

EXHIBIT B

TECHNICAL DESCRIPTION

A. Product Description:

The SelectAmp NBPCS-900-3 bi-directional channelized paging repeater provides selective frequency amplification of user specified frequencies in the 928-932, and 938-942 MHz bands in the forward direction (base station to pager) and 897-903 MHz band in the reverse direction (pager to base station). This unit can be configured with up to three channelizers allowing the user to configure the unit to suit their needs. The channelizers are available in two versions: a 930 MHz, 12.5 kHz Bandwidth version intended for POCSAG/FLEX and a 940 MHz, 50 kHz Bandwidth version intended for ReFLEX. Frequency selections, gain adjustment, and fault monitoring are accomplished with monitor and control circuitry and firmware.

In the forward direction, the repeater accepts inputs in the 928 - 942 MHz band and selectively passes one discrete channel in each band while rejecting the others. The selection is accomplished by downconverting the desired signals to a 45 MHz intermediate frequency and using a narrowband crystal filter to provide adjacent channel rejection. The reverse path is not channelized. All frequency in the 897-903 MHz band pass through the repeater.

Frequency Range:

Forward(930): 928-932 MHz
 Forward(940): 938-942 MHz
 Reverse : 897-903 MHz

Composite Output Power:

Forward: 1 Watt
 Reverse: 500 mWatts

Power Gain:

Forward: 50 to 95dB, adjustable
 Reverse: 50 to 85dB, adjustable

Modulation Types:

This amplifier is designed for use with all types paging modulations using the 12.5 kHz channel bandwidth in the 930 MHz band and 50 kHz channels in the 940 MHz band. The compliance tests were performed with a representative digital modulation.

The amplifier is described in further detail in the User's Guide presented in Exhibit D.

B. Production Quantity: Large scale production of this unit is

planned.

C. Circuit Diagram:

The block diagram for the device is shown in Figure B-1.

D. Circuits Employed for Suppression of Spurious Radiation:

The repeater contains two paths: a forward path for the base station to the pager signal; and where applicable a reverse path for the pager to base station signal. The forward path includes a diplexer, LNA/splitter/combiner, channelizer, and power amplifier. The reverse path includes a diplexer, broadband module (amplifier and filters, and a power amplifier. See Chapter 3 of Users Guide for further details.

E. Power Supply:

The power supply assembly consists of a Power Entry Module and switching power supply. The power supply accepts inputs of 100 to 240 VAC, 50/60 Hz and converts to an output of +15 VDC.