

ConSys - A New Control System for ASTRID and ELISA, J.S. NIELSEN, K.T. NIELSEN, and T. WORM, ISA, University of Aarhus, Denmark - A new PC/Windows NT control system has been developed for ASTRID and ELISA. The system is network based (Ethernet), with distributed front-end and client/console computers. The system consists of three parts: the kernel, devices, and client programs. The kernel, common for all computers, handles all communication between devices and client programs, be it locally on the same computer or across the network. The devices store the values of the parameters on the system, and handle all the input/output communication to the hardware under control through device drivers etc. For interaction with the operators, a number of client programs have been developed, of which the major one is the Console. The tripartition of the system allow very easy addition of new devices and client programs, as new types of hardware needs control, and as new needs for utility programs arise. The computer-code is highly object-oriented reducing code size and development time. The system is fully software configurable with all addresses, conversions, and display properties stored in an ODBC compliant database (at our site a Microsoft SQL database is used). Tools for parameter logging (to the SQL database), and software ramping of parameters have been implemented.