APPLICATION: ROADWAY MONITORING ON PARKING DECKS WITH LUFFT MARWIS

Challenge

The top parking deck of open parking garages is always exposed to the weather and its impact on safety.
This poses significant risks for vehicles and pedestrians, especially in winter conditions.

Solution

The MARWIS road sensor records the road condition, temperature, and friction. The compact weather sensor WS captures various weather data. The Lufft ISOCON is a versatile interface converter to complement the system.

Benefits

The coordinated system provides hyper-local information that enables responsible parties to immediately take necessary actions to maintain road safety, such as treating or temporarily closing the roadway.

Project

To guarantee safe traffic on a ramp, the Swiss company Migros integrated a heating system in the roadway leading to the parking deck on the roof of its distribution center in Zurich. Thanks to a smart monitoring station from OTT HydroMet, this only comes on when needed, allowing Migros to save over 80% energy output.

Setup: The mobile and static Lufft MARWIS road weather sensor monitors the roadway, while the compact Lufft WS600 weather station collects relevant weather data.

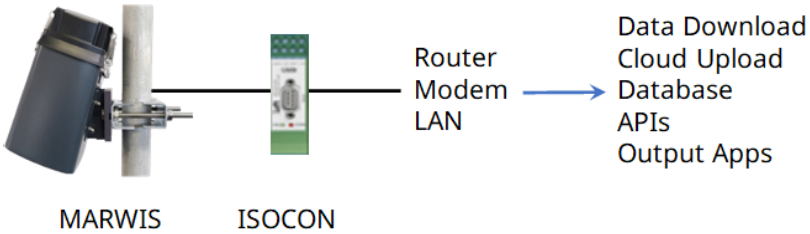
The data is retrieved via modem, gateway or protocol converter. This data is then available to the heating control system in order to carry out the corresponding switching operations.

Lufft MARWIS and a weather sensor WS600 on a heated ramp leading to a parking deck. *Credit: Migros Zurich*

System Components

MARWIS, ISOCON, Power Supply 24V,
Control cabinet for installation in the parking garage, connection to network (LAN, Router, Modem)

Schematic Setup



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Further information

Blog: Migros Zurich fights slickness on slopes

Contact

Questions? Reach out to us!