emissions equal those of i.e. the Netherlands or Argentina
- Company perspective
 - Share of energy costs on total IT costs
 - Now: 20 %
 - Future: 50 %

Energy costs are or will become an important topic for every business

At a glance

- Extended temperature range of
 - 5 ° Celsius / 41 ° Fahrenheit to
 - 40 ° Celsius / 104 ° Fahrenheit
- Impact on system
 - Very few limitations (e.g. choice of CPU, no tape support)
 - No restriction on operation time
- Released for
 - Fujitsu PRIMERGY RX300 S8, RX200 S8, RX100 S8, RX2520 M1
 - Further system on project request

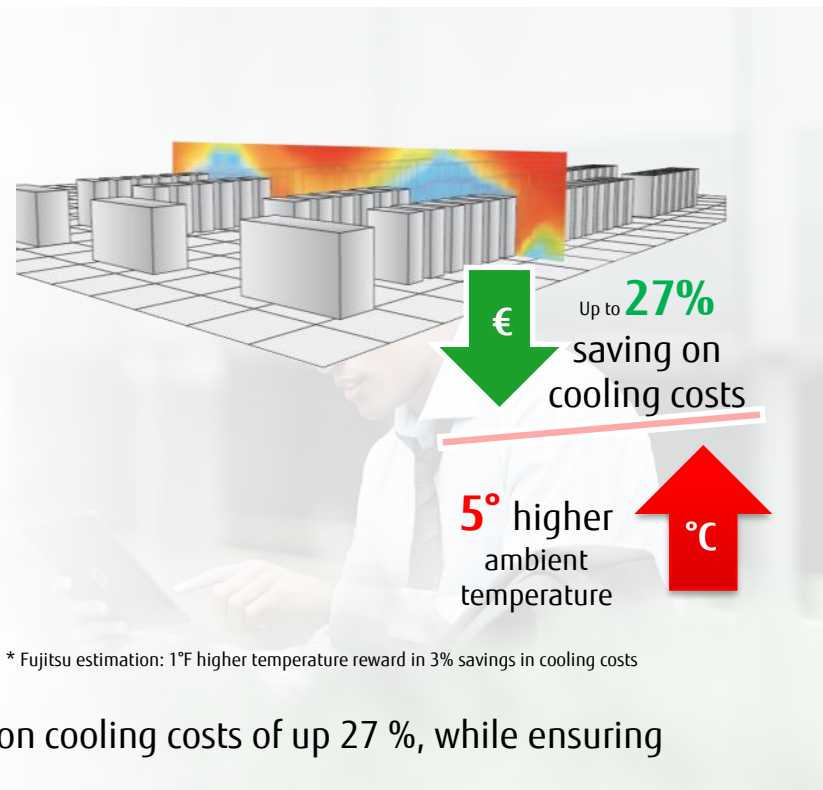


Cool-safe[©] Advanced Thermal Design



Business Benefits

- Up to 27% saving on energy costs for cooling
- Reduced infrastructure costs for new data centers
- 'Chiller-less' data center
- System availability guarantee, even under extreme conditions – without any operating time limitation
 - Warm environment of up to 40 ° Celsius
 - Fresh-air DC cooling (no air conditioning)
 - Extreme weather conditioning (particular for container solutions)



Cool-safe[©] Advanced Thermal Design enables saving on cooling costs of up to 27 %, while ensuring system availability - even under extreme conditions

Project example: Internet Initiative Japan

- Requirement
 - 30 °C environment DC (container)
 - Power saving for cooling unit in DC able to take free cooling.
 - Low power consumption system also required.
- Approach
 - Offer RX200 S6 with special SDR
 - FAN control setting was optimized for Iij's required operating temperature
 - Around 15% power saving for general RX200 S6 under 30 °C
- Project volume: 3,000 units in FY 2010/2011



What about other infrastructure components?



ETERNUS DX

Storage



IP switch

Switches



Power & UPS

Released for 5-40 ° Celsius operation