# Acantho A Vertiv™ Case Study







## The Company

Acantho, a telecommunications operator, is the digital company that forms part of the Hera Group, which, for over fifteen years, has developed a proprietary fiber-optic ultra-broadband network. Dedicated to servicing the main cities of the Emilia-Romagna region, today the network stretches across 4,200 km (of which 2,100 km via the metropolitan network) and ensures complete coverage of the area thanks to the integration with the major national and international operators. Acantho provides businesses and individuals with high-performance connectivity, telephone services and Data Centers, all the while ensuring a high level of reliability, maximum security for systems, data and continuity of service. This is achieved through its Data Centers based in Imola and Milan.

#### www.acantho.it

### **Background**

The recent acquisition of new customers has led Acantho to set up another IT room within the Imola Data Center, in addition to the four already present. 48 new rack cabinets have been installed in the new room and, thanks to the partnership with Vertiv, who Acantho has worked with for more than fifteen years, the reliability of the infrastructure has been further enhanced to ensure maximum power efficiency. After a testing phase of the available new products, optimal solutions were identified and the required installations performed. Vertiv™ solutions were successfully implemented during the first months of 2019.

#### **Contents**

Location: Imola (BO)

Industry: Colocation/Internet & Service Provider

#### **Vertiv Solutions:**

- 2 Liebert® Trinergy™ Cube 400 kVA UPS scalable up to 800 kVA and 1 Liebert Trinergy Cube 800 kVA UPS scalable up to 1600 kVA;
- 2 Liebert® PCW refrigerated water conditioning units, PH045DC model;
- Vertiv<sup>™</sup> LIFE<sup>™</sup> remote diagnostics and preventive monitoring services.

#### Needs

Enhance infrastructure to maximize the power, reliability, and scalability of the entire system.

Use the latest technologies to ensure the best energy efficiency and performance, while reducing consumption and limiting management costs.

#### Results

- Energy savings in line with expectations
- System efficiency, reliability and scalability
- Limitation of operating costs

#### The Context

For Acantho, Data Center service is the technological hub for ny company's development and growth, thanks to its capacity to move large volumes of data and processes. For this reason, in line with the provision of a complete service and high level of reliability, the digital company offers the following Dual IDC services: two Data Centers; one TIER III compliant (in Imola) and one TIER IV compliant (in Siziano, in the Milanese hinterland) according to the standards defined by the Uptime Institute. The electrical power and conditioning system for these infrastructures ensures continuity of service, thanks to the redundant power lines at every level, UPS systems and batteries, while auxiliary generators will be activated in the event of a prolonged interruption of power. As a result of the need to expand the Data Center in Imola, the entire power supply system needed to be protected in its integrity. In order to do this, Acantho chose the professionalism and efficiency of the products and services offered by Vertiv. In particular, Acantho requested Vertiv LIFE™ Services, which allows Vertiv experts to analyze the system's operational conditions in real time, capturing data to identify, diagnose, and resolve any operational anomalies.



#### The Solutions

For UPS, Acantho's choice is 2 Liebert® Trinergy™ Cube 400 kVA UPS scalable up to 800 kVA and 1 Liebert Trinergy Cube 800 kVA UPS, scalable up to 1600 kVA, increasing peace of mind and security at sites with critical loads thanks to their advanced data discovery, measurement and recording capabilities, as well as predictive maintenance and event analysis using the Vertiv™ LIFE™ Services remote diagnostics service. The combination of a failure-proof architecture, dynamic maintainability and hot scalability enables these UPS to ensure continuous operation and high-level protection throughout the business.

"We knew that the expansion of our Data Center in Imola would be a challenge in terms of continuity and energy efficiency of the entire system" - said Max Bombardi, Acantho Data Center Management Officer - "For this reason, we looked toVertiv with whom we have by now established a trustworthy relationship, given the expertise and professionalism demonstrated in the past fifteen years. For us at Acantho, the advantage of the Vertiv offering was the LIFE remote diagnostics and preventive monitoring service that ensure us total availability 24/7, 365 days a year, with a maximum of four hours from the call and a scheduled annual maintenance visit."

With the predictive maintenance available and the use of the Vertiv LIFE Services remote diagnostics service, Liebert Trinergy Cube can verify the health of its components to identify maintenance needs and ensure continuity to critical power. Accurate event detection, as well as waveform and harmonic spectrum acquisition, also allows for the recording of external phenomena that could affect service continuity. Liebert Trinergy Cube is then able to capture relevant data on efficiency and activity time that allows Data Center managers to control their physical space, optimize their use and independently calculate PUE (power usage effectiveness) values.

"The UPS Trinergy Cube units we installed are proving to be the solution to maintaining the maximum energy efficiency of our Data Center, and most importantly, enable significant energy savings. In line with our growth expectations, we do not exclude that we will further enhance the infrastructure by adding two 200 kVA cores and one 400 kVA within 2020."

This innovative type of UPS can deliver up to 99% efficiency in Dynamic Online mode, as well as power density for each core up to 200 kW or 400 kW. With its optimized partial-load efficiency and hot scalability up to 3.4 MW, it can meet the requirements of any 150 kW to 27 MW plant in parallel.

In addition to the UPS systems, Acantho also purchased two Liebert® PCWs, cooled water conditioning perimeter units available from 25 to 220 kW, ideal for Data Centers and server rooms with power varying from 200 kW to 6 MW. The Liebert PCW is in fact designed to maximize energy efficiency, increase performance and reduce operating costs, thereby improving the power consumption of the entire Data Center.

Finally, Acantho signed the Vertiv LIFE Services contract, which is Vertiv's remote diagnostics and preventive monitoring service aimed at improving operating time and operational efficiency by constantly monitoring and detecting performance trends. Vertiv Life Services immediately define the most appropriate intervention based on regular communications between the installed systems and Vertiv service Centers.

"We are proud of the partnership that has been created over the years with an important and growing business like Acantho, and we are committed to supporting them in their 'connect your future' payoff' - says **Stefano Mozzato, Country Manager** of Vertiv in Italy - "Like the great architects, we too create critical infrastructures of the modern Data Center, and this is why we love defining ourselves as "architects of continuity", where continuity means delivering reliable technologies along with timely and accurate service to customers, ensuring their productive performance gains are improved."