

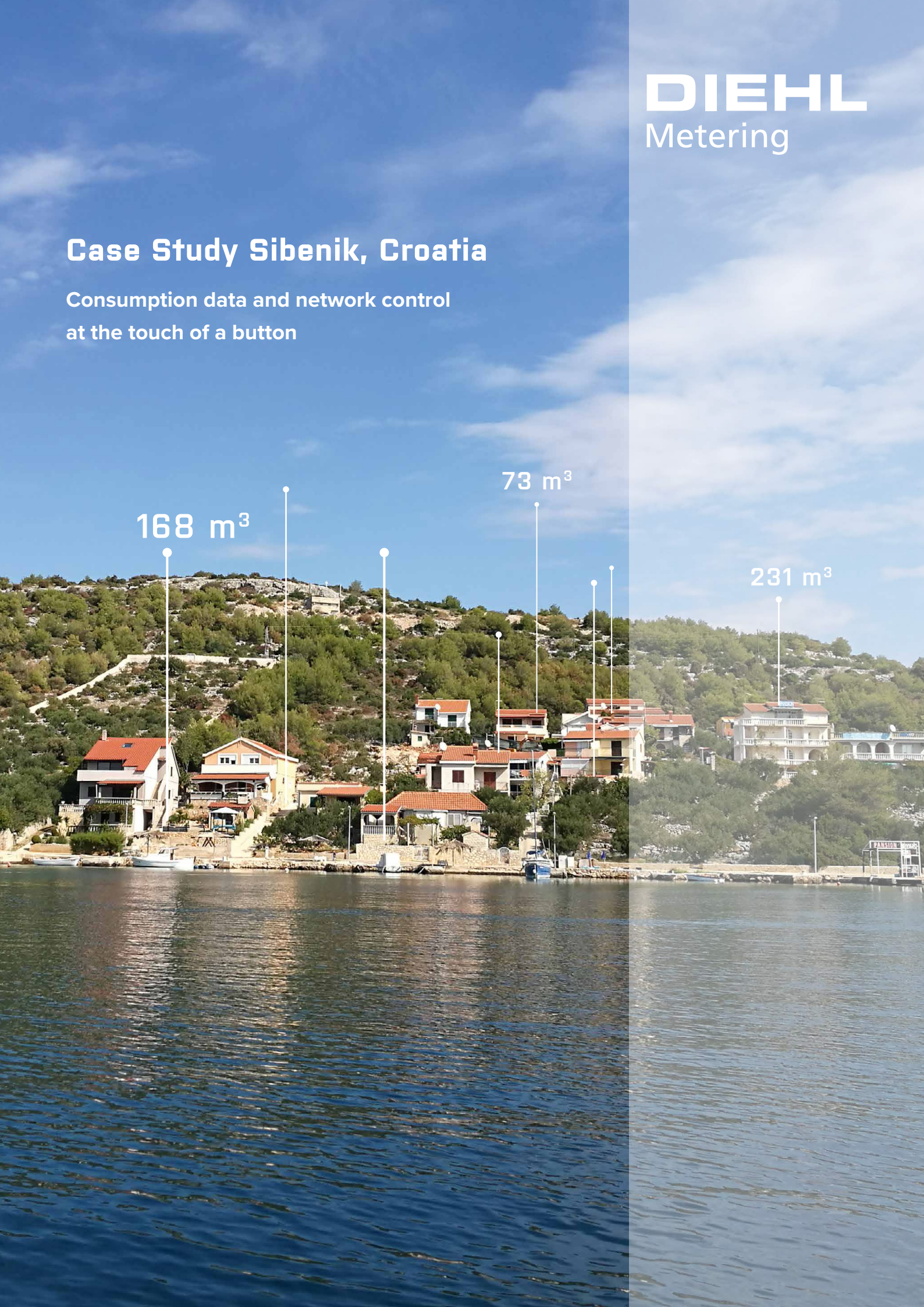
Case Study Sibenik, Croatia

Consumption data and network control
at the touch of a button

168 m³

73 m³

231 m³





READOUT UNDER THE MOST DIFFICULT CONDITIONS

The island's infrastructure makes meter reading a challenge.

