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Interfacing Micro Logic Systems' NetPage with Freeset DCT1900

NetPage from Micro Logic Systems is a flexible, microprocessor-based communication interface system. NetPage consists on two or more MLS-NP-1 interface units. Each MLS-NP-1 interface unit consists of 20 MHz processor core with on-chip RAM and EPROM memory. The MLS-NP-1 is capable of both RS-232 and RS-485 communications.

NetPage allows nurse call systems with RS-232 pocket paging ports using TAP or other paging protocols to communicate nurse call messages to the Ascom Freeset system. NetPage will convert non-standard TAP data (not compatible with Ascom Freeset) to pure TAP 1.8 compliant data. NetPage also adds Enhanced SMS syntax to the TAP data allowing simple, one-touch voice connection (and one-touch disconnect) of the wireless handset to the patient call station.

NetPage allows communication between systems by creating a simple RS-485 network. One MLS-NP-1 interface unit is connected to the RS-232 serial port of each system to be connected. In a typical application, one MLS-NP-1 is connected to the nurse call system and one MLS-NP-1 is connected to the Freeset system. Two pair of 22 AWG wire is required between MLS-NP-1 units. MLS-NP-1 units, and therefore, the nurse call and Freeset systems, may be separated by up to 2500'.

NetPage can also be used to connect both a Freeset system and a pocket paging system to a single nurse call pocket paging port. A third MLS-NP-1 interface is used for this application and is connected to the pocket paging system. All three MLS-NP-1 units are connected on the NetPage four wire RS-485 network. NetPage can automatically route messages to the appropriate system (Freeset and/or pocket page). The NetPage RS-485 network is bi-directional. ACK or NAK signals from the Freeset and pocket paging system are returned through the network to the nurse call system.

Each NetPage system is shipped with the appropriate firmware chips for the specific application, therefore, no setup or programming is required. This allows rapid installation.

MLS-NP-1 interface units contain no moving parts, consume very little power, have no components subjected to thermal stress, and have a watchdog timer supervised processor. This makes the NetPage system maintenance free and extremely reliable.

Refer to Ascom Technical Service Bulletin TS-0108 for additional information regarding upgrading existing Freeset DCT1900 systems to handle Short Messaging Service (SMS) functions.