

Success Story

Operational under any circumstances



**Bircher Smart Access supports fast and secure
transit at international borders**



Security and access systems at border crossings require particularly reliable systems

With the help of Bircher Smart Access's ProLoop2 Gatekeeper Intelligent Security has optimized traffic flow and security at the largest border crossings between the U.S. and Mexico.

Long lines of cars rolling south or north in the sweltering heat: It would be hard to find a clearer image of Mexico's close economic ties with the United States than the San Ysidro border crossing in Southern California: In terms of traffic volume it is the second largest in the world (after a bridge between Malaysia and Singapore) – traffic from cars and trucks flows across the state border on 25 lanes (to be expanded to 34 in the future) – with over 70,000 vehicles per day heading north alone.

The security and access systems for such challenging border crossings are developed and deployed by Gatekeeper Intelligent Security. The U.S.-based systems developer specializes in intelligent optical inspection and recognition solutions for border security and critical infrastructure access checkpoints. In particular, their focus is on the ability to perform multiple security functions as accurately and simultaneously as

possible. Since 2005 Gatekeeper has implemented more than 2700 access control projects in over 30 countries, many of them using Bircher Smart Access solutions.

Braving heat and cold in equal measure

Robert Rozploch is Senior Vice President of Research & Engineering at Gatekeeper and explains the challenges of operating a reliable system on the US-Mexico border. "At all ports of entry the uninterrupted flow of private and commercial vehicles must be ensured without compromising the security of the operations. Added to that are the wide temperature swings in the desert with temperature differences between day and night of 50 degrees Celsius or more."

Initially the standard loop detector ProLoop2 with two loops, two relay outputs and 24V AC/DC input from Bircher Smart Access was used at some of Gatekeeper's border crossing installations.

Via an induction loop installed in the ground the system detects metallic vehicles of all kinds – from bicycles to large commercial vehicles. ProLoop2 is designed to meet the highest standards for reliability and operational safety. Special attention was also paid to simple operation and rapid commissioning.

Specification according to customer requirements

During operation, it became apparent that although the requirements regarding traffic flow were met, the operating temperature range of the ProLoop2 from -20 to +60°C was frequently exceeded. Gatekeeper therefore expressed a desire for an even more robust design at Bircher Smart Access. "We also had the goal of being able to configure and make other adjustments remotely and thus better fit the devices into our system architecture in order to keep our lanes up and running, and at peak performance," Rozploch adds.

To further increase the temperature resistance of the ProLoop2, Bircher Smart Access engineers used particularly temperature-stable components and developed the system accordingly and they provided a special cable for direct access via PC. This resulted in an even more powerful and flexible ProLoop2 for Gatekeeper, which now meets all their requirements. Brett Fowler, Senior Member of Technical Staff at Gatekeeper, comments: "The support from engineering at Bircher Smart Access was really outstanding. Upon request, Felix Schwob even provided us with the access commands for direct remote access to the ProLoop2 – it doesn't get any better than that!"



Robert Rozploch, Senior Vice President of Research & Engineering at Gatekeeper



Brett Fowler, Senior Member of Technical Staff at Gatekeeper

Direct access via laptop plus remote access

The further enhanced ProLoop2 is now an integral part of Gatekeeper's instrumentation at several Port of Entry locations and functions flawlessly. Thanks to extended connectivity and direct accessibility the operator can remotely make all desired adjustments. Not only can all values be read out live and transferred to connected systems but, if necessary, the parameters can also be changed live for example to use specific settings per vehicle type.

"Bircher Smart Access responded quickly to our requests, showed itself to be very cooperative, and delivered exactly what we needed even as our requirements increased – that's how we picture a good partner," Rozploch sums up. Based on the positive experience with ProLoop2 on the US-Mexico border, Gatekeeper Intelligent Security has moved forward to use Bircher's system for their other international border security installations as well.

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Figures: Remote configuration of the ProLoop2

Loop detector for industrial doors and gates, car parks and parking bollards

ProLoop2

The loop detector ProLoop2 is – in combination with our preassembled induction loops – the perfect solution to detect any kind of vehicle at gates, barriers and parking bollards:

- Quick and easy setup
- Immediate error thanks to LCD display
- Intuitive handling and flexible configuration
- Integrated measurement and display of loop inductivity
- High operational reliability



ProLoop2



ProLoop2 (11 pin)

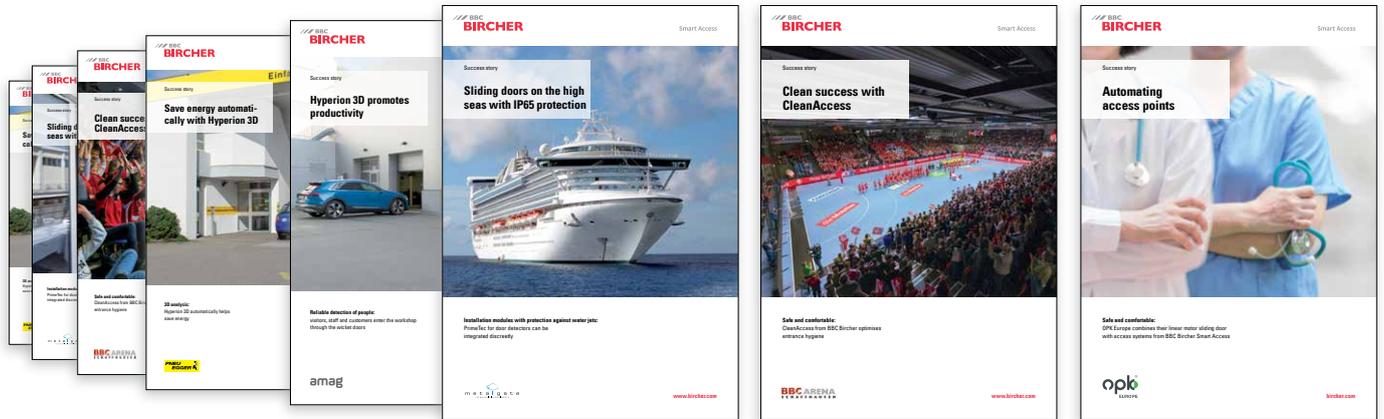
Induction loop (Accessory)

The preassembled induction loop is a key component for the sensor system of the loop detector. It can be installed into the floor and is available in different dimensions. So this accessory is optimally designed to seamlessly function with our ProLoop2 and ProLoop Lite detectors.



Optional accessories: induction loop

You can find more Success Stories online:



About BBC Bircher Smart Access

BBC Bircher Smart Access develops, produces and distributes intelligent sensor solutions for access systems. Rising levels of pedestrian and vehicle traffic around the world are placing increasingly exacting requirements on access points.

Solutions from BBC Bircher fulfil the growing demand for safety, hygiene, accessibility and energy efficiency. Sensor solutions from BBC Bircher are characterised by a comprehensive product portfolio, an international production network, as well as the commitment and teamwork of some 180 employees and their exceptional technological expertise.

With its extensive sales network in Europe, Asia and North America, BBC Bircher has been meeting the specific requests and requirements of its international client base for more than 60 years. BBC Bircher Smart Access has been a business segment of the BBC Group since 1991.

For more information, visit our website:

bircher.com



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- Worldwide support and service
- Comprehensive portfolio
- Individual solutions



Tested quality

- Designed in Switzerland
- User-friendly, reliable and certified products
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- Specialised in access solutions
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