Test result: RDC Premium receiver receives almost all radio modules in open pits. A small part could not be received when the shaft was closed.

1161 m

Test-results – key:

- No. of meters placed in the pits are read-out
- No. of meters placed in the pits are not read-out
- meter installed inside an apartment are read-out
- RDC Premium Receiver
- Izar Radio Extend, to reach the too far-away radio modules

THE CHALLENGE:

RELIABLE METER READING IN A DIFFICULT TERRAIN

The “Vodovod i Odvodnja d.o.o. Sibenik” waterworks in Sibenik, Croatia, provides drinking water for 46,332 people. This also includes the many Kornati islands off the Croatian mainland. The manual reading of the meters on the small island of Kaprije has so far proved to be particularly challenging. In a pilot project, Diehl Metering has installed a fixed network solution for the Sibenik waterworks on the island. Five more islands are to follow in the future.

The waterworks of Sibenik (Vodovod i Odvodnja d.o.o. Sibenik, Croatia) are faced with great challenges in the meter reading on the small Kornati island Kaprije, which has a population of more than 1,000 during the summer months.

The drinking water required for the inhabitants of the island is transported to the island by special tankers. Every drop is expensive and precious, the journey from the mainland is long. Until now, mechanical meters were mostly installed in shafts surrounded by rock and difficult to access on the cliffy island, which is typical for the region. The differences in height to be overcome also made manual reading difficult for the employees of the waterworks. The readout process was therefore time-consuming and costly, and the reaction time to problems was very long.



EXPENSIVE DRINKING WATER

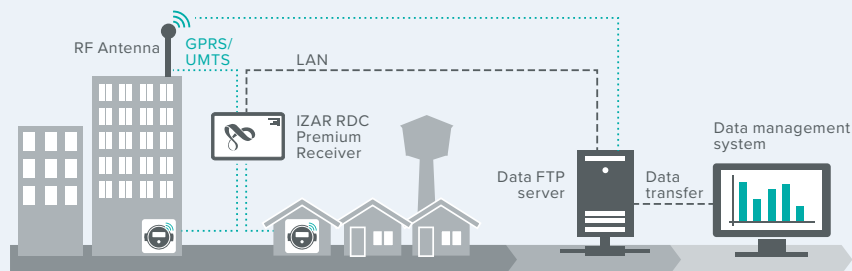
High costs by special tanker transport of water as well time-consuming manual reading.

THE SOLUTION:

FIXED NETWORK WITH ULTRASONIC WATER METERS FOR AUTOMATED READOUT



For the AMR (Automatic Meter Reading) on Kaprije, the existing mechanical water meters were successively replaced by static HYDRUS ultrasonic meters. For the radio readout, two unidirectional antennas were installed and the IZAR RDC Premium Receiver is configured to upload the meters data every 15 minutes to the Diehl Metering FTP server. The data management system is provided by the local partner company IKOM.



THE BENEFIT:

TIME, WATER AND MONEY ARE SAVED

Thanks to the Fixed Network installed on the island, time-consuming on-site visits by employees for meter reading in Kaprije are a thing of the past. This saves time and money. The large radio range of the Fixed Network ensures that the meter data is received error-free by the stationary radio receivers.

Any faults or water bottlenecks are detected at an early stage so that appropriate countermeasures can be taken immediately. In addition, the HYDRUS static ultrasonic meter detects air in the pipes and precisely measures the actual water consumption. This saves costs and eliminates incorrect consumption measurements.

If leaks often went unnoticed in the past, an automated alarm ensures that faults in the distribution network or at the water meter can be detected and rectified.

“We consciously chose Kaprije for our pilot project because it is the place with the most difficult meter reading conditions. The excellent advice and the results we obtained speak for themselves and have convinced us. We are planning to equip another five islands with a Fixed Network from Diehl Metering.”

Mr. Frane Malenica, General Manager of waterworks „Vodovod i odvodnja“ Sibenik.



WATER CONSUMPTION ALWAYS IN VIEW

The monitoring of the consumption is possible at any time.



EFFICIENT, QUICK REACTION

faster decision and response time thanks to AMR (Automated Meter Reading)

