2. OVERVIEW/SYSTEM DESCRIPTION

The AFL Channel Selective Cell Enhancer is a 2-way on-band repeater. Various models are available to cover frequency bands from 50MHz to 3000MHz. Its main sphere of applications is in urban areas where the topology is such that shadows occur in the propagation pattern (for example within large buildings, conference centres and tunnels, etc.,)

The Channel Selective Cell Enhancer is a 2-port device for direct connection to two antennas, usually a highly directional Yagi or similar aligned towards the base (donor) site and an omni-directional antenna to cover the mobiles. The frequency bands that are passed by the Cell Enhancer are set as per the specific customer requirements.

AFL manufacture a wide range of Cell Enhancers, configured for each customer's specific requirements. Two basic physical variants are available, a rack mounted version to fit in a standard 19" rack and an environmentally sealed wall mounted version which requires no further enclosure.

The rack-mounted version is usually supplied in 3 units, a power supply unit and 2 RF units (one containing each path). Each shelf/tray unit containing active modules has a 'D.C. on' indicator on the front panel and the PSU also has an 'A.C. on' indicator.

The wall-mounted version is supplied in a single environmentally-protected case. Handles are provided for carrying the unit and the door is fitted with locks. A supply isolator switch is fitted inside the unit and there are '.DC. on' and 'Alarm on' indicators on the outside of the door.

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