

LOW-COST INNOVATIVE TECHNOLOGY FOR WATER QUALITY MONITORING AND WATER RESOURCES MANAGEMENT FOR URBAN AND RURAL WATER SYSTEMS IN INDIA

LOTUS COMMUNICATION N°15

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The LOTUS box

The LOTUS box is an electronic box built around a micro-controller. A microcontroller is a single integrated circuit that works like a little computer, it processes and executes a pre-programmed set of tasks.

Within the LOTUS project, the LOTUS box serves as a data hub. It is directly connected to the LOTUS sensors put in the water. The role of the LOTUS sensor is to measure elements in the water to know its quality. Therefore, the sensors gather the data and then, send those data to the LOTUS box. The data is processed and finally, the box forwards the refined data to the cloud to be reviewed and analysed by experts.

The first main advantage of the LOTUS box is its adaptability. Indeed, the box can be connected to various sensors already available on the market, allowing the monitoring of any parameter to be measured. Also, due to its high connectivity, meaning that the box can be connected to any kind of network (5G/4G, WIFI, etc.), the box can work under any conditions on the field. The second main advantage is the unique energy management system which allows for very low power consumption and low energy footprint.

As of today, the LOTUS box is being implemented in all the 5 use cases within the LOTUS project. Moreover, EGM now commercializes the LOTUS box under another name the "Edge Spot". Therefore, it is already possible for the stakeholders to buy the LOTUS box. The device will also be available in India through the partners of the LOTUS project.

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LOTUS Consortium Members



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