Engineering Services
High Performance Passive Filters

MicroSpire designs and manufactures passive filters with a high performances and thermal stability for diverse applications such as ADSL telecom, public telephones, railway systems, home automation and so on.

ADSL Central Office Splitters

The ACOPS splitter cards separate voice and ADSL data at the Central Office side. These cards have either 1, 4, 8 or 16 channels, each channel having a low-pass and a high-pass filter. All ADSL (TRT1) outputs have a supplementary 1500 Vrms isolation with respect to the line voltage (TRT3) and the voice signal in accordance with the norm EN60950. The filters' impedances are adaptable hence they can operate with other ADSL equipment on the market.

Public Telephone Filters

These filters are used to block either the 12, 18 or 22kHz billing count frequencies found in public telephones. They are highly selective with a -55 dB attenuation at the centre frequency whilst passing without distortion the voice signals outside their narrow rejection band. As they are used in outdoor public telephones, these filters are of a rugged construction and operate between -25 °C to +70 °C.

Train Detection Filters

These medium-frequency filters are connected to rail tracks to detect the passage of trains by sensing the change in the impedance of a track segment at a given frequency.

These passive filters tune to and block frequencies as matched pairs to enable their operation in contiguous rail tracks. The filters are rugged to withstand train vibrations and outdoor temperatures between -25 °C and +70 °C.