

## **Nominee: Automation NV**

### **Nomination title: Green Modular Data Centre**

The challenges facing IT grow by the day. The business needs to run new applications, store more data, deliver to a global market, exploit big data, capitalise on new market opportunities and generally do more with less. Waste such as comatose servers must be eradicated and operational costs have to be reduced. Processes must ensure staff productivity is as high as possible and green credentials must be evident. Automation BV and on365 have developed a new and unique containerised datacentre solution to the UK market.

- **Faster:** Up to 60% quicker.
- **Cheaper:** Typical 30% CAPEX savings achieved.
- **Plug'n'Play!:** Just turn on & go!
- **Substantial Time Savings:** Typically just 6-8 weeks for a reference design
- **Risk Adverse:** Standardised & Proven Design. Nothing is unique and everything is constantly value engineered.
- **Standard controlled factory build environment:** Eliminates stranded capacity, increases reliability and provides guarantees such as PuE ratios.
- **Pay as you grow:** Completely modular, scalable and mobile.
- **Innovative Cooling:** NEW direct air free cooling system from Colt International.
- **Proven Track Record:** Automation has delivered over 600 containerised IT solutions in Europe.
- **Peace of Mind:** on365 is the UK's leading provider of critical power protection and cooling services with over 250 years of combined Datacentre Coolstream Evaporative Cooling System Colt's direct air evaporative cooling system takes full advantage of the free cooling power of a temperate climate. This free cooling air is regulated by recirculated server exhaust air with occasional adiabatic assistance in the summer months. For approximately 95% of the year the system takes filtered outside air and carefully mixes it with warm recirculated server exhaust air to maintain temperature and relative humidity levels within the stringent A1 standards of the ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Data Centre Thermal Guidelines. This is an extremely efficient system and also delivers the benefits of very high reliability. This is a direct result of its simple design and minimal component count.
- **Also Delivers annualised PuE of 1.08: Guaranteed!**
- **Best in Class:** unique control system allows control of relative humidity levels after the adiabatic cooling process.
- **90% efficient:** evaporative cooling delivers 4 to 7 times more economy than conventional systems consuming around 4kW of electrical energy for every 50kW of cooling capacity and 100l of water per hour whilst in full adiabatic cooling mode.

- Environmentally friendly and safe: Coolstream runs on fresh air and water only and requires no CFC or similar refrigerants so no F gas compliance.
- Air quality guaranteed: Evaporative cooling involves supplying 100% filtered, fresh air in accordance with the ASHRAE guidelines.
- Decentralised, modular approach: Maximises reliability.

### **Why nominee should win**

- Guaranteed PUE of 1.15 for the whole containerised data centre
- No CFC gases
- Fool-proof cooling design which will continue to work even under catastrophic failure conditions
- Modular, pay-as-you-grow
- Fast deployment