

Destructive Beam Profile Monitor Electronics using Gated Current Integrators, S. LEONTEIN, E. WESTLIN, Manne Siegbahn Laboratory - Strip detectors are used to determine the profile and position of the low intensity pulsed ion beams from the Stockholm EBIS ion source. Electronics for amplification, multiplexing, analog-to-digital conversion and read-out will be described, as well as client/server software for Ethernet. The use of integrating amplifiers gives a current range of 1 pA to 100 uA and a charge range of 0.1 pC to 1 nC for each strip. The integration time can be varied down to 10 us and the shortest time between beam pulses that can be handled is 10 ms. The electronics also produce a pulse output for the total beam current.