Summary

This research is continuance from previous research with topics: "Early Warning System". FEWS (Flood Early Warning System) is an early warning system that will be applied at DAS (WaterShed) Sampean Madura that flow through Bondowoso and Situdondo City. The background of the Options DAS Sampean Madura is Genesis Flood at Situbondo City. Design of Digital-AWLR is making of an Electrical Sensor that can indicate water level, so this signal can convert to digital data that can be transmitted to server FEWS (Flood Early Warning System)-Server with GSM Modem. The result of the test, the sensitivity of electrical sensor for level is 16 mV/cm, and the accuracy of Digital-AWLR is ± 2.35 cm. Average of Transmission delay from GSM Modem AWLR Digital to the FEWS-Server is 8.3 s. This Digital-AWLR Module can be used to collect data water level that indicates and reference data as warning in program of FEWS.

Index Terms - Flood, DAS (WaterShed), AWLR (Automatic Water Level Recorder), Digital, Sensor, Level, Modem, GSM, FEWS (Flood Early Warning System).