

## THE GPRS TRANSMITTING DATA PLUVIOMETER (RAIN GAUGE)

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**Summary.** *Given the importance of the present climate changes, the paper presents a GPRS Transmitting Data Pluviometer, transmitting pluviometric data and the intensity of some concomitant transmitted meteorological phenomena. The equipment is going to be finalized at the Faculty of Hydrotechnical Engineering, Geodesy and Environmental Engineering within “Gheorghe Asachi” Technical University of Iasi. The resulted data is very important as it is used mainly in hydrologic stations, environmental agencies or the dispatcher of disaster commandments within city halls, prefectures or individuals, in order to evaluate the meteorological phenomena and to take preventing operative measures for floods and land slides. This equipment is made of rainfall transducer which has inside a new system for getting the impulses resulted when swinging a tipping cup. The apparatus is made of a Hall sensor, an accelerometric sensor and within the evacuation pipes of the volumetric measured water there are fixed a radiation sensor and a Ph sensor for establishing the rainfall quality; on the exterior surface are fixed a light and air ionizing sensor, a microphone for catching the background noises of some meteorological phenomena that accompany the rainfalls. The resulted data is taken by a microcontroller. After processing the resulted parameters are transmitted via a GPRS module to a web server and via a GPS relay broadcasting station. These parameters are stored in a flash memory together with a time base. The access to the data stored on the web server is given to disaster dispatchers, city halls, environmental agencies, meteorological and hydrologic stations or to any interested person.*

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