

Distech Controls provides equipment for the Refuge du Goûter – the last staging post before the Mont Blanc summit

[Paris, FRANCE, 9 December 2022] – Distech Controls, expert in connected solutions for building management, has been chosen to provide connected and sustainable solutions for the Refuge du Goûter, the last staging post before reaching the summit of Mont Blanc.

Specific needs for an extraordinary project

Located in the commune of Saint-Gervais (Haute-Savoie), at an altitude of 3,800 metres, the Refuge du Goûter is a mountain refuge subject to extreme conditions: temperatures dropping to -40°C in winter, windstorms with gusts of up to 200 km/h, a thick layer of ice plastering the facade, etc. In addition, the refuge is forced to operate in total autonomy: it is not connected to the drinking water, sewerage or electricity networks. The water needed to operate the refuge is collected using a snow-melting machine, and electricity is produced by solar panels and a cogeneration plant. Thermal solar panels also enable energy storage. In addition to these difficult conditions, the refuge is only occupied for 4 months out of the year. The challenge is therefore to ensure that it functions properly even when unoccupied. The refuge must maintain an indoor temperature of at least 5°C in order to safeguard the equipment and batteries, thus ensuring the refuge's sustainability in winter.

"This is not your ordinary site, what with the altitude and total isolation. It operates completely autonomously. We thought we could provide the same solutions as for other refuges, but that isn't feasible. This project called for a custom-made solution," specifies Laurent Gil, Technical Manager for refuges along the *Voie Normale du Mont-Blanc* with the French Federation of Alpine and Mountaineering Clubs (FFCAM).

The Refuge du Goûter is indeed a unique building. To ensure its autonomy, its structure and environment must be adapted to. Distech Controls was therefore asked to replace the existing BMS equipment with an interoperable, sustainable, optimised, reliable global solution open to the IoT. Remote operation is thereby greatly simplified, while optimising the refuge's energy performance, all while respecting the very short installation and start-up times. This project had an incompressible deadline, but it was brilliantly completed: the refuge opened to the public in May 2022.

An extensive collaborative study

To offer a tailored solution, the teams from the FFCAM (refuge operator) and Distech Controls had long discussions ahead of the project. Accompanied by integrator AM2I and DSP¹ REQUEA, a member of Distech Controls' Digital Partner Programme, the teams communicated heavily to take all needs into account and successfully complete the project.

"From the very first discussions, the FFCAM teams expressed their needs. Their knowledge of the building and installations was key in addition to the very specific constraints. From the outset, without these clearly identified elements, it would have been difficult to put a custom-made solution in place. We worked together to meet the

¹ Digital Solution Provider

requirements as precisely as possible,” explains Jérôme Lhote, Technical Business Development Director for Europe at Distech Controls.

The study phase was long and complex. The teams were mainly concerned with how the building behaved during the winter period (eight months of closure). The teams focused on rationalising consumption as much as possible and optimising of each piece of equipment, thereby simplifying operation for the technical teams without neglecting the reliability of the solution.

“What we really appreciated, was their attentiveness. Listening and trust were a key part of this operation’s success for maximum energy optimisation. Furthermore, Distech Controls solutions are designed to simplify the end user’s experience,” adds Laurent Gil.

A custom-made solution for the future

After this study phase, which identified specific needs, the teams were able to put forward a custom-made solution. The solution thus proposed by Distech Controls and its partners meets the challenges of autonomy and remote building management. The solution installed and programmed by AM2I makes it possible to rationalise and optimise energy consumption to the maximum. Coupled with the digital solutions developed by REQUEA on a LoRaWAN protocol, data capture and transmission are done easily and in real time with the FFCAM technical department, located in the valley. This equipment and digital solutions now make it possible for technical teams to monitor, manage and control the entire building and its environment.

Beyond providing solutions for current needs, Distech Controls and its partners AM2I and REQUEA have designed the refuge of the future. For now, the solution only uses a part of its potential. In the years to come, the opening up to the IoT will also facilitate the connection to other services and will enable a sustainable solution with an interconnection on all the building systems.

“Thanks to AM2I and REQUEA, members of our Digital Partner Programme, we have been able to go above and beyond to implement the solution and associated services that meet the customer’s needs. We achieve this by working together, in synergy,” states Jérôme Lhote.

“Distech Controls must keep this innovative state of mind and always anticipate customer needs. To do so, listening to the customer is key. They certainly know how to do that at Distech Controls,” concludes Laurent Gil.

More information about the Digital Partner Programme: <https://www.distech-controls.com/en-gb/resources/digital-partner-program-map/digital-partner-program>

About Distech Controls

Distech Controls connects people with intelligent building solutions through our forward-thinking technologies and services. We partner with customers to deliver innovative solutions that can provide better health, better spaces, and better efficiencies. Our passion for innovation, quality and sustainability guides our business, which serves multiple market segments through worldwide business divisions, service offices and a superior network of Authorized System Integrators and Distributors. Distech Controls is a subsidiary of Acuity Brands, Inc.

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