Coupled Bunch Modes Measurement System at ELETTRA, A. FABRIS, <u>C. PASOTTI</u>, P. PITTANA, M. SVANDRLIK, Sincrotrone Trieste - ELETTRA operates with a controlled longitudinal coupled bunch excitation in order to provide the required lifetime. A constant control of this excitation is required to avoid deterioration of the light quality. A fast and reliable measurement of the Coupled Bunch Modes oscillation amplitudes is obtained by means of automatic acquisition software that allows to characterize the full beam spectrum in 4 minutes for the longitudinal plane and 10 minutes for the transverse one. The system is fully integrated with the ELETTRA control system. It provides real time results which can also be saved for post-processing purposes. Options for full spectrum measurement or single coupled bunch mode measurements in time are available. A further option is implemented to allow measurements for different filling patterns of the ring. The measurement set up and specification as well as some measurements on the ELETTRA machine are presented.