

Preliminary Data

- ◆ Interface of up to 2 BTS with Tx/Rx ports and Low Power Simplex DAS system
- ◆ Independently adjustable Tx and Rx levels
- ◆ Guaranteed Low PIM, High Isolation
- ◆ High Reliability, RoHS compliant
- ◆ Standard 2RU EIA Rack (3.5")



This Signal Conditioner Shelf, KM-54N is designed to interface two Tx/Rx signals within the same frequency bands anywhere in the 800 - 2170 MHz frequency range, with a simplex DAS system. It allows independent level adjustment of the Tx and Rx elements of a wireless signal, when the signal is already split into Tx and Rx paths.

The unit first duplexes each of the Tx/Rx inputs, of which the Tx outputs are combined using a 2:1 Hybrid Combiner. The combined Tx signal is then attenuated by a fixed 6dB attenuator before it is fed to a 0-30 dB level adjustment for optimum DAS performance. The interface is rated for input Tx powers of up to 60W/input.

The DAS Rx signal is fed to a similar level adjustment, before being split into four, with 2 to the Duplexers and 2 Rx to location monitoring ports as may be required. (08/11)

Frequency: 800 - 2170 MHz
Return Loss: >18 dB, all ports
Tx Power: 60W average max./input
3 kW max. peak
Tx Path: 10 dB min. attenuation plus an adjustable 30 dB in 1 dB steps.
Rx Path: 6 dB min. attenuation plus an adjustable 30 dB in 1 dB steps.
Tx Isolation:
Tx/Rx To Rx: >65 dB typ
Tx1/Tx2 To other Tx >25 dB
Rx1/Rx2 To other Rx >20 dB
IMD, typical: <-118 dBm in Rx band at input using two +43dBm tones
Impedance: 50Ω nominal
Environment: 0°C to +55°C, IP64
Housing: Passivated aluminum
Connectors: N(f), Triplate, SMA (f) gold
Weight: 30 lbs. nom.
MTBF: >500,000 hours

