3.1 Description

The band selective (no channelisation) tunnel amplifier is directly connected to an air interface antenna directed towards the base station and a leaky feeder antenna to cover the mobiles in the tunnel. The downlink power is 20Watts, provided by a pair of parallel configured 10W amplifiers, and the uplink power device is a single 1W amplifier, which is sufficient power for ample communications with the base station.
Automatic gain control is featured in both paths to prevent overloading of the input stages should a mobile be operated close to the antennas.
A built-in current fault alarm system monitors each active device in the system and outputs a summary volt-free, relay contact pair suitable for integrating into any existing alarm loop system.

3.2 Technical Specification

PARAMETER		SPECIFICATION
Frequency range:		1930-1990MHz (Downlink)
		1850-1910MHz (Uplink)
Bandwidth:		60MHz
Passband ripple:		±1.5dB
Gain:		>85dB
Gain Adjustment:		0 - 30dB (in 2dB steps, both paths)
Uplink Power:		>1.0Watts
Downlink Power:		>20.0Watts
IP3:	Uplink:	+40dBm
	Downlink:	+52.5dBm
1dB compression point:		+41.5dBm (downlink)
		+29dBm (uplink)
Noise Figure:		<6dB (@max gain)
AGC:		+40dBm (downlink)
		+28dBm (uplink)
VSWR:		better than 1.5:1
RF Connectors:		N type, female
Temperature range:	operational:	-10°C to +60°C
	storage:	-40°C to +70°C
Alarms Fitted: (volt-free relay contacts/TTL)		1 Amplifiers (U/L & D/L)