Operational Description

The PS009900 is a booster amplifier that operates from 888-902 MHz with 8 dB of gain. The amplifier is intended to boost a constant envelope signal (FM, GMSK, BPSK, etc.) from a 5 watt radio output to 30 watts output power. The unit is intended for railway safety applications. A PTT (Push-to-Talk) signal controls the power amplification function, allowing the booster to amplify the radio signal prior to radiation. When the PTT is disengaged, a passive receive path permits the radio to receive signals at 935-938 MHz. Although operational in CW (continuous transmit) mode for test and evaluation purposes, the unit is designed for periodic operation on demand.

The power amplification function is achieved using a an LDMOS amplifier.