

European innovation in environmental monitoring: new weather stations in the ports of Manfredonia and Gallipoli



In the field of **environmental monitoring**, weather stations play a fundamental role in collecting climate and environmental data. Recently, LSI LASTEM installed **two marine weather stations** in the **ports** of **Manfredonia** and **Gallipoli**, bringing innovation and precision in the monitoring of atmospheric and marine conditions in these strategic areas.

The Interreg project and collaboration

The installations are part of the **European Interreg Italy-Greece 2021-2027 project**, a cross-border cooperation initiative that aims to improve the quality of life in the participating regions. In this context, the ports of Manfredonia and Gallipoli have **collaborated** with **UPI Puglia** and **Confcommercio Puglia** to provide a useful information network for tourists and the Italian Navy. **FMTechnology** played a key role as system integrator, ensuring that weather stations were fully integrated into the local systems and personally managing the physical installation of the equipment.

Features of LSI LASTEM meteorological stations

The marine weather stations installed in the ports of Manfredonia and Gallipoli are equipped with advanced technologies for **monitoring various climatic and chemical-physical parameters** of the water. Each station is equipped with a multiparametric probe developed ad hoc by LSI LASTEM, which measures salinity, water level, pH and conductivity. This data is important for understanding the state of the marine environment and for making informed decisions.

High accuracy instruments and sensors

In addition to the marine multi-parameter probe, the weather stations have a number of advanced sensors. These include a **rain gauge** to measure precipitation, an **ultrasonic anemometer** to monitor wind speed and direction and a **sensor** to detect air **temperature** and **humidity**. These tools allow accurate and continuous data collection, providing essential information for both scientific research and daily operations in ports.

Benefits for tourism and the Italian Navy

The weather stations in Manfredonia and Gallipoli not only serve a **scientific purpose**, but also offer practical **benefits** for **tourism** and the **Navy**. The data collected helps tourists plan their visits according to the weather conditions, improving their experience. At the same time, in the port of Manfredonia, the **Italian Navy** can use this information for **navigation** and **security operations**.

Future prospects: other marine weather stations

The project, financed until 2027, should include the **extension of the installations** to other marinas and non-marinas, creating an increasingly wide and widespread meteorological monitoring network. The aim is to continuously improve the quality of available information, promoting sustainable management of marine and coastal resources.

Conclusion

The **meteorological stations** installed by **LSI LASTEM** in the ports of Manfredonia and Gallipoli represent an important **step forward in environmental monitoring**. Thanks to the collaboration with various local authorities and the support of the European Interreg project, these stations provide valuable data for both tourists and the Navy. With the prospect of further expansion, LSI LASTEM continues to be at the forefront of technological innovation for environmental monitoring